

# **METHOD AND APPARATUS FOR TRIGGERING A SCROLLABLE LIST**

## **Technical field**

The document describes examples of a method a list displaying step of displaying a scrollable list of

## **Background Art**

The patent document number US-20170285900 discloses a display device includes a display section and a control unit including a processor. The control unit displays, upon deciding that an image to be displayed in the display section is a scrollable image larger than a predetermined display region of the display section, and an entirety of which can be displayed in the display region by scrolling the image in a vertical or horizontal direction in a display screen of the display section, a portion of the scrollable image in the display region, the portion being shifted in the vertical direction or horizontal direction to a predetermined position away from a head position, and then displays, in the display region, the scrollable image scrolled until the head position thereof appears at an end of the display region in a direction of the shifting.

This approach presents limitations.

## **Summary**

A method includes displaying a scrollable list of content items, receiving input associated with a scroll command, based on the scroll command, displaying a scrollable refresh trigger, and in response to a determining event of determining, based on the scroll command, that the scrollable refresh trigger has been activated, refreshing the scrollable list of content items.

Below: mention the existence and develop the substance of each advantage and/or technical effect associated with each claim feature or group of features. This will advantageously advocate for inventive steps.

In the summary section, add the sentence "Embodiments of the invention are associated with various advantages and/or technical effects."

## **Brief description of drawings**

Below: drawings are not strictly required by patent laws. If present, drawings are useful to the mere extent of their textual description only. Information hardly can be derived from graphical elements. You have to write down the interpretation you make of the drawings. It can be advisable to include - and thus describe - two drawings. One drawing preferably shows the handling of time (if applicable). If a method is claimed, Claim 1 should be described e.g. steps.

The second drawing is preferably a block diagram showing system aspects, e.g. interacting mechanical pieces or computers

The present disclosure is illustrated by way of example and not limited in the accompanying figures in which like reference numerals indicate similar elements and in which: FIG. 1 illustrates one embodiment of the invention (time)... FIG. 2 shows... (space)

## **Detailed description**

### Definitions

A scrollable list is an and/or means and/or designates one or more of: video game series.

A content item is an and/or means and/or designates one or more of: implementation of information technology management.

A receive input step is an and/or means and/or designates one or more of: ability of a computer to receive and interpret intelligible handwritten input.

A scroll command is an and/or means and/or designates one or more of: graphical user interface element.

An input (in the sense of input signal, remark, comment, stimulation, stimulus, stimulant) is an and/or means and/or designates one or more of: signal going into an electronic system; a statement that expresses a personal opinion or belief or adds information; any stimulating information or event; acts to arouse action; a component of production; something that goes into the production of output.

In some embodiments the verb to input can be replaced by: enter (data or a program) into a computer.

A trigger displaying step is an and/or means and/or designates one or more of: instrument for displaying time-varying signals.

A scrollable refresh trigger (in the sense of pull-to-refresh) is an and/or means and/or designates one or more of: a touchscreen gesture that consists of touching the screen of a computing device with a finger or pressing a button on a pointing device, dragging the screen downward with the finger or pointing device, and then releasing it, as a signal to the application to refresh the contents of the screen. The pull-to-refresh gesture first appeared in the Tweetie mobile application developed by Loren Brichter.

A determining event is an and/or means and/or designates one or more of: 1908 meteor air burst explosion in Siberia.

A list refreshing step is an and/or means and/or designates one or more of: award.

A trigger (in the sense of gun trigger, induction, initiation) is an and/or means and/or designates one or more of: lever that activates the firing mechanism of a gun; a device that activates or releases or causes something to happen; an act that sets in motion some course of events.

In some embodiments the verb to trigger (in the sense of trip, actuate, activate, set off, spark off, spark, trigger off, touch off) can be replaced by: put in motion or move to act; release or pull the trigger on.

A list (in the sense of listing, tilt, inclination, lean, leaning) is an and/or means and/or designates one or more of: a database containing an ordered array of items (names or topics); the property possessed by a line or surface that departs from the vertical.

