

WHAT IS CLAIMED IS:

1. A system for organizing, displaying, and interacting with information on a display device, the system comprising:
 - a computer processor;
 - a memory device accessible by the computer processor and storing at least one of:
 - computer code executable by the computer processor, and
 - data used by the computer code;
 - a display device structured to display a graphical interface to a user based on the computer code executed by the computer processor; and
 - an input device structured to receive information from the user based on one or more images of the graphical interface displayed on the display device,wherein the computer code includes:
 - a main display module for providing a main display area of the graphical interface, and for organizing digital objects in a plurality of layers, the layers including:
 - a base layer corresponding to a base-surface window of the main display area, wherein an appearance of one or more base-layer objects in the base-surface window may be selectively altered by the user, and
 - a fixed layer corresponding to a fixed-surface window of the main display area, wherein an appearance of one or more fixed-layer objects in the fixed-surface window are fixed or pinned when an appearance of a base-layer object is altered by the user,
 - wherein the main display module enables the user to selectively pin and unpin a digital object to the fixed-surface window as a fixed-layer object, to set a digital object as a base-layer object displayed in the basic-layer window, to change a base-layer object to a fixed-layer object, and to change a fixed-layer object to a base-layer object, and
 - wherein the main display module enables the user to create a group of base-layer objects, such that an appearance of the group of base-layer objects may be altered in unison.
2. The system according to Claim 1, wherein the main display module enables the user to move, zoom, and rotate a base-layer object within the base-surface window.
3. The system according to Claim 1, wherein the main display module enables the user to move, zoom, and rotate the base-surface window within the main display area relative to a position of the fixed-surface window.
4. The system according to Claim 1, wherein the main display module enables the user to selectively set a position of the fixed-surface window within the main display area.

5. The system according to Claim 1, wherein the main display module enables the user to create a first group of base-layer objects different from a second group of base-layer objects, such that an appearance of the first group of base-layer objects may be altered in unison without altering an appearance of the second group of base-layer objects.
6. The system according to Claim 1, further comprising a communication interface for connecting the computer processor to at least one of:
 - an apparatus connected to the system via a dedicated communication line, to allow the system to receive information from and send information to the apparatus,
 - a local area network, to allow the system to receive information from and send information to one or more other systems connected to the local area network, and
 - an Internet service provider, to allow the system to receive information from and send information to an Internet address, andwherein the communication interface is configured to perform at least one of: wireless communication and wired communication.
7. The system according to Claim 1, wherein the input device includes at least one of:
 - a touch-sensitive sensor arrangement structured to receive pressure produced by the user on the display device,
 - a voice receiver structured to receive sound commands produced by the user, and
 - an electronic pointing device structured to be manipulated by the user to provide commands based on a location of a cursor on the display device.
8. The system according to Claim 1,
 - wherein the memory device stores code bundles, and
 - wherein each code bundle includes executable code and configuration data for instantiating a corresponding digital object on the display device.
9. The system according to Claim 1, wherein the display device is at least one of:
 - a touch-sensitive display surface that receives user input by sensing physical contact, and
 - an electronic display monitor that receives user input via at least one of: a pointing device and a voice command.
10. The system according to Claim 9, wherein a digital object may be moved, rotated, or zoomed by the user via at least one of:
 - a swipe motion on the touch-sensitive display surface,
 - a tap on the touch-sensitive display surface,

a drag motion of the pointing device,
a click of the pointing device, and
a spoken command.

11. The system according to Claim 10, wherein, when the digital object is moved, rotated, or zoomed, a visible appearance of the digital object transitions smoothly from an initial appearance to a final appearance.

12. The system according to Claim 1, wherein the computer code further includes a zoom module that enables the user to alter a size of at least one of:

- a base-layer object,
- a group of base-layer objects,
- all base-layer objects, and
- a viewable area of the base-surface window,

displayed on the display device.

13. The system according to Claim 12, wherein the zoom module is configured to provide at least one of:
one-command zooming, such that a single command issued by the user and received by the input device causes zooming to a predetermined size and a predetermined position,

a sliding zoom scale, which enables the user to change the size smoothly and continuously in accordance with a slide position of the sliding zoom scale, the slide position being smoothly and continuously changeable by the user via the input device, and

a zoom-level changer, which enables the user to incrementally change a zoom level to one of a plurality of discrete zoom levels.

14. The system according to Claim 13, wherein the zoom module enables the user to cause the sliding zoom scale to appear and disappear from the main display area by at least one of:

- a tap input,
- a swipe input,
- a click input, and
- a voice-command input.

15. The system according to Claim 13, wherein, when the sliding zoom scale appears in the main display area, the slide position of the sliding zoom scale is at a position corresponding to a current size of the base-surface window.

16. The system according to Claim 14,

wherein the zoom module enables the user to cause the sliding zoom scale to appear and disappear from the main display area by a tap input or a click input, and,

a position of the tap input or the click input designates a position at which the sliding zoom scale appears in the main display area.

17. The system according to Claim 13, wherein the zoom module is configured to display the sliding zoom scale at a predetermined position in the main display area.

18. The system according to Claim 13, wherein the zoom module enables the user to change the zoom level by at least one of:

a tap input,

a click input, and

a voice-command input.

19. The system according to Claim 1, wherein digital objects in the base layer and the fixed layer correspond to user interfaces for interactive applications.

20. The system according to Claim 19, wherein the digital objects include at least one of:

a document that includes at least one of: text, an image, a video, and an animation;

a media player that plays at least one of: music content, video content, and streaming media data;

a home appliance or device controller;

a game;

a navigation tool that reveals a particular portion of the main display area;

a social networking tool;

a reference tool that includes at least one of: a dictionary, thesaurus, and an encyclopedia; and

a container that associates a plurality of digital objects into a group, and enables the group to be displayed as an icon or in full size.

21. The system according to Claim 19,

wherein a digital object appears in the main display area in an iconize state or a fully displayed state, and

wherein the main display module enables the user to change the digital object to and from the iconized state and the fully displayed state.

22. The system according to Claim 19, wherein the main display module enables the user to change a position of a digital object in the main display area without changing a position of another digital object in the main display area.

23. The system according to Claim 21, wherein
the digital object corresponds to a running interactive software application, and,
when the digital object appears in the fully displayed state in the main display area, the digital object may be locked to prevent changes to the running interactive software application when the digital object is moved, rotated, or zoomed.
24. The system according to Claim 1, wherein the computer code further includes a rotation module that enables the user to alter a rotational orientation of at least one of:
a base-layer object,
a group of base-layer objects,
all base-layer objects, and
a viewable area of the base-surface window,
displayed on the display device.
25. The system according to Claim 24, wherein the rotation module enables the user to change a rotational orientation of a base-layer object to an arbitrary angle without changing a rotational orientation of another base-layer object.
26. The system according to Claim 24, wherein the rotation module enables the user to change a rotational orientation of a group of base-layer objects to an arbitrary angle without changing a rotational orientation of the viewable area of the base-surface window.
27. The system according to Claim 1, wherein the computer code further includes a container module that enables the user to associate a plurality of digital objects into a group, such that a change in size, rotation, or position of the group causes a corresponding change in size, rotation, or position of each of the plurality of digital objects in the group.
28. The system according to Claim 1, wherein
the computer code further includes a docking module that enables the user to dock a first digital object with a second digital object to form first and second docked digital objects that are operatively linked together,
the first and second digital objects correspond to first and second interactive software applications, respectively, and
data produced by the first interactive software program corresponding to the docked first digital object is used by the second interactive software applications corresponding to the second digital object to produce a combined output.

