

CLAIMS

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

a computer processor; and

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 when executed causes the computer processor to:

provide, to at least one display device, a graphical interface that includes a main display area;

provide to the at least one display device a main digital object that provides a menu of a plurality of digital objects and a search area allowing the user to input a search term for a digital objection, each digital object corresponding to a user interface for an interactive application,

organize digital objects selected from the menu of the plurality of digital objects in a plurality of layers, the selected digital objects including at least two different types of interactive applications, 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 a 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, the fixed layer being positioned above the base layer within 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;

form, based on user instructions inputted using the input device via the graphical interface, a group by overlaying a plurality of base-layer digital objects in the base-surface window of the main display area, each digital object of the group having an area that overlaps with an area of another digital object of the group; and

synchronize the digital objects of the group such that a manipulation to one of the digital objects of the group, based on a user instruction, affects a remainder of the digital objects of the group.

2. The system according to Claim 1, wherein the computer code when executed causes the computer processor to provide the graphical interface to a plurality of display devices,

wherein the digital objects of the group are displayed on each of the display devices, and

wherein the digital objects of the group are synchronized across the display devices such that the manipulation to the one of the digital objects of the group, based on the user instruction, affects a remainder of the digital objects of the group and appears on all of the display devices.

3. The system according to Claim 1, wherein the manipulation to the one of the digital objects of the group causes a change in any one or a combination of:

an appearance of all of the digital objects of the group,

an orientation of all of the digital objects of the group, and

an operation of all of the digital objects of the group.

4. The system according to Claim 1, wherein the manipulation to the one of the digital objects of the group involves a single touchpoint on the graphical interface.

5. The system according to Claim 1, wherein the input device, which is useable to input information to the computer processor via the graphical interface, includes at least one of: a mouse, a keypad, a touchpad, an infrared device, a trackball, a stylus, a group of buttons, a group of knobs, a group of direction keys, and a microphone.

6. The system according to Claim 2, wherein the display devices include a first display device and a second display device located remotely from the first display device, and wherein a change made to an object based on a user instruction inputted via a graphical interface of the first display device appears on a graphical interface of the second display device located remotely from the first display device.

7. A system of 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 when executed

causes the computer processor to:

provide, to each display device of a plurality of display devices, a graphical interface that includes a main display area,

provide to at least one of the display devices a main digital object that provides a menu of a plurality of digital objects and a search area allowing the user to input a search term for a digital objection, with each digital object being a separate interactive application providing a user interface,

wherein, for each display device, a plurality of digital objects selected from the menu of the plurality of digital objects are organized in a plurality of layers, the plurality of selected digital objects including at least two different types of interactive application, and

wherein, for each display device, the layers include:

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

synchronize the display devices such that the display devices operate together as a single base-surface window, when the display devices are in proximity to each other; and,

based on a user instruction, drag a digital object such that the digital object appears to move from a first display device of the display devices to a second display

device of the display devices as if the first and second display devices are part of a single display device.

8. The system according to Claim 7, further comprising a sensor for detecting a spatial proximity to the first and second display devices.

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

providing, from a computer processor to at least one display device, (i) a graphical interface that includes a main display area, and (ii) a main digital object that provides a menu of a plurality of digital objects and a search area allowing a user to input a search term for a digital object, each digital object being a separate interactive application providing a user interface;

organizing digital objects selected from the menu of the plurality of digital objects in a plurality of layers, the selected digital objects including at least two different types of interactive applications, 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, the fixed layer being positioned above the base layer within 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;

receiving, by the computer processor, user instructions inputted via the graphical interface using the input device, the user instructions causing the computer processor to form a group by causing a plurality of base-layer digital objects in the base-surface window of the main display area to be overlapped, such that each digital object of the group has an area that overlaps with an area of another digital object of the group; and

synchronizing the digital objects of the group such that a manipulation to one of the digital objects of the group, based on a user instruction, affects a remainder of the digital objects of the group.

10. The method according to Claim 9, wherein, in the providing step, the computer processor provides the graphical interface to a plurality of display devices,

wherein the digital objects of the group are displayed on each of the display devices, and

wherein, in the synchronizing step, the digital objects of the group are synchronized across the display devices such that the manipulation to the one of the digital objects of the group, based on the user instruction, affects a remainder of the digital objects of the group and appears on all of the display devices.

11. The method according to Claim 9, wherein the manipulation to the one of the digital objects of the group causes a change in any one or a combination of:

an appearance of all of the digital objects of the group,

an orientation of all of the digital objects of the group, and

an operation of all of the digital objects of the group.

12. The method according to Claim 9, wherein the manipulation to the one of the digital objects of the group involves a single touchpoint on the graphical interface.

13. The method according to Claim 9, wherein, in the receiving step, the computer processor receives via the graphical interface the user instructions inputted using an input device that includes at least one of: a mouse, a keypad, a touchpad, an infrared device, a trackball, a stylus, a group of buttons, a group of knobs, a group of direction keys, and a microphone.

14. The method according to Claim 10, wherein the display devices include a first display device and a second display device located remotely from the first display device, and wherein, in the synchronizing step, a change made to an object based on a user instruction inputted via a graphical interface of the first display device appears on a graphical interface of the second display device located remotely from the first display device.