In some embodiments the verb to list (in the sense of name, lean, heel, number) can be replaced by: give or make a list of; name individually; give the names of; include in a list; cause to lean to the side; tilt to one side; enumerate.

An item (in the sense of point, detail, particular, token) is an and/or means and/or designates one or more of: a distinct part that can be specified separately in a group of things that could be enumerated on a list; a small part that can be considered separately from the whole; a whole individual unit; especially when included in a list or collection; an isolated fact that is considered separately from the whole; an individual instance of a type of symbol.

Item means: (used when listing or enumerating items) also; -Philip Guedalla.

A response (in the sense of reply, reaction, answer, reception) is an and/or means and/or designates one or more of: a result; a bodily process occurring due to the effect of some antecedent stimulus or agent; a statement (either spoken or written) that is made to reply to a question or request or criticism or accusation; the manner in which something is greeted; a phrase recited or sung by the congregation following a versicle by the priest or minister; the speech act of continuing a conversational exchange; the manner in which an electrical or mechanical device responds to an input signal or a range of input signals.

A command (in the sense of bid, bidding, dictation, control, mastery, instruction, statement, program line) is an and/or means and/or designates one or more of: an authoritative direction or instruction to do something; a military unit or region under the control of a single officer; the power or authority to command; availability for use; a position of highest authority; great skillfulness and knowledge of some subject or activity; (computer science) a line of code written as part of a computer program.

In some embodiments the verb to command (in the sense of require, dominate, overlook, overtop, control) can be replaced by: be in command of; make someone do something; demand as one's due; look down on; exercise authoritative control or power over.

An instruction (in the sense of teaching, pedagogy, direction, education, didactics, educational activity, command, statement, program line) is an and/or means and/or designates one or more of: a message describing how something is to be done; the activities of educating or instructing;

activities that impart knowledge or skill; the profession of a teacher; (computer science) a line of code written as part of a computer program.

A feedback is an and/or means and/or designates one or more of: the process in which part of the output of a system is returned to its input in order to regulate its further output; response to an inquiry or experiment.

An audio feedback is an and/or means and/or designates one or more of: howling caused by a circular path in an audio system.

A - a receiving input step (in the sense of in computer science, state machine replication (smr) or state machine approach) is an and/or means and/or designates one or more of: a general method for implementing a fault-tolerant service by replicating servers and coordinating client interactions with server replicas. The approach also provides a framework for understanding and designing replication management protocols.

An input step is an and/or means and/or designates one or more of: the step response of a system in a given initial state consists of the time evolution of its outputs when its control inputs are Heaviside step functions. In electronic engineering and control theory, step response is the time behaviour of the outputs of a general system when its inputs change from zero to one in a very short time.

An event (in the sense of case, consequence, effect, outcome, result, issue, upshot) is an and/or means and/or designates one or more of: something that happens at a given place and time; a special set of circumstances; a phenomenon located at a single point in space-time; the fundamental observational entity in relativity theory; a phenomenon that follows and is caused by some previous phenomenon.

A refreshing step is an and/or means and/or designates one or more of: 1996 studio album by Sepultura.

The time (in the sense of clip, clock time, fourth dimension, meter, metre, prison term, sentence) is an and/or means and/or designates one or more of: an instance or single occasion for some event; a period of time considered as a resource under your control and sufficient to accomplish something; an indefinite period (usually marked by specific attributes or activities); a suitable moment; the continuum of experience in which events pass from the future through the present to the past; a person's experience on a particular occasion; a reading of a point in time as given by a clock; the fourth coordinate that is required (along with three spatial dimensions) to specify a physical event; rhythm as given by division into parts of equal duration; the period of time a prisoner is imprisoned.

In some embodiments the verb to time (in the sense of clock) can be replaced by: measure the time or duration of an event or action or the person who performs an action in a certain period of time; assign a time for an activity or event; set the speed, duration, or execution of; regulate or set the time of; adjust so that a force is applied and an action occurs at the desired time.