29. The system according to Claim 28, wherein the first digital object is docked with the second digital object based on a touching position of the first digital object relative to the second digital object in the base-surface window.
30. The system according to Claim 28, wherein the first digital object is undocked from the second digital object based on a spaced-apart position of the first digital object relative to the second digital object in the base-surface window.
31. The system according to Claim 1,
wherein the computer code further includes a management module for enabling the user to manage a repository of digital objects selectable for use,
wherein a management module includes a main digital object that manages access by the user to the repository, and
wherein the main digital object may be hidden or revealed in the main display area in accordance with a command inputted by the user.
32. The system according to Claim 31, wherein the main digital object is a user interface for an interactive software application that:
provides a menu of the digital objects in the repository selectable by the user to be a base-layer object,
provides a menu of hierarchies of digital objects in the repository selectable by the user, in which digital objects belonging to a hierarchy share a common characteristic, such that a selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy to be provided for selection by the user to be a base-layer object, and
provides a search input area for the user to input a search term to search for a digital object in the repository.
33. The system according to Claim 32, wherein a digital object of the repository selected by the user via the main digital object causes a copy of the digital object to appear in an object window within the base-surface window.
34. The system according to Claim 32, wherein the main digital object enables the user to save duplicate copies of a digital object in the repository under different names.
35. The system according to Claim 32, wherein the main digital object enables the user to save different versions of a digital object in the repository under different names.

36. The system according to Claim 32, wherein the main digital object enables multiple copies of a digital object of the repository selected by the user to be to appear multiple object windows within the base-surface window.

37. The system of Claim 1, further comprising a plurality of display devices each structured to display a graphical interface to the user based on the computer code executed by the computer processor, wherein a digital object may be transferred from a first display device to a second display device.

38. The system of Claim 37, wherein, when the digital object is transferred from the first display device to the second display device, a visible appearance of the digital object moves smoothly from the first display device to the second display device.

39. The system of Claim 37, wherein, when the digital object is transferred from the first display device to the second display device if the first display device electronically recognizes the second display device.

40. The system of Claim 1, wherein

the system further comprises a communication interface for wirelessly connecting the computer processor to an external controller,

the system is portable by the user,

when the system enters a location recognized by the system and controlled by the external controller, a signal received by the computer processor from the external controller automatically initiates execution of a portion of the computer code to cause the display device to display one or more digital objects corresponding to the location.

41. The system of Claim 1, wherein

the system further comprises a sensor that senses a condition of an environment of the system,

the system is portable by the user,

when the sensor senses a predetermined condition of the environment of the system, the sensor provides a signal to the computer processor to initiate execution of a portion of the computer code to cause the display device to display one or more digital objects corresponding to the predetermined condition of the environment of the system.

42. The system of Claim 1, wherein the computer code further includes an overlay module that enables the user to overlay a first digital object upon a second digital object, and to utilize the first digital object and the second digital object as a group.

43. The system of Claim 42, wherein the overlay module further enables the user to control, by using the first digital object, a remote device, the remote device being determined based on a positional relationship between the first digital object and the second digital object.

44. The system of Claim 1, further comprising a proximity sensor configured to detect a spatial proximity between the display device and an additional display device, wherein the main display module enables the user to create a virtual base-layer that spans across the display device and the additional display device.

45. A method for organizing, displaying, and interacting with information on a display device, the method comprising steps of:

- displaying a graphical interface to a user;

- receiving information from the user based on one or more images of the graphical interface;

- providing a main display area of the graphical interface;

- organizing digital objects in a plurality of layers, the layers including:

- a base layer corresponding to a base-surface window of the main display area, wherein an appearance of one or more base-layer objects in the base-surface window may be selectively altered by the user, and

- a fixed layer corresponding to a fixed-surface window of the main display area, wherein an appearance of one or more fixed-layer objects in the fixed-surface window are fixed or pinned when an appearance of a base-layer object is altered by the user; and

- enabling the user to:

- selectively pin and unpin a digital object to the fixed-surface window as a fixed-layer object,

- set a digital object as a base-layer object displayed in the basic-layer window,

- change a base-layer object to a fixed-layer object,

- change a fixed-layer object to a base-layer object, and

- create a group of base-layer objects, such that an appearance of the group of base-layer objects may be altered in unison.

46. The method according to Claim 45, further comprising enabling the user to move, zoom, and rotate a base-layer object within the base-surface window.

47. The method according to Claim 45, further comprising enabling the user to move, zoom, and rotate the base-surface window within the main display area relative to a position of the fixed-surface window.

48. The method according to Claim 45, further comprising enabling the user to selectively set a position of the fixed-surface window within the main display area.

49. The method according to Claim 45, further comprising enabling the user to create a first group of base-layer objects different from a second group of base-layer objects, such that an appearance of the first group of base-layer objects may be altered in unison without altering an appearance of the second group of base-layer objects.

50. The method according to Claim 45, further comprising providing a communication interface for connecting a computer processor to at least one of:

an apparatus connected to a system via a dedicated communication line, to allowing the system to receive information from and send information to the apparatus,

a local area network, to allow the system to receive information from and send information to one or more other systems connected to the local area network, and

an Internet service provider, to allow the system to receive information from and send information to an Internet address, and

wherein the communication interface is configured to perform at least one of: wireless communication and wired communication.

51. The method according to Claim 45, further comprising:

receiving, via a touch-sensitive sensor arrangement, pressure produced by the user on the display device,

receiving, via a voice receiver, sound commands produced by the user, and

receiving, via an electronic pointing device, manipulations by the user to provide commands based on a location of a cursor on the display device.

52. The method according to Claim 45, further comprising:

storing code bundles in a memory device,

wherein each code bundle includes executable code and configuration data for instantiating a corresponding digital object on the display device.

53. The method according to Claim 45, further comprising:

receiving, via a touch-sensitive display surface, user input by sensing physical contact, and

receiving, via an electronic display monitor, user input via at least one of: a pointing device and a voice command.

54. The method according to Claim 53, wherein a digital object may be moved, rotated, or zoomed by the user via at least one of:

a swipe motion on the touch-sensitive display surface,

a tap on the touch-sensitive display surface,

a drag motion of the pointing device,
a click of the pointing device, and
a spoken command.

55. The method according to Claim 54, wherein, when the digital object is moved, rotated, or zoomed, a visible appearance of the digital object transitions smoothly from an initial appearance to a final appearance.

56. The method according to Claim 45, further comprising enabling the user to alter a size of at least one of:

a base-layer object,
a group of base-layer objects,
all base-layer objects, and
a viewable area of the base-surface window,
displayed on the display device.

57. The method according to Claim 56, further comprising providing:

one-command zooming, such that a single command issued by the user causes zooming to a predetermined size and a predetermined position,

a sliding zoom scale, which enables the user to change the size smoothly and continuously in accordance with a slide position of the sliding zoom scale, the slide position being smoothly and continuously changeable by the user, and

a zoom-level changer, which enables the user to incrementally change a zoom level to one of a plurality of discrete zoom levels.

58. The method according to Claim 57, further comprising enabling the user to cause the sliding zoom scale to appear and disappear from the main display area by at least one of:

a tap input,
a swipe input,
a click input, and
a voice-command input.

59. The method according to Claim 57, wherein, when the sliding zoom scale appears in the main display area, the slide position of the sliding zoom scale is at a position corresponding to a current size of the base-surface window.

60. The method according to Claim 58,

further comprising enabling the user to cause the sliding zoom scale to appear and disappear from the main display area by a tap input or a click input,

wherein a position of the tap input or the click input designates a position at which the sliding zoom scale appears in the main display area.

61. The method according to Claim 57, further comprising displaying the sliding zoom scale at a predetermined position in the main display area.

62. The method according to Claim 57, further comprising enabling the user to change the zoom level by at least one of:

- a tap input,
- a click input, and
- a voice-command input.

63. The method according to Claim 45, wherein digital objects in the base layer and the fixed layer correspond to user interfaces for interactive applications.

