

information processing method, and a program capable of presenting information in a more appropriate form even when a size of the input and output interface is restricted.

Solution to Problem

[0009]

According to a first aspect, there is provided a card-type terminal having a card-shaped housing, the terminal including a display unit, and a plurality of sensor elements, wherein the plurality of sensor elements are provided separate from the display unit, wherein the plurality of sensor elements are arranged in a direction along an arcuate axis, wherein the display unit is configured to switch display between a plurality of output screens based on a user input on the plurality of sensor elements, the plurality of output screens including output screens having different hierarchical levels and output screens having a same hierarchical level, and wherein the output screens having different hierarchical levels display information on the different hierarchical levels, and the switching display is controlled to switch display directly between the output screens having different hierarchical levels based on the user input.

[0010]

According to a second aspect, there is provided a method including displaying at least one of a plurality of output screens on a display unit of a card-type terminal having a card-shaped housing, detecting a user input on a plurality of sensor elements, wherein the plurality of sensor elements are provided separate from the display unit and arranged in a direction along an arcuate axis, and switching display between output screens of the plurality of output screens based on the user input on the plurality of sensor elements, the plurality of output screens including output screens having different hierarchical levels and output screens having a same hierarchical level, wherein the switching display is controlled to switch display directly between the output screens having different hierarchical levels based on the user input, and the output screens having different hierarchical levels display information on the different hierarchical levels.

[0011]

According to a third aspect, there is provided a non-transitory computer-readable medium having embodied thereon a program, which when executed by a computer causes the computer to execute a method, the method including displaying at least one of a plurality of output screens on a display unit of a card-type terminal having a card-shaped housing, detecting a user input on a plurality of sensor elements, wherein the plurality of sensor elements are provided separate from the display unit and arranged in a direction along an arcuate axis, and switching display between output screens of the plurality of output screens based on the user input on the plurality of sensor elements, the plurality of output screens including output screens having different hierarchical levels and output screens having a same hierarchical level, wherein the switching display is controlled to switch display directly between the output screens having different hierarchical levels based on the user input, and the output screens having different hierarchical levels display information on the different hierarchical levels.

Claims

1. A card-type terminal having a card-shaped housing, the terminal comprising:
a display unit; and
a plurality of sensor elements,
wherein the plurality of sensor elements are provided separate from the display unit,
wherein the plurality of sensor elements are arranged in a direction along an arcuate axis,
wherein the display unit is configured to switch display between a plurality of output screens based on a user input on the plurality of sensor elements, the plurality of output screens comprising output screens having different hierarchical levels and output screens having a same hierarchical level, and
wherein the output screens having different hierarchical levels display information on the different hierarchical levels, and the switching display is controlled to switch display directly between the output screens having different hierarchical levels based on the user input.
2. The terminal of claim 1, wherein the user input is configured to be one of a first operation and a second operation.
3. The terminal of claim 2, wherein
when the user input is the first operation, the output screens having different hierarchical levels are switched sequentially based on the user input, and
when the user input is the second operation, the output screens having the same hierarchical levels are switched sequentially based on the user input.
4. The terminal of 2 or 3, wherein the first operation and the second operation are different operations.
5. The terminal of any one of claims 2 to 4, wherein the first operation and the second operation have respective directionalities in relation to an arrangement of the plurality of sensor elements.
6. The terminal of any one of claims 2 to 5, wherein the first operation and the second operation are gestures made in different directions.
7. The terminal of any one of the preceding claims, wherein the display unit is further configured to display a visual indicator of hierarchical level for each respective output screen.
8. The apparatus of any one of the preceding claims, wherein the display unit is further configured to switch display between the plurality of output screens by scrolling between the plurality of output screens.

9. The terminal of any one of the preceding claims, wherein the display unit is further configured to switch display between output screens having the same hierarchical level, based on the user input swiping along the plurality of sensor elements.
10. The terminal of any one of the preceding claims, wherein the display unit is further configured to switch display between output screens having different hierarchical levels, based on the user input tapping at least one of the plurality of sensor elements.
11. The terminal of claim 10, wherein:
 - the plurality of sensor elements comprises a first sensor element, wherein the display unit switches display to a lower level hierarchical display screen based on the user input tapping the first sensor element; and
 - the plurality of sensor elements comprises a second sensor element, wherein the display unit switches display to a higher level hierarchical display screen based on the user input tapping the second sensor element.
12. The terminal of any one of the preceding claims, further comprising at least one communication unit provided to be separated from the display unit.
13. The terminal of any one of the preceding claims, wherein the display unit further comprises at least one of a liquid crystal display or an organic light emitting diode.
14. The terminal of any one of the preceding claims, wherein the plurality of sensor elements comprises at least one proximity sensor.
15. The terminal of any one of the preceding claims, wherein the plurality of sensor elements comprises at least one touch sensor.
16. The terminal of any one of the preceding claims, wherein a notification is provided to indicate selection of one of the plurality of sensor elements.
17. The terminal of claim 16, further comprising
 - at least one light emitting unit,
 - wherein the at least one light emitting unit is configured to provide the notification by at least one of emit light or blink, to indicate the selection of one of the plurality of sensor elements.

18. A method comprising:

displaying at least one of a plurality of output screens on a display unit of a card-type terminal having a card-shaped housing;

detecting a user input on a plurality of sensor elements, wherein the plurality of sensor elements are provided separate from the display unit and arranged in a direction along an arcuate axis; and

switching display between output screens of the plurality of output screens based on the user input on the plurality of sensor elements, the plurality of output screens comprising output screens having different hierarchical levels and output screens having a same hierarchical level,

wherein the switching display is controlled to switch display directly between the output screens having different hierarchical levels based on the user input, and the output screens having different hierarchical levels display information on the different hierarchical levels.

19. A non-transitory computer-readable medium having embodied thereon a program, which when executed by a computer causes the computer to execute a method, the method comprising:

displaying at least one of a plurality of output screens on a display unit of a card-type terminal having a card-shaped housing;

detecting a user input on a plurality of sensor elements, wherein the plurality of sensor elements are provided separate from the display unit and arranged in a direction along an arcuate axis; and

switching display between output screens of the plurality of output screens based on the user input on the plurality of sensor elements, the plurality of output screens comprising output screens having different hierarchical levels and output screens having a same hierarchical level,

wherein the switching display is controlled to switch display directly between the output screens having different hierarchical levels based on the user input, and the output screens having different hierarchical levels display information on the different hierarchical levels.