An operation (in the sense of military operation, surgery, surgical operation, surgical procedure, surgical process, procedure, functioning, performance, process, cognitive process, mental process, cognitive operation, mathematical process, mathematical operation) is an and/or means and/or designates one or more of: the state of being in effect or being operative; a business especially one run on a large scale; a planned activity involving many people performing various actions; (computer science) data processing in which the result is completely specified by a rule (especially the processing that results from a single instruction); activity by a military or naval force (as a maneuver or campaign); a medical procedure involving an incision with instruments; performed to repair damage or arrest disease in a living body; a process or series of acts especially of a practical or mechanical nature involved in a particular form of work; process or manner of functioning or operating; (psychology) the performance of some composite cognitive activity; an operation that affects mental contents; (mathematics) calculation by mathematical methods; the activity of operating something (a machine or business etc.).

An important refresh operation is an and/or means and/or designates one or more of: type of computer memory.

A discrete content item is an and/or means and/or designates one or more of: information filtering system to predict users' preferences.

A receive input is an and/or means and/or designates one or more of: structure at the rear of the vertebrate brain, beneath the cerebrum.

A touch-based user input (in the sense of touch user interface (TUI)) is an and/or means and/or designates one or more of: a computer-pointing technology based upon the sense of touch (haptics). Whereas a graphical user interface (GUI) relies upon the sense of sight, a TUI enables not only the sense of touch to innervate and activate computer-based functions, it also allows the user, particularly those with visual impairments, an added level of interaction based upon tactile or Braille input.

## **Detailed description**

There is disclosed a method, comprising: - a list displaying step of displaying a scrollable list of content items; - a receiving input step of receiving input associated with a scroll command; based on the scroll command, - a trigger displaying step of displaying a scrollable refresh trigger; and in response to a determining event of determining, based on the scroll command, that the scrollable refresh trigger has been activated, - a list refreshing step of refreshing the scrollable list of content items.

In a development, the scrollable refresh trigger scrolls with the scrollable list of content items.

In a development, the scrollable refresh trigger indicates the time at which the scrollable list of content items was last refreshed.

based on the scroll command, providing a first instruction associated with displaying the scrollable refresh trigger. and in response to determining that the scrollable refresh trigger is

fully displayed, providing a second instruction associated with activating the scrollable refresh trigger.

in response to determining that the scroll command was completed while the scrollable refresh trigger was fully displayed, determining that the scrollable refresh trigger has been activated.

in response to determining that the scroll command was completed while the scrollable refresh trigger was not fully displayed, determining that the scrollable refresh trigger has not been activated.

in response to determining that an important refresh operation has completed, automatically scrolling the scrollable list of content items such that the scrollable refresh trigger is not displayed.

In a development, the method further comprises: in response to displaying the scrollable refresh trigger, providing first audio feedback. and in response to determining that the scrollable refresh trigger has been activated, providing second audio feedback.

In a development, the scrollable list of content items includes a plurality of discrete content items arranged chronologically.

In a development, the received input represents touch-based user input.

There is disclosed a method, comprising: - a list (wherein a list is a strip of fabric, especially from the edge of a piece of cloth.) displaying step (wherein a step is (programming) a constant difference between consecutive values in a series.) of displaying a scrollable list (wherein a scrollable list is video game series.) of content items (wherein a content items is implementation of information technology management.); - a receiving input step (wherein a - a receiving input step is in computer science, state machine replication (smr) or state machine approach is a general method for implementing a fault-tolerant service by replicating servers and coordinating client interactions with server replicas. the approach also provides a framework for understanding and designing replication management protocols.) of receiving input (wherein an input is the act or process of putting in; infusion.) associated with a scroll command (wherein a scroll command is graphical user interface element.); based on the scroll command, - a trigger displaying step of displaying a scrollable refresh trigger (wherein a scrollable refresh trigger is pull-to-refresh is a touchscreen gesture that consists of touching the screen of a computing device with a finger or pressing a button on a pointing device, dragging the screen downward with the finger or pointing device, and then releasing it, as a signal to the application to refresh the contents of the screen.

the pull-to-refresh gesture first appeared in the tweetie mobile application developed by loren brichter.); and in response (wherein a response is an answer or reply, or something in the nature of an answer or reply.) to a determining event (wherein a determining event is 1908 meteor air burst explosion in siberia.) of determining, based on the scroll command, that the scrollable refresh trigger has been activated, - a list refreshing step (wherein a refreshing step is 1996 studio album by seputura.) of refreshing the scrollable list of content items.