64. The method according to Claim 63, wherein the digital objects include at least one of:

- a document that includes at least one of: text, an image, a video, and an animation;
- a media player that plays at least one of: music content, video content, and streaming media data;
- a home appliance or device controller;
- a game;
- a navigation tool that reveals a particular portion of the main display area;
- a social networking tool;
- a reference tool that includes at least one of: a dictionary, thesaurus, and an encyclopedia; and
- a container that associates a plurality of digital objects into a group, and enables the group to be displayed as an icon or in full size.

65. The method according to Claim 63,

wherein a digital object appears in the main display area in an iconize state or a fully displayed state, and

wherein the method further comprises enabling the user to change the digital object to and from the iconized state and the fully displayed state.

66. The method according to Claim 63, further comprising enabling the user to change a position of a digital object in the main display area without changing a position of another digital object in the main display area.

67. The method according to Claim 65, wherein
the digital object corresponds to a running interactive software application, and,
when the digital object appears in the fully displayed state in the main display area, the digital object may be locked to prevent changes to the running interactive software application when the digital object is moved, rotated, or zoomed.
68. The method according to Claim 45, further comprising enabling the user to alter a rotational orientation of at least one of:
a base-layer object,
a group of base-layer objects,
all base-layer objects, and
a viewable area of the base-surface window,
displayed on the display device.
69. The method according to Claim 68, further comprising enabling the user to change a rotational orientation of a base-layer object to an arbitrary angle without changing a rotational orientation of another base-layer object.
70. The method according to Claim 68, further comprising enabling the user to change a rotational orientation of a group of base-layer objects to an arbitrary angle without changing a rotational orientation of the viewable area of the base-surface window.
71. The method according to Claim 45, further comprising enabling the user to associate a plurality of digital objects into a group, such that a change in size, rotation, or position of the group causes a corresponding change in size, rotation, or position of each of the plurality of digital objects in the group.
72. The method according to Claim 45, further comprising:
enabling the user to dock a first digital object with a second digital object to form first and second docked digital objects that are operatively linked together,
wherein the first and second digital objects correspond to first and second interactive software applications, respectively, and
wherein data produced by the first interactive software program corresponding to the docked first digital object is used by the second interactive software applications corresponding to the second digital object to produce a combined output.

73. The method according to Claim 72, wherein the first digital object is docked with the second digital object based on a touching position of the first digital object relative to the second digital object in the base-surface window.
74. The method according to Claim 72, wherein the first digital object is undocked from the second digital object based on a spaced-apart position of the first digital object relative to the second digital object in the base-surface window.
75. The method according to Claim 45, further comprising:
enabling the user to manage a repository of digital objects selectable for use,
wherein a management module includes a main digital object that manages access by the user to the repository, and
wherein the main digital object may be hidden or revealed in the main display area in accordance with a command inputted by the user.
76. The method according to Claim 75, wherein the main digital object is a user interface for an interactive software application that:
provides a menu of the digital objects in the repository selectable by the user to be a base-layer object,
provides a menu of hierarchies of digital objects in the repository selectable by the user, in which digital objects belonging to a hierarchy share a common characteristic, such that a selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy to be provided for selection by the user to be a base-layer object, and
provides a search input area for the user to input a search term to search for a digital object in the repository.
77. The method according to Claim 76, wherein a digital object of the repository selected by the user via the main digital object causes a copy of the digital object to appear in an object window within the base-surface window.
78. The method according to Claim 76, wherein the main digital object enables the user to save duplicate copies of a digital object in the repository under different names.
79. The method according to Claim 76, wherein the main digital object enables the user to save different versions of a digital object in the repository under different names.

80. The method according to Claim 76, wherein the main digital object enables multiple copies of a digital object of the repository selected by the user to be to appear multiple object windows within the base-surface window.

81. The method of Claim 45, wherein a plurality of display devices are each structured to display a graphical interface to the user based on the computer code executed by the computer processor, wherein a digital object may be transferred from a first display device to a second display device.

82. The method of Claim 81, wherein, when the digital object is transferred from the first display device to the second display device, a visible appearance of the digital object moves smoothly from the first display device to the second display device.

83. The method of Claim 81, wherein, when the digital object is transferred from the first display device to the second display device if the first display device electronically recognizes the second display device.

84. The method of Claim 45, wherein

when a portable system is brought into a location that is recognized by the system and controlled by an external controller, a signal is received by a computer processor from the external controller and the display device is automatically caused to display one or more digital objects corresponding to the location.

85. The method of Claim 45, further comprising:

sensing a predetermined condition of an environment of a system, and

providing a signal to a computer processor to cause the display device to display one or more digital objects corresponding to the predetermined condition of the environment of the system.

86. The method of Claim 45, further comprising enabling the user to overlay a first digital object upon a second digital object, and to utilize the first digital object and the second digital object as a group.

87. The method of Claim 86, further comprising enabling the user to control, by using the first digital object, a remote device, the remote device being determined based on a positional relationship between the first digital object and the second digital object.

88. The method of Claim 45, further comprising:

detecting, via a proximity sensor, a spatial proximity between the display device and an additional display device; and

enabling the user to create a virtual base-layer that spans across the display device and the additional display device.

89. A non-transitory computer-readable medium having stored thereon sequences of instructions, the sequences of instructions including instructions, which, when executed by a computer system, cause the computer system to:

- display a graphical interface to a user;

- receive information from the user based on one or more images of the graphical interface;

- provide a main display area of the graphical interface;

- organize digital objects in a plurality of layers, the layers including:

- a base layer corresponding to a base-surface window of the main display area, wherein an appearance of one or more base-layer objects in the base-surface window may be selectively altered by the user, and

- a fixed layer corresponding to a fixed-surface window of the main display area, wherein an appearance of one or more fixed-layer objects in the fixed-surface window are fixed or pinned when an appearance of a base-layer object is altered by the user; and

- enable the user to:

- selectively pin and unpin a digital object to the fixed-surface window as a fixed-layer object,

- set a digital object as a base-layer object displayed in the basic-layer window,

- change a base-layer object to a fixed-layer object,

- change a fixed-layer object to a base-layer object, and

- create a group of base-layer objects, such that an appearance of the group of base-layer objects may be altered in unison.

90. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to move, zoom, and rotate a base-layer object within the base-surface window.

91. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to move, zoom, and rotate the base-surface window within the main display area relative to a position of the fixed-surface window.

92. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to selectively set a position of the fixed-surface window within the main display area.

93. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to

enable the user to create a first group of base-layer objects different from a second group of base-layer objects, such that an appearance of the first group of base-layer objects may be altered in unison without altering an appearance of the second group of base-layer objects.

94. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to provide a communication interface for connecting the computer processor to at least one of:

an apparatus connected to the system via a dedicated communication line, to allow the system to receive information from and send information to the apparatus,

a local area network, to allow the system to receive information from and send information to one or more other systems connected to the local area network, and

an Internet service provider, to allow the system to receive information from and send information to an Internet address, and

wherein the communication interface is configured to perform at least one of: wireless communication and wired communication.

95. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to:

receive, via a touch-sensitive sensor arrangement, pressure produced by the user on the display device,

receive, via a voice receiver, sound commands produced by the user, and

receive, via an electronic pointing device, manipulations by the user to provide commands based on a location of a cursor on the display device.

96. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to:

store code bundles in a memory device,

wherein each code bundle includes executable code and configuration data for instantiating a corresponding digital object on the display device.

97. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to:

receive, via a touch-sensitive display surface, user input by sensing physical contact, and

receive, via an electronic display monitor, user input via at least one of: a pointing device and a voice command.

98. The non-transitory computer-readable medium according to Claim 97, wherein a digital object may be moved, rotated, or zoomed by the user via at least one of:

- a swipe motion on the touch-sensitive display surface,
- a tap on the touch-sensitive display surface,
- a drag motion of the pointing device,
- a click of the pointing device, and
- a spoken command.

