

[0013] A mobile terminal tap event recognition apparatus is provided, including:
[0014] a processor;
[0015] a memory configured to store machine-executable instructions, where
[0016] by reading and executing the machine-executable instructions stored in the memory and corresponding to mobile terminal tap event recognition logic, the processor is caused to:
[0017] record a touch event detected by a touch screen of a mobile terminal;
[0018] when a tap event is triggered, determine, according to the recorded touch event, whether the triggering of the tap event takes place in a page scrolling process; and
[0019] cancel the tap event if the triggering of the tap event takes place in the page scrolling process.
[0020] It can be learned from the foregoing description that in this specification, when the tap event is triggered, it is determined, according to the recorded touch event, whether the triggering of the tap event takes place in the page scrolling process, and the tap event is cancelled if the triggering of the tap event takes place in the page scrolling process. In this way, misjudgement of an operation intention of a user is prevented and accuracy of tap event recognition is improved.

BRIEF DESCRIPTION OF THE DRAWINGS

[0021] FIG. 1 is a schematic flowchart of a mobile terminal tap event recognition method, according to an exemplary embodiment of this specification.
[0022] FIG. 2 is a schematic flowchart of another mobile terminal tap event recognition method, according to an exemplary embodiment of this specification.
[0023] FIG. 3 is a schematic flowchart of a touch event recording method, according to an exemplary embodiment of this specification.
[0024] FIG. 4 is a schematic structural diagram of a mobile terminal tap event recognition apparatus, according to an exemplary embodiment of this specification.
[0025] FIG. 5 is a block diagram of a mobile terminal tap event recognition apparatus, according to an exemplary embodiment of this specification.

DETAILED DESCRIPTION OF THE INVENTION

[0026] Exemplary embodiments are described in detail herein, and examples of the exemplary embodiments are shown in the accompanying drawings. When the following descriptions relate to the accompanying drawings, unless indicated otherwise, same numbers

CLAIMS

What is claimed is:

1. A mobile terminal tap event recognition method, comprising:
 - recording a touch event detected by a touch screen of a mobile terminal;
 - when a tap event is triggered, determining, according to the recorded touch event, whether the triggering of the tap event takes place in a page scrolling process; and
 - cancelling the tap event if the triggering of the tap event takes place in the page scrolling process.
2. The method according to claim 1, further comprising:
 - allowing the tap event to be sent if the triggering of the tap event does not take place in the page scrolling process.
3. The method according to claim 1, wherein the recording a touch event detected by a touch screen of a mobile terminal comprises:
 - when a browser control of the mobile terminal is a UIWebView control, recording the touch event detected by the touch screen of the mobile terminal.
4. The method according to claim 1, wherein the recording a touch event detected by a touch screen of a mobile terminal comprises:
 - when the detected touch event is a touch event of a specified category, modifying an event name of the touch event, and recording a modified event name and a timestamp corresponding to the touch event;
 - when the detected touch event is not a touch event of the specified category, recording an event name of the touch event and a timestamp corresponding to the touch event;
 - after a group of new touchstart-touchend events are recorded, determining whether a number of recorded touchstart-touchend groups exceeds N; and
 - if the number of recorded touchstart-touchend groups exceeds N, deleting, according to timestamps, touch events recorded before N groups of latest touchstart-touchend events, wherein N is a natural number greater than or equal to 1.
5. The method according to claim 4, wherein
 - when the touch event of the specified category is a touchcancel event, the modifying an

event name of the touch event comprises: modifying an event name of the touchcancel event to touchend; and

when the touch event of the specified category is a scroll event, the modifying an event name of the touch event comprising:

determining whether the scroll event is global page scrolling or regional page scrolling according to attribute information of the scroll event;

modifying an event name of the scroll event to scroll>window when the scroll event is global page scrolling; and

modifying the event name of the scroll event to scroll:target when the scroll event is regional page scrolling.

6. The method according to claim 5, wherein when N is equal to 2, the determining, according to the recorded touch event, whether the triggering of the tap event takes place in a page scrolling process comprises:

when the recorded touch event is global page scrolling, if there is no scroll>window event between a first group of touchstart-touchend events and a second group of touchstart-touchend events, and there is a scroll>window event in the second group of touchstart-touchend events, determining that the triggering of the tap event takes place in the page scrolling process; and

when the recorded touch event is regional page scrolling, if there is no scroll:target event in the first group of touchstart-touchend events, and there is a scroll:target event in the second group of touchstart-touchend events or after the second group of touchstart-touchend events, determining that the triggering of the tap event takes place in the page scrolling process.

7. A mobile terminal tap event recognition apparatus, comprising:

an event recording unit, configured to record a touch event detected by a touch screen of a mobile terminal;

a scrolling determining unit, configured to: when a tap event is triggered, determine, according to the recorded touch event, whether the triggering of the tap event takes place in a page scrolling process; and

a tap cancelling unit, configured to cancel the tap event if the triggering of the tap event takes place in the page scrolling process.

8. The apparatus according to claim 7, further comprising:

a tap allowing unit, configured to allow the tap event to be sent if the triggering of the tap event does not take place in the page scrolling process.

9. The apparatus according to claim 7, wherein

the event recording unit is configured to: when a browser control of the mobile terminal is a UIWebView control, record the touch event detected by the touch screen of the mobile terminal.

10. The apparatus according to claim 7, wherein the event recording unit is configured to:

when the detected touch event is a touch event of a specified category, modify an event name of the touch event, and record a modified event name and a timestamp corresponding to the touch event;

when the detected touch event is not a touch event of the specified category, record an event name of the touch event and a timestamp corresponding to the touch event;

after a group of new touchstart-touchend events are recorded, determine whether a number of recorded touchstart-touchend groups exceeds N; and

if the number of recorded touchstart-touchend groups exceeds N, delete, according to timestamps, touch events recorded before N groups of latest touchstart-touchend events, wherein N is a natural number greater than or equal to 1.

11. The apparatus according to claim 10, wherein

when the touch event of the specified category is a touchcancel event, the event recording unit is configured to modify an event name of the touchcancel event to touchend; and

when the touch event of the specified category is a scroll event, the event recording unit is configured to determine whether the scroll event is global page scrolling or regional page scrolling according to attribute information of the scroll event; modify an event name of the scroll event to scroll>window when the scroll event is global page scrolling; and modify the event name of the scroll event to scroll>target when the scroll event is regional page scrolling.

12. The apparatus according to claim 11, wherein when N is equal to 2, the scrolling determining unit is configured to:

when the recorded touch event is global page scrolling, if there is no scroll>window event between a first group of touchstart-touchend events and a second group of

touchstart-touchend events, and there is a scroll>window event in the second group of touchstart-touchend events, determine that the triggering of the tap event takes place in the page scrolling process; and

when the recorded touch event is regional page scrolling, if there is no scroll:target event in the first group of touchstart-touchend events, and there is a scroll:target event in the second group of touchstart-touchend events or after the second group of touchstart-touchend events, determine that the triggering of the tap event takes place in the page scrolling process.

13. A mobile terminal tap event recognition apparatus, comprising:

a processor;

a memory configured to store machine-executable instructions, wherein

by reading and executing the machine-executable instructions stored in the memory and corresponding to mobile terminal tap event recognition logic, the processor is caused to:

record a touch event detected by a touch screen of a mobile terminal;

when a tap event is triggered, determine, according to the recorded touch event, whether the triggering of the tap event takes place in a page scrolling process; and

cancel the tap event if the triggering of the tap event takes place in the page scrolling process.