In a development (wherein the development is (uncountable) the process of developing; growth, directed change.), the scrollable refresh trigger scrolls with the scrollable list of content items.

In a development, the scrollable refresh trigger indicates the time (wherein the time is (uncountable) the inevitable progression into the future with the passing of present and past events.) at which the scrollable list of content items was last refreshed.

based on the scroll command, providing a first instruction (wherein an instruction is (computing) a single operation of a processor defined by an instruction set architecture.) associated with displaying the scrollable refresh trigger. and in response to determining that the scrollable refresh trigger is fully displayed, providing a second instruction associated with activating the scrollable refresh trigger.

in response to determining that the scroll command was completed while the scrollable refresh trigger was fully displayed, determining that the scrollable refresh trigger has been activated.

in response to determining that the scroll command was completed while the scrollable refresh trigger was not fully displayed, determining that the scrollable refresh trigger has not been activated.

in response to determining that an important refresh operation (wherein an important refresh operation is type of computer memory.) has completed, automatically scrolling the scrollable list of content items such that the scrollable refresh trigger is not displayed.

In a development, the method further comprises: in response to displaying the scrollable refresh trigger, providing first audio feedback (wherein an audio feedback is howling caused by a circular path in an audio system.). and in response to determining that the scrollable refresh trigger has been activated, providing second audio feedback.

In a development, the scrollable list of content items includes a plurality (wherein the plurality is (uncountable) the state of being plural.) of discrete content items (wherein a discrete content items is information filtering system to predict users' preferences.) arranged chronologically.

In a development, the received input (wherein a received input is structure at the rear of the vertebrate brain, beneath the cerebrum.) represents touch-based user input (wherein a touch-based user input is a touch user interface (tui) is a computer-pointing technology based upon the sense of touch (haptics). whereas a graphical user interface (gui) relies upon the sense of sight, a tui enables not only the sense of touch to innervate and activate computer-based functions, it also allows the user, particularly those with visual impairments, an added level of interaction based upon tactile or braille input.).

There is disclosed a method, comprising : - a list displaying step; - a receiving input step of receiving input associated with a scroll command; based on the scroll command, - a trigger displaying step of displaying a scrollable refresh trigger; and in response to a determining event of determining, based on the scroll command, that the scrollable refresh trigger has been activated, - a list refreshing step of refreshing the scrollable list of content items.

There is disclosed a method, comprising : - a list displaying step of displaying a list of content items; - a receiving input step of receiving input associated with a scroll command; based on the scroll command, - a trigger displaying step of displaying a scrollable refresh trigger; and in response to a determining event of determining, based on the scroll command, that the scrollable refresh trigger has been activated, - a list refreshing step of refreshing the scrollable list of content items.

There is disclosed a method, comprising : - a list displaying step of displaying a scrollable list; - a receiving input step of receiving input associated with a scroll command; based on the scroll command, - a trigger displaying step of displaying a scrollable refresh trigger; and in response to a determining event of determining, based on the scroll command, that the scrollable refresh trigger has been activated, - a list refreshing step of refreshing the scrollable list of content items.

There is disclosed a method (or act, or activity, or computer-implemented method, or computer-readable medium comprising instructions which when executed by a computer perform a method, or process, or use), comprising: - a list displaying step of displaying a scrollable list of content items; - a receiving input step of receiving input associated with a scroll command; based on the scroll command, - a trigger displaying step of displaying a scrollable refresh trigger; and in response to a determining event of determining, based on the scroll command, that the scrollable refresh trigger has been activated, - a list refreshing step of refreshing the scrollable list of content items.

Below: invariant general boiler plates. Consider carefully whether to include or not.

The present document is not a medical advice, nor a legal advice.