99. The non-transitory computer-readable medium according to Claim 98, wherein, when the digital object is moved, rotated, or zoomed, a visible appearance of the digital object transitions smoothly from an initial appearance to a final appearance.

100. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to alter a size of at least one of:

- a base-layer object,
- a group of base-layer objects,
- all base-layer objects, and
- a viewable area of the base-surface window,

displayed on the display device.

101. The non-transitory computer-readable medium according to Claim 100, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to provide at least one of:

one-command zooming, such that a single command issued by the user and received by the input device causes zooming to a predetermined size and a predetermined position,

a sliding zoom scale, which enables the user to change the size smoothly and continuously in accordance with a slide position of the sliding zoom scale, the slide position being smoothly and continuously changeable by the user via the input device, and

a zoom-level changer, which enables the user to incrementally change a zoom level to one of a plurality of discrete zoom levels.

102. The non-transitory computer-readable medium according to Claim 101, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to cause the sliding zoom scale to appear and disappear from the main display area by at least one of:

- a tap input,

a swipe input,
a click input, and
a voice-command input.

103. The non-transitory computer-readable medium according to Claim 101, wherein, when the sliding zoom scale appears in the main display area, the slide position of the sliding zoom scale is at a position corresponding to a current size of the base-surface window.

104. The non-transitory computer-readable medium according to Claim 102, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to cause the sliding zoom scale to appear and disappear from the main display area by a tap input or a click input,

wherein a position of the tap input or the click input designates a position at which the sliding zoom scale appears in the main display area.

105. The non-transitory computer-readable medium according to Claim 101, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to display the sliding zoom scale at a predetermined position in the main display area.

106. The non-transitory computer-readable medium according to Claim 101, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to change the zoom level by at least one of:

a tap input,
a click input, and
a voice-command input.

107. The non-transitory computer-readable medium according to Claim 89, wherein digital objects in the base layer and the fixed layer correspond to user interfaces for interactive applications.

108. The non-transitory computer-readable medium according to Claim 107, wherein the digital objects include at least one of:

a document that includes at least one of: text, an image, a video, and an animation;
a media player that plays at least one of: music content, video content, and streaming media data;
a home appliance or device controller;
a game;
a navigation tool that reveals a particular portion of the main display area;
a social networking tool;

a reference tool that includes at least one of: a dictionary, thesaurus, and an encyclopedia; and
a container that associates a plurality of digital objects into a group, and enables the group to be displayed as an icon or in full size.

109. The non-transitory computer-readable medium according to Claim 107,

wherein a digital object appears in the main display area in an iconize state or a fully displayed state, and

wherein the non-transitory computer-readable medium further has stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to change the digital object to and from the iconized state and the fully displayed state.

110. The non-transitory computer-readable medium according to Claim 107, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to change a position of a digital object in the main display area without changing a position of another digital object in the main display area.

111. The non-transitory computer-readable medium according to Claim 109, wherein

the digital object corresponds to a running interactive software application, and,

when the digital object appears in the fully displayed state in the main display area, the digital object may be locked to prevent changes to the running interactive software application when the digital object is moved, rotated, or zoomed.

112. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to alter a rotational orientation of at least one of:

a base-layer object,

a group of base-layer objects,

all base-layer objects, and

a viewable area of the base-surface window,

displayed on the display device.

113. The non-transitory computer-readable medium according to Claim 112, further having stored

thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to change a rotational orientation of a base-layer object to an arbitrary angle without changing a rotational orientation of another base-layer object.

114. The non-transitory computer-readable medium according to Claim 112, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to change a rotational orientation of a group of base-layer objects to an arbitrary angle without changing a rotational orientation of the viewable area of the base-surface window.

115. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to associate a plurality of digital objects into a group, such that a change in size, rotation, or position of the group causes a corresponding change in size, rotation, or position of each of the plurality of digital objects in the group.

116. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to dock a first digital object with a second digital object to form first and second docked digital objects that are operatively linked together,

wherein the first and second digital objects correspond to first and second interactive software applications, respectively, and

wherein data produced by the first interactive software program corresponding to the docked first digital object is used by the second interactive software applications corresponding to the second digital object to produce a combined output.

117. The non-transitory computer-readable medium according to Claim 116, wherein the first digital object is docked with the second digital object based on a touching position of the first digital object relative to the second digital object in the base-surface window.

118. The non-transitory computer-readable medium according to Claim 116, wherein the first digital object is undocked from the second digital object based on a spaced-apart position of the first digital object relative to the second digital object in the base-surface window.

119. The non-transitory computer-readable medium according to Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to:

manage a repository of digital objects selectable for use, and

manage access by the user to the repository,

wherein the main digital object may be hidden or revealed in the main display area in accordance with a command inputted by the user.

120. The non-transitory computer-readable medium according to Claim 119, wherein the main digital object is a user interface for an interactive software application that:

provides a menu of the digital objects in the repository selectable by the user to be a base-layer object,

provides a menu of hierarchies of digital objects in the repository selectable by the user, in which digital objects belonging to a hierarchy share a common characteristic, such that a selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy to be provided for selection by the user to be a base-layer object, and

provides a search input area for the user to input a search term to search for a digital object in the repository.

121. The non-transitory computer-readable medium according to Claim 120, wherein a digital object of the repository selected by the user via the main digital object causes a copy of the digital object to appear in an object window within the base-surface window.

122. The non-transitory computer-readable medium according to Claim 120, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to save duplicate copies of a digital object in the repository under different names.

123. The non-transitory computer-readable medium according to Claim 120, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to save different versions of a digital object in the repository under different names.

124. The non-transitory computer-readable medium according to Claim 120, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable multiple copies of a digital object of the repository selected by the user to be to appear multiple object windows within the base-surface window.

125. The non-transitory computer-readable medium of Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to display a graphical interface to the user, wherein a digital object may be transferred from a first display device to a second display device.

126. The non-transitory computer-readable medium of Claim 125, wherein, when the digital object is transferred from the first display device to the second display device, a visible appearance of the digital object moves smoothly from the first display device to the second display device.

127. The non-transitory computer-readable medium of Claim 125, wherein, when the digital object is transferred from the first display device to the second display device if the first display device electronically recognizes the second display device.

128. The non-transitory computer-readable medium of Claim 89, wherein when the medium is brought into a location that is recognized by the medium and controlled by an external controller, a signal is received by a computer processor from the external controller and the display device is automatically caused to display one or more digital objects corresponding to the location.

129. The non-transitory computer-readable medium of Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to:

sense a predetermined condition of the environment of the system; and

provide a signal to a computer processor to cause the display device to display one or more digital objects corresponding to the predetermined condition of the environment of the system.

130. The non-transitory computer-readable medium of Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to overlay a first digital object upon a second digital object, and to utilize the first digital object and the second digital object as a group.

131. The non-transitory computer-readable medium of Claim 130, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to control, by using the first digital object, a remote device, the remote device being determined based on a positional relationship between the first digital object and the second digital object.

132. The non-transitory computer-readable medium of Claim 89, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to:

detect a spatial proximity between the display device and an additional display device, and

enable the user to create a virtual base-layer that spans across the display device and the additional display device.