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

providing, by a computer processor to each display device of a plurality of display devices, (i) a graphical interface that includes a main display area, and (ii) a main digital object that provides a menu of a plurality of digital objects and a search area allowing for input of a search term for a digital object, wherein, for each display device of the plurality of display devices, a plurality of digital objects selected from the menu of the plurality of digital objects are organized in a plurality of layers, with each selected digital object being a separate

an interactive application providing a user interface, the selected plurality of digital objects including at least two different types of interactive applications, and wherein, for each display device, the layers including:

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

synchronizing the display devices such that the display devices operate together as a single base-surface window, when the display devices are in proximity to each other; and

receiving, by the computer processor, a user instruction that causes the computer processor to move a digital object such that the digital object appears to be dragged from a first display device of the display devices to a second display device of the display devices as if the first and second display devices are part of a single display device.

16. The method according to Claim 15, further comprising a step of detecting a spatial proximity to the first and second display devices.

17. A non-transitory computer-readable medium having stored thereon sequences of instructions that, when executed by a computer system, cause the computer system to

perform method of organizing, displaying, and interacting with information on a display device, wherein the method comprises steps of:

providing, from a computer processor to at least one display device, (i) a graphical interface that includes a main display area, and (ii) a main digital object that provides a menu of a plurality of digital objects and a search area allowing the user to input a search term for a digital object, each digital object being a separate interactive application providing a user interface;

organizing digital objects selected from the menu of the plurality of digital objects in a plurality of layers, the selected digital objects including at least two different types of interactive applications, 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, the fixed layer being positioned above the base-layer within 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;

receiving, by the computer processor, user instructions inputted via the graphical interface using the input device, the user instructions causing the computer processor to form a group by causing a plurality of base-layer digital objects in the base-surface window of the main display area to be overlapped, such that each digital object of the group has an area that overlaps with an area of another digital object of the group; and

synchronizing the digital objects of the group such that a manipulation to one of the digital objects of the group, based on a user instruction, affects a remainder of the digital objects of the group.

18. The non-transitory computer-readable medium according to Claim 17, wherein, in the providing step, the computer processor provides the graphical interface to a plurality of display devices,

wherein the digital objects of the group are displayed on each of the display devices, and

wherein, in the synchronizing step, the digital objects of the group are synchronized across the display devices such that the manipulation to the one of the digital objects of the group, based on the user instruction, affects a remainder of the digital objects of the group and appears on all of the display devices.

19. The non-transitory computer-readable medium according to Claim 17, wherein the manipulation to the one of the digital objects of the group causes a change in any one or a combination of:

an appearance of all of the digital objects of the group,

an orientation of all of the digital objects of the group, and

an operation of all of the digital objects of the group.

20. The non-transitory computer-readable medium according to Claim 17, wherein the manipulation to the one of the digital objects of the group involves a single touchpoint on the graphical interface.

21. The non-transitory computer-readable medium according to Claim 17, wherein, in the receiving step, the computer processor receives via the graphical interface the user instructions inputted using an input device that includes at least one of: a mouse, a keypad, a touchpad, an infrared device, a trackball, a stylus, a group of buttons, a group of knobs, a group of direction keys, and a microphone.

22. The non-transitory computer-readable medium according to Claim 18, wherein the display devices include a first display device and a second display device located remotely from the first display device, and

wherein, in the synchronizing step, a change made to an object based on a user instruction inputted via a graphical interface of the first display device appears on a graphical interface of the second display device located remotely from the first display device.

23. A non-transitory computer-readable medium having stored thereon sequences of instructions that, when executed by a computer system, cause the computer system to perform method of organizing, displaying, and interacting with information on a display device, wherein the method comprises steps of:

providing, by a computer processor to a display device of a plurality of display devices, (i) a graphical interface that includes a main display area, and (ii) a main digital object that provides a menu of a plurality of digital objects and a search area allowing for input of a search term for a digital object, wherein, for each display device of the plurality of display devices, a plurality of digital objects selected from the menu of the plurality of digital objects are organized in a plurality of layers, with each selected digital object being a separate

interactive application providing a user interface, the selected plurality of digital objects including at least two different types of interactive applications,, the layers including:

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

synchronizing the display devices such that the display devices operate together as a single base-surface window, when the display devices are in proximity to each other; and

receiving, by the computer processor, a user instruction that causes the computer processor to move a digital object such that the digital object appears to be dragged from a first display device of the display devices to a second display device of the display devices as if the first and second display devices are part of a single display device.

24. The non-transitory computer-readable medium according to Claim 23, wherein the method further comprises a step of detecting a spatial proximity to the first and second display devices.

25. The system according to Claim 1, wherein the menu of the main digital object includes a menu of hierarchies of digital objects, with digital objects belonging to each

hierarchy sharing a common characteristic such that selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy being provided.

26. The system according to Claim 7, wherein the menu of the main digital object includes a menu of hierarchies of digital objects, with digital objects belonging to each hierarchy sharing a common characteristic such that selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy being provided.

27. The method according to Claim 9, wherein the menu of the main digital object includes a menu of hierarchies of digital objects, with digital objects belonging to each hierarchy sharing a common characteristic such that selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy being provided.

28. The method according to Claim 15, wherein the menu of the main digital object includes a menu of hierarchies of digital objects, with digital objects belonging to each hierarchy sharing a common characteristic such that selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy being provided.

29. The non-transitory computer-readable medium according to Claim 17, wherein the menu of the main digital object includes a menu of hierarchies of digital objects, with digital objects belonging to each hierarchy sharing a common characteristic such that selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy being provided.

30. The non-transitory computer-readable medium according to Claim 23, wherein the menu of the main digital object includes a menu of hierarchies of digital objects, with digital objects belonging to each hierarchy sharing a common characteristic such that selection of a hierarchy from the menu results in a submenu of digital objects belonging to the selected hierarchy being provided.