CLAIMS

1. A system for organizing, displaying, and interacting with information on a display device, the system comprising:

a computer processor;

a memory device accessible by the computer processor and storing at least one of:

computer code executable by the computer processor, and

data used by the computer code,

wherein the computer code includes:

a main display module for providing, to a display device of a user, a graphical interface that includes a main display area, and for organizing digital objects in a plurality of layers, the layers including:

a base layer corresponding to a base-surface window of the main display area, wherein an appearance of one or more base-layer objects in the base-surface window may be selectively altered by the user via an input device working in conjunction with graphical information of the graphical interface, the input device enabling the user to input information to the computer processor, and

a fixed layer corresponding to a fixed-surface window of the main display area, wherein an appearance of one or more fixed-layer objects in the fixed-surface window are fixed or pinned when an appearance of a base-layer object is altered by the user via the input device,

a zoom module that enables the user to alter a size of at least one of: a base-layer object, a group of base-layer objects, all base-layer objects, and a viewable area of the base-surface window, displayed on the display device, and

a rotation module that enables the user to alter a rotational orientation of at least one of: a base-layer object, a group of base-layer objects, all base-layer objects, and a viewable area of the base-surface window, displayed on the display device,

wherein the main display module enables the user to input information to the computer processor, via the input device, to selectively pin and unpin a digital object to the fixed-surface window as a fixed-layer object, to set a digital object as a base-layer object displayed in the base-

surface window, to change a base-layer object to a fixed-layer object, and to change a fixed-layer object to a base-layer object,

wherein the main display module enables the user to input information to the computer processor, via the input device, to create a group of base-layer objects, such that an appearance of the group of base-layer objects may be altered in unison,

wherein each digital object appearing in the base layer or the fixed layer corresponds to a user interface for an interactive application, and each digital object may be displayed in a fully displayed state, in which the user may interact with the corresponding interactive application, or in an iconized state,

wherein the main display module enables the user to change an appearance of a digital object to and from the iconized state and the fully displayed state, and

wherein the zoom module and the rotation module enable a digital object to be zoomed and rotated in a single motion by using the input device to drag a predetermined area of the digital object.

2. The system according to Claim 1, wherein the main display module, the zoom module, and the rotation module enable the user to move, zoom, and rotate a base-layer object within the base-surface window.

3. The system according to Claim 1, wherein the main display module, the zoom module, and the rotation module enable the user to move, zoom, and rotate the base-surface window within the main display area relative to a position of the fixed-surface window.

4. The system according to Claim 1, wherein the main display module enables the user to selectively set a position of the fixed-surface window within the main display area.

5. The system according to Claim 1, wherein the main display module enables the user to create a first group of base-layer objects different from a second group of base-layer objects, such that an appearance of the first group of base-layer objects may be altered in unison without altering an appearance of the second group of base-layer objects.

6. The system according to Claim 1, further comprising a communication interface for connecting the computer processor to at least one of:
 - an apparatus connected to the system via a dedicated communication line, to allow the system to receive information from and send information to the apparatus,
 - a local area network, to allow the system to receive information from and send information to one or more other systems connected to the local area network, and
 - an Internet service provider, to allow the system to receive information from and send information to an Internet address, andwherein the communication interface is configured to perform at least one of: wireless communication and wired communication.
7. The system according to Claim 1, wherein the input device includes at least one of:
 - a touch-sensitive sensor arrangement structured to receive pressure produced by the user on the display device,
 - a voice receiver structured to receive sound commands produced by the user, and
 - an electronic pointing device structured to be manipulated by the user to provide commands based on a location of a cursor on the display device.
8. The system according to Claim 1,
 - wherein the memory device stores code bundles, and
 - wherein each code bundle includes executable code and configuration data for instantiating a corresponding digital object on the display device.
9. The system according to Claim 1, wherein the display device is at least one of:
 - a touch-sensitive display surface that receives user input by sensing physical contact, and
 - an electronic display monitor that receives user input via at least one of: a pointing device and a voice command.
10. The system according to Claim 9, wherein a digital object may be moved, rotated, or zoomed by the user via at least one of:
 - a swipe motion on the touch-sensitive display surface,

a tap on the touch-sensitive display surface,
a drag motion of the pointing device,
a click of the pointing device, and
a spoken command.

11. The system according to Claim 10, wherein, when the digital object is moved, rotated, or zoomed, a visible appearance of the digital object transitions smoothly from an initial appearance to a final appearance.

12. The system according to Claim 1, wherein the zoom module is configured to provide at least one of:

one-command zooming, such that a single command issued by the user and received by the input device causes zooming to a predetermined size and a predetermined position,

a sliding zoom scale, which enables the user to change the size smoothly and continuously in accordance with a slide position of the sliding zoom scale, the slide position being smoothly and continuously changeable by the user via the input device, and

a zoom-level changer, which enables the user to incrementally change a zoom level to one of a plurality of discrete zoom levels.

13. The system according to Claim 12, wherein the zoom module enables the user to cause the sliding zoom scale to appear and disappear from the main display area by at least one of:

a tap input,

a swipe input,

a click input, and

a voice-command input.

14. The system according to Claim 12, wherein, when the sliding zoom scale appears in the main display area, the slide position of the sliding zoom scale is at a position corresponding to a current size of the base-surface window.

15. The system according to Claim 13,

wherein the zoom module enables the user to cause the sliding zoom scale to appear and disappear from the main display area by a tap input or a click input, and,

a position of the tap input or the click input designates a position at which the sliding zoom scale appears in the main display area.

16. The system according to Claim 12, wherein the zoom module is configured to display the sliding zoom scale at a predetermined position in the main display area.

17. The system according to Claim 12, wherein the zoom module enables the user to change the zoom level by at least one of:

a tap input,

a click input, and

a voice-command input.

18. The system according to Claim 1, wherein the digital objects include at least one of:

a document that includes at least one of: text, an image, a video, and an animation;

a media player that plays at least one of: music content, video content, and streaming media data;

a home appliance or device controller;

a game;

a navigation tool that reveals a particular portion of the main display area;

a social networking tool;

a reference tool that includes at least one of: a dictionary, thesaurus, and an encyclopedia;

and

a container that associates a plurality of digital objects into a group, and enables the group to be displayed as an icon or in full size.

19. The system according to Claim 1, wherein the main display module enables the user to change a position of a digital object in the main display area without changing a position of another digital object in the main display area.

20. The system according to Claim 1, wherein
the digital object corresponds to a running interactive software application, and,
when the digital object appears in the fully displayed state in the main display area, the
digital object may be locked to prevent changes to the running interactive software application,
the changes being possible when the digital object is moved, rotated, or zoomed.
21. The system according to Claim 1, wherein the rotation module enables the user to change
a rotational orientation of a base-layer object to an arbitrary angle without changing a rotational
orientation of another base-layer object.
22. The system according to Claim 1, wherein the rotation module enables the user to change
a rotational orientation of a group of base-layer objects to an arbitrary angle without changing a
rotational orientation of the viewable area of the base-surface window.
23. The system according to Claim 1, wherein the computer code further includes a container
module that enables the user to associate a plurality of digital objects into a group, such that a
change in size, rotation, or position of the group causes a corresponding change in size, rotation,
or position of each of the plurality of digital objects in the group.
24. The system according to Claim 1, wherein
the computer code further includes a docking module that enables the user to dock a first
digital object with a second digital object to form first and second docked digital objects that are
operatively linked together,
the first and second digital objects correspond to first and second interactive software
applications, respectively, and
data produced by the first interactive software program corresponding to the docked first
digital object is used by the second interactive software applications corresponding to the second
digital object to produce a combined output.

25. The system according to Claim 24, wherein the first digital object is docked with the second digital object based on a touching position of the first digital object relative to the second digital object in the base-surface window.
26. The system according to Claim 24, wherein the first digital object is undocked from the second digital object based on a spaced-apart position of the first digital object relative to the second digital object in the base-surface window.
27. The system according to Claim 1,
wherein the computer code further includes a management module for enabling the user to manage a repository of digital objects selectable for use,
wherein a management module includes a main digital object that manages access by the user to the repository, and
wherein the main digital object may be hidden or revealed in the main display area in accordance with a command inputted by the user.
28. The system according to Claim 27, wherein the main digital object is a user interface for an interactive software application that:
provides a menu of the digital objects in the repository selectable by the user to be a base-layer object,
provides a menu of hierarchies of digital objects in the repository selectable by the user, in which digital objects belonging to a hierarchy share a common characteristic, such that a selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy to be provided for selection by the user to be a base-layer object, and
provides a search input area for the user to input a search term to search for a digital object in the repository.
29. The system according to Claim 28, wherein a digital object of the repository selected by the user via the main digital object causes a copy of the digital object to appear in an object window within the base-surface window.

30. The system according to Claim 28, wherein the main digital object enables the user to save duplicate copies of a digital object in the repository under different names.
31. The system according to Claim 28, wherein the main digital object enables the user to save different versions of a digital object in the repository under different names.
32. The system according to Claim 28, wherein the main digital object enables multiple copies of a digital object of the repository selected by the user to be to appear multiple object windows within the base-surface window.
33. The system of Claim 1, further comprising a plurality of display devices each structured to display a graphical interface to the user based on the computer code executed by the computer processor, wherein a digital object may be transferred from a first display device to a second display device.
34. The system of Claim 33, wherein, when the digital object is transferred from the first display device to the second display device, a visible appearance of the digital object moves smoothly from the first display device to the second display device.
35. The system of Claim 33, wherein, when the digital object is transferred from the first display device to the second display device if the first display device electronically recognizes the second display device.
36. The system of Claim 1, wherein
the system further comprises a communication interface for wirelessly connecting the computer processor to an external controller,
the system is portable by the user,
when the system enters a location recognized by the system and controlled by the external controller, a signal received by the computer processor from the external controller automatically initiates execution of a portion of the computer code to cause the display device to display one or more digital objects corresponding to the location.

37. The system of Claim 1, wherein
the system further comprises a sensor that senses a condition of an environment of the system,
the system is portable by the user,
when the sensor senses a predetermined condition of the environment of the system, the sensor provides a signal to the computer processor to initiate execution of a portion of the computer code to cause the display device to display one or more digital objects corresponding to the predetermined condition of the environment of the system.
38. The system of Claim 1, wherein the computer code further includes an overlay module that enables the user to overlay a first digital object upon a second digital object, and to utilize the first digital object and the second digital object as a group.
39. The system of Claim 38, wherein the overlay module further enables the user to control, by using the first digital object, a remote device corresponding to an overlaid portion of the second digital object, the remote device being determined based on a positional relationship between the first digital object and the second digital object, in which the first digital device is positioned on the overlaid portion of the second digital object to which the remote device corresponds.
40. The system of Claim 1, further comprising a proximity sensor configured to detect a spatial proximity between the display device and an additional display device, wherein the main display module enables the user to create a virtual base-layer that spans across the display device and the additional display device.
41. A method for organizing, displaying, and interacting with information on a display device, the method comprising steps of:
providing, from a computer processor to a display device of a user, a graphical interface that includes a main display area;
organizing digital objects in a plurality of layers, the layers including:

a base layer corresponding to a base-surface window of the main display area, wherein an appearance of one or more base-layer objects in the base-surface window may be selectively altered by the user via instructions inputted by the user to the computer processor using an input device operating in conjunction with graphical information of the graphical interface, and

a fixed layer corresponding to a fixed-surface window of the main display area, wherein an appearance of one or more fixed-layer objects in the fixed-surface window are fixed or pinned when an appearance of a base-layer object is altered by the user via instructions inputted by the user to the computer processor using the input device,

wherein each digital object appearing in the base layer or the fixed layer corresponds to a user interface for an interactive application, and each digital object may be displayed in a fully displayed state, in which the user may interact with the corresponding interactive application, or in an iconized state;

enabling the user, via the input device, to:

selectively pin and unpin a digital object to the fixed-surface window as a fixed-layer object,

set a digital object as a base-layer object displayed in the base-surface window,

change a base-layer object to a fixed-layer object,

change a fixed-layer object to a base-layer object, and

create a group of base-layer objects, such that an appearance of the group of base-layer objects may be altered in unison;

enabling the user, via the input device, to zoom to alter a size of at least one of: a base-layer object, a group of base-layer objects, all base-layer objects, and a viewable area of the base-surface window, displayed on the display device;

enabling the user, via the input device to alter a rotational orientation of at least one of: a base-layer object, a group of base-layer objects, all base-layer objects, and a viewable area of the base-surface window, displayed on the display device; and

enabling the user, via the input device, to change an appearance of a digital object to and from the iconized state and the fully displayed state,

wherein a digital object is zoomable and rotatable in a single motion by using the input device to drag a predetermined area of the digital object.

42. The method according to Claim 41, wherein the method enables the user to move, zoom, and rotate a base-layer object within the base-surface window by using the input device.
43. The method according to Claim 41, wherein the method enables the user to move, zoom, and rotate the base-surface window within the main display area relative to a position of the fixed-surface window by using the input device.
44. The method according to Claim 41, further comprising enabling the user to selectively set a position of the fixed-surface window within the main display area.
45. The method according to Claim 41, further comprising enabling the user to create a first group of base-layer objects different from a second group of base-layer objects, such that an appearance of the first group of base-layer objects may be altered in unison without altering an appearance of the second group of base-layer objects.
46. The method according to Claim 41, further comprising providing a communication interface for connecting a computer processor to at least one of:
- an apparatus connected to a system via a dedicated communication line, to allowing the system to receive information from and send information to the apparatus,
 - a local area network, to allow the system to receive information from and send information to one or more other systems connected to the local area network, and
 - an Internet service provider, to allow the system to receive information from and send information to an Internet address, and
- wherein the communication interface is configured to perform at least one of: wireless communication and wired communication.
47. The method according to Claim 41, further comprising:
- receiving, via a touch-sensitive sensor arrangement, pressure produced by the user on the display device,
 - receiving, via a voice receiver, sound commands produced by the user, and

receiving, via an electronic pointing device, manipulations by the user to provide commands based on a location of a cursor on the display device.

48. The method according to Claim 41, further comprising:
storing code bundles in a memory device,
wherein each code bundle includes executable code and configuration data for instantiating a corresponding digital object on the display device.
49. The method according to Claim 41, further comprising:
receiving, via a touch-sensitive display surface, user input by sensing physical contact,
and
receiving, via an electronic display monitor, user input via at least one of: a pointing device and a voice command.
50. The method according to Claim 49, wherein a digital object may be moved, rotated, or zoomed by the user via at least one of:
a swipe motion on the touch-sensitive display surface,
a tap on the touch-sensitive display surface,
a drag motion of the pointing device,
a click of the pointing device, and
a spoken command.
51. The method according to Claim 50, wherein, when the digital object is moved, rotated, or zoomed, a visible appearance of the digital object transitions smoothly from an initial appearance to a final appearance.
52. The method according to Claim 41, further comprising providing:
one-command zooming, such that a single command issued by the user causes zooming to a predetermined size and a predetermined position,

a sliding zoom scale, which enables the user to change the size smoothly and continuously in accordance with a slide position of the sliding zoom scale, the slide position being smoothly and continuously changeable by the user, and

a zoom-level changer, which enables the user to incrementally change a zoom level to one of a plurality of discrete zoom levels.

53. The method according to Claim 52, further comprising enabling the user to cause the sliding zoom scale to appear and disappear from the main display area by at least one of:

- a tap input,
- a swipe input,
- a click input, and
- a voice-command input.

54. The method according to Claim 52, wherein, when the sliding zoom scale appears in the main display area, the slide position of the sliding zoom scale is at a position corresponding to a current size of the base-surface window.

55. The method according to Claim 53,

further comprising enabling the user to cause the sliding zoom scale to appear and disappear from the main display area by a tap input or a click input,

wherein a position of the tap input or the click input designates a position at which the sliding zoom scale appears in the main display area.

56. The method according to Claim 52, further comprising displaying the sliding zoom scale at a predetermined position in the main display area.

57. The method according to Claim 52, further comprising enabling the user to change the zoom level by at least one of:

- a tap input,
- a click input, and
- a voice-command input.

58. The method according to Claim 41, wherein the digital objects include at least one of:
a document that includes at least one of: text, an image, a video, and an animation;
a media player that plays at least one of: music content, video content, and streaming media data;
a home appliance or device controller;
a game;
a navigation tool that reveals a particular portion of the main display area;
a social networking tool;
a reference tool that includes at least one of: a dictionary, thesaurus, and an encyclopedia;
and
a container that associates a plurality of digital objects into a group, and enables the group to be displayed as an icon or in full size.
59. The method according to Claim 41, further comprising enabling the user to change a position of a digital object in the main display area without changing a position of another digital object in the main display area.
60. The method according to Claim 41, wherein
the digital object corresponds to a running interactive software application, and,
when the digital object appears in the fully displayed state in the main display area, the digital object may be locked to prevent changes to the running interactive software application, the changes being possible when the digital object is moved, rotated, or zoomed.
61. The method according to Claim 41, further comprising enabling the user to change a rotational orientation of a base-layer object to an arbitrary angle without changing a rotational orientation of another base-layer object.
62. The method according to Claim 41, further comprising enabling the user to change a rotational orientation of a group of base-layer objects to an arbitrary angle without changing a rotational orientation of the viewable area of the base-surface window.

63. The method according to Claim 41, further comprising enabling the user to associate a plurality of digital objects into a group, such that a change in size, rotation, or position of the group causes a corresponding change in size, rotation, or position of each of the plurality of digital objects in the group.

64. The method according to Claim 41, further comprising:
enabling the user to dock a first digital object with a second digital object to form first and second docked digital objects that are operatively linked together,
wherein the first and second digital objects correspond to first and second interactive software applications, respectively, and
wherein data produced by the first interactive software program corresponding to the docked first digital object is used by the second interactive software applications corresponding to the second digital object to produce a combined output.

65. The method according to Claim 64, wherein the first digital object is docked with the second digital object based on a touching position of the first digital object relative to the second digital object in the base-surface window.

66. The method according to Claim 64, wherein the first digital object is undocked from the second digital object based on a spaced-apart position of the first digital object relative to the second digital object in the base-surface window.

67. The method according to Claim 41, further comprising:
enabling the user to manage a repository of digital objects selectable for use,
wherein a management module includes a main digital object that manages access by the user to the repository, and
wherein the main digital object may be hidden or revealed in the main display area in accordance with a command inputted by the user.

68. The method according to Claim 67, wherein the main digital object is a user interface for an interactive software application that:

provides a menu of the digital objects in the repository selectable by the user to be a base-layer object,

provides a menu of hierarchies of digital objects in the repository selectable by the user, in which digital objects belonging to a hierarchy share a common characteristic, such that a selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy to be provided for selection by the user to be a base-layer object, and

provides a search input area for the user to input a search term to search for a digital object in the repository.

69. The method according to Claim 68, wherein a digital object of the repository selected by the user via the main digital object causes a copy of the digital object to appear in an object window within the base-surface window.

70. The method according to Claim 68, wherein the main digital object enables the user to save duplicate copies of a digital object in the repository under different names.

71. The method according to Claim 68, wherein the main digital object enables the user to save different versions of a digital object in the repository under different names.

72. The method according to Claim 68, wherein the main digital object enables multiple copies of a digital object of the repository selected by the user to be to appear multiple object windows within the base-surface window.

73. The method of Claim 41, wherein a plurality of display devices are each structured to display a graphical interface to the user based on the computer code executed by the computer processor, wherein a digital object may be transferred from a first display device to a second display device.

74. The method of Claim 73, wherein, when the digital object is transferred from the first display device to the second display device, a visible appearance of the digital object moves smoothly from the first display device to the second display device.

75. The method of Claim 73, wherein, when the digital object is transferred from the first display device to the second display device if the first display device electronically recognizes the second display device.

76. The method of Claim 41, wherein
when a portable system is brought into a location that is recognized by the system and controlled by an external controller, a signal is received by a computer processor from the external controller and the display device is automatically caused to display one or more digital objects corresponding to the location.

77. The method of Claim 41, further comprising:
sensing a predetermined condition of an environment of a system, and
providing a signal to a computer processor to cause the display device to display one or more digital objects corresponding to the predetermined condition of the environment of the system.

78. The method of Claim 41, further comprising enabling the user to overlay a first digital object upon a second digital object, and to utilize the first digital object and the second digital object as a group.

79. The method of Claim 78, further comprising enabling the user to control, by using the first digital object, a remote device corresponding to an overlaid portion of the second digital object, the remote device being determined based on a positional relationship between the first digital object and the second digital object, in which the first digital device is positioned on the overlaid portion of the second digital object to which the remote device corresponds.

80. The method of Claim 41, further comprising:

detecting, via a proximity sensor, a spatial proximity between the display device and an additional display device; and

enabling the user to create a virtual base-layer that spans across the display device and the additional display device.

81. A non-transitory computer-readable medium having stored thereon sequences of instructions, the sequences of instructions including instructions, which, when executed by a computer system, cause the computer system to:

provide, from a computer processor to a display device of a user, a graphical interface that includes a main display area;

organize digital objects in a plurality of layers, the layers including:

a base layer corresponding to a base-surface window of the main display area, wherein an appearance of one or more base-layer objects in the base-surface window may be selectively altered by the user via instructions inputted by the user to the computer processor using an input device operating in conjunction with graphical information of the graphical interface, and

a fixed layer corresponding to a fixed-surface window of the main display area, wherein an appearance of one or more fixed-layer objects in the fixed-surface window are fixed or pinned when an appearance of a base-layer object is altered by the user via instructions inputted by the user to the computer processor using the input device,

wherein each digital object appearing in the base layer or the fixed layer corresponds to a user interface for an interactive application, and each digital object may be displayed in a fully displayed state, in which the user may interact with the corresponding interactive application, or in an iconized state;

enable the user to:

selectively pin and unpin a digital object to the fixed-surface window as a fixed-layer object,

set a digital object as a base-layer object displayed in the base-surface window,

change a base-layer object to a fixed-layer object,

change a fixed-layer object to a base-layer object, and

create a group of base-layer objects, such that an appearance of the group of base-layer objects may be altered in unison;

enable the user, via the input device, to zoom to alter a size of at least one of: a base-layer object, a group of base-layer objects, all base-layer objects, and a viewable area of the base-surface window, displayed on the display device;

enable the user, via the input device to alter a rotational orientation of at least one of: a base-layer object, a group of base-layer objects, all base-layer objects, and a viewable area of the base-surface window, displayed on the display device; and

enable the user, via the input device, to change an appearance of a digital object to and from the iconized state and the fully displayed state,

wherein each digital object appearing in the base layer or the fixed layer corresponds to a user interface for an interactive application, and each digital object may be displayed in a fully displayed state, in which the user may interact with the corresponding interactive application, or in an iconized state, based on an instruction inputted by the user using the input device, and

wherein a digital object is zoomable and rotatable in a single motion by using the input device to drag a predetermined area of the digital object.

82. The non-transitory computer-readable medium according to Claim 81, wherein the sequences of instructions enable the user to move, zoom, and rotate a base-layer object within the base-surface window via use of the input device.

83. The non-transitory computer-readable medium according to Claim 81, wherein the sequences of instructions enable the user to move, zoom, and rotate the base-surface window within the main display area relative to a position of the fixed-surface window via use of the input device.

84. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to selectively set a position of the fixed-surface window within the main display area.

85. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to create a first group of base-layer objects different from a second group of base-layer objects, such that an appearance of the first group of base-layer objects may be altered in unison without altering an appearance of the second group of base-layer objects.

86. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to provide a communication interface for connecting the computer processor to at least one of:

- an apparatus connected to the system via a dedicated communication line, to allow the system to receive information from and send information to the apparatus,

- a local area network, to allow the system to receive information from and send information to one or more other systems connected to the local area network, and

- an Internet service provider, to allow the system to receive information from and send information to an Internet address, and

- wherein the communication interface is configured to perform at least one of: wireless communication and wired communication.

87. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to:

- receive, via a touch-sensitive sensor arrangement, pressure produced by the user on the display device,

- receive, via a voice receiver, sound commands produced by the user, and

- receive, via an electronic pointing device, manipulations by the user to provide commands based on a location of a cursor on the display device.

88. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to:

- store code bundles in a memory device,
- wherein each code bundle includes executable code and configuration data for instantiating a corresponding digital object on the display device.

89. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to:

- receive, via a touch-sensitive display surface, user input by sensing physical contact, and
- receive, via an electronic display monitor, user input via at least one of: a pointing device and a voice command.

90. The non-transitory computer-readable medium according to Claim 89, wherein a digital object may be moved, rotated, or zoomed by the user via at least one of:

- a swipe motion on the touch-sensitive display surface,
- a tap on the touch-sensitive display surface,
- a drag motion of the pointing device,
- a click of the pointing device, and
- a spoken command.

91. The non-transitory computer-readable medium according to Claim 90, wherein, when the digital object is moved, rotated, or zoomed, a visible appearance of the digital object transitions smoothly from an initial appearance to a final appearance.

92. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to provide at least one of:

- one-command zooming, such that a single command issued by the user and received by the input device causes zooming to a predetermined size and a predetermined position,

a sliding zoom scale, which enables the user to change the size smoothly and continuously in accordance with a slide position of the sliding zoom scale, the slide position being smoothly and continuously changeable by the user via the input device, and

a zoom-level changer, which enables the user to incrementally change a zoom level to one of a plurality of discrete zoom levels.

93. The non-transitory computer-readable medium according to Claim 92, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to cause the sliding zoom scale to appear and disappear from the main display area by at least one of:

a tap input,

a swipe input,

a click input, and

a voice-command input.

94. The non-transitory computer-readable medium according to Claim 92, wherein, when the sliding zoom scale appears in the main display area, the slide position of the sliding zoom scale is at a position corresponding to a current size of the base-surface window.

95. The non-transitory computer-readable medium according to Claim 93, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to cause the sliding zoom scale to appear and disappear from the main display area by a tap input or a click input,

wherein a position of the tap input or the click input designates a position at which the sliding zoom scale appears in the main display area.

96. The non-transitory computer-readable medium according to Claim 92, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to display the sliding zoom scale at a predetermined position in the main display area.

97. The non-transitory computer-readable medium according to Claim 92, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to change the zoom level by at least one of:

- a tap input,
- a click input, and
- a voice-command input.

98. The non-transitory computer-readable medium according to Claim 81, wherein the digital objects include at least one of:

- a document that includes at least one of: text, an image, a video, and an animation;
 - a media player that plays at least one of: music content, video content, and streaming media data;
 - a home appliance or device controller;
 - a game;
 - a navigation tool that reveals a particular portion of the main display area;
 - a social networking tool;
 - a reference tool that includes at least one of: a dictionary, thesaurus, and an encyclopedia;
- and
- a container that associates a plurality of digital objects into a group, and enables the group to be displayed as an icon or in full size.

99. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to change a position of a digital object in the main display area without changing a position of another digital object in the main display area.

100. The non-transitory computer-readable medium according to Claim 81, wherein the digital object corresponds to a running interactive software application, and, when the digital object appears in the fully displayed state in the main display area, the digital object may be locked to prevent changes to the running interactive software application, the changes being possible when the digital object is moved, rotated, or zoomed.

101. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to change a rotational orientation of a base-layer object to an arbitrary angle without changing a rotational orientation of another base-layer object.

102. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to change a rotational orientation of a group of base-layer objects to an arbitrary angle without changing a rotational orientation of the viewable area of the base-surface window.

103. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to associate a plurality of digital objects into a group, such that a change in size, rotation, or position of the group causes a corresponding change in size, rotation, or position of each of the plurality of digital objects in the group.

104. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to dock a first digital object with a second digital object to form first and second docked digital objects that are operatively linked together,

wherein the first and second digital objects correspond to first and second interactive software applications, respectively, and

wherein data produced by the first interactive software program corresponding to the docked first digital object is used by the second interactive software applications corresponding to the second digital object to produce a combined output.

105. The non-transitory computer-readable medium according to Claim 104, wherein the first digital object is docked with the second digital object based on a touching position of the first digital object relative to the second digital object in the base-surface window.

106. The non-transitory computer-readable medium according to Claim 104, wherein the first digital object is undocked from the second digital object based on a spaced-apart position of the first digital object relative to the second digital object in the base-surface window.

107. The non-transitory computer-readable medium according to Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to:

- manage a repository of digital objects selectable for use, and

- manage access by the user to the repository,

- wherein the main digital object may be hidden or revealed in the main display area in accordance with a command inputted by the user.

108. The non-transitory computer-readable medium according to Claim 107, wherein the main digital object is a user interface for an interactive software application that:

- provides a menu of the digital objects in the repository selectable by the user to be a base-layer object,

- provides a menu of hierarchies of digital objects in the repository selectable by the user, in which digital objects belonging to a hierarchy share a common characteristic, such that a selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy to be provided for selection by the user to be a base-layer object, and

- provides a search input area for the user to input a search term to search for a digital object in the repository.

109. The non-transitory computer-readable medium according to Claim 108, wherein a digital object of the repository selected by the user via the main digital object causes a copy of the digital object to appear in an object window within the base-surface window.

110. The non-transitory computer-readable medium according to Claim 108, further having stored thereon sequences of instructions, which, when executed by the computer system, cause

the computer system to enable the user to save duplicate copies of a digital object in the repository under different names.

111. The non-transitory computer-readable medium according to Claim 108, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to save different versions of a digital object in the repository under different names.

112. The non-transitory computer-readable medium according to Claim 108, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable multiple copies of a digital object of the repository selected by the user to be to appear multiple object windows within the base-surface window.

113. The non-transitory computer-readable medium of Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to display a graphical interface to the user, wherein a digital object may be transferred from a first display device to a second display device.

114. The non-transitory computer-readable medium of Claim 113, wherein, when the digital object is transferred from the first display device to the second display device, a visible appearance of the digital object moves smoothly from the first display device to the second display device.

115. The non-transitory computer-readable medium of Claim 113, wherein, when the digital object is transferred from the first display device to the second display device if the first display device electronically recognizes the second display device.

116. The non-transitory computer-readable medium of Claim 81, wherein when the medium is brought into a location that is recognized by the medium and controlled by an external controller, a signal is received by a computer processor from the external controller and the display device is automatically caused to display one or more digital objects corresponding to the location.

117. The non-transitory computer-readable medium of Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to:

sense a predetermined condition of the environment of the system; and

provide a signal to a computer processor to cause the display device to display one or more digital objects corresponding to the predetermined condition of the environment of the system.

118. The non-transitory computer-readable medium of Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to overlay a first digital object upon a second digital object, and to utilize the first digital object and the second digital object as a group.

119. The non-transitory computer-readable medium of Claim 118, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to enable the user to control, by using the first digital object, a remote device corresponding to an overlaid portion of the second digital object, the remote device being determined based on a positional relationship between the first digital object and the second digital object, in which the first digital device is positioned on the overlaid portion of the second digital object to which the remote device corresponds.

120. The non-transitory computer-readable medium of Claim 81, further having stored thereon sequences of instructions, which, when executed by the computer system, cause the computer system to:

detect a spatial proximity between the display device and an additional display device,
and

enable the user to create a virtual base-layer that spans across the display device and the additional display device.