The invention can take form of an entirely hardware embodiment, an entirely software embodiment or an embodiment containing both hardware and software elements. In a preferred embodiment, the invention is implemented in software, which includes but is not limited to firmware, resident software, microcode, etc. Furthermore, the invention can take the form of a computer program product accessible from a computer-usable or computer-readable medium providing program code for use by or in connection with a computer or any instruction execution system. For the purposes of this description, a computer-usable or computer-readable can be any apparatus that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device.

Below: incentives to combine. Consider carefully whether to include or not. If used, this section can robustify your patent application against adverse improvement patents, but also yours.

Any one of the presently described embodiments can be advantageously combined with any other one.

It is suggested to combine described embodiments, or combinations thereof, with one or more of the following techniques or technologies or concepts or ideas or paradigms or states or the like:

Input devices

In some embodiments, one or more user input devices can be used. Input devices can comprise devices such as one or more physical buttons, a touch screen or a portion thereof, a voice recognition device, eye-tracking device, etc. A wide range of haptic devices can also be used and such devices also include motion gestures analysis or interpretation. The devices can be combined with one another (multimodal interaction). For example, a voice command can be confirmed or modulated by an action on a touch sensitive interface.

Touch-sensitive surfaces can comprise sensors to detect intensity of contacts on the touch-sensitive surfaces. Such devices ("force touch") can use intensity thresholds or ranges of thresholds. Force touch can encode particular user interactions (speed of touch and force can indicate hesitations or particular mood of a patient, since some biometry can be derived from user interactions, as keyboard typing).

In some embodiments, speech synthesis can be used. Text-to-speech can be used (e.g. upon request). Imaging sensors combined with OCR capabilities embedded in software apps can allow the user to acquire an image of the environment

Time and/or Space

In some embodiments, the system, parts thereof and/or the control thereof are arranged and/or configured according to one or more time and/or space schemes.

Dimensions of parts, e.g. sensors and/or actuators can be different (e.g. macro or micro-scales).

Measurements can be performed "continuously" and/or "continually" and/or "intermittently" (regularly or irregularly) performed.

Measures can be regular or irregular, periodic or a-periodic, intermittent, opportunistic (triggered by predefined event, available bandwidth, etc).

Values can be logged. History of logs can be archived. Logs can be encrypted.

The frequency of sampling can be event-driven (e.g. movement while sleeping)

Some embodiments of the invention can be achieved at different sizes or scales or size scales. Some components or parts or portions can be miniaturized. Dimensions can be macroscopic (as it is generally the case today), millimetric, microscopic, sub-microscopic if not at nano-scale.

We arrive at the "EXPANSION ZONE" or "ITERATIVE GENERATION"

(1)scrollable list

(2)list displaying step

(3)content items

(4)receiving input step

(5)scroll command

(6)input

(7)trigger displaying step

(8)scrollable refresh trigger

(9)determining event

(10)list refreshing step

(11)first instruction

(12)second instruction

1. A method, comprising: - a list displaying step of displaying a scrollable list of content items; - a receiving input step of receiving input associated with a scroll command; based on the scroll command, - a trigger displaying step of displaying a scrollable refresh trigger; and in response to a determining event of determining, based on the scroll command, that the scrollable refresh trigger has been activated, - a list refreshing step of refreshing the scrollable list of content items.

2. The method of claim 1, wherein the scrollable refresh trigger scrolls with the scrollable list of content items.

3. The method of claim 1, wherein the scrollable refresh trigger indicates the time at which the scrollable list of content items was last refreshed.

4. The method of claim 1, further comprising:based on the scroll command, providing a first instruction associated with displaying the scrollable refresh trigger; and in response to determining that the scrollable refresh trigger is fully displayed, providing a second instruction associated with activating the scrollable refresh trigger.

5. The method of claim 1, further comprising: in response to determining that the scroll command was completed while the scrollable refresh trigger was fully displayed, determining that the scrollable refresh trigger has been activated.

6. The method of claim 1, further comprising: in response to determining that the scroll command was completed while the scrollable refresh trigger was not fully displayed, determining that the scrollable refresh trigger has not been activated.

7. The method of claim 1, further comprising: in response to determining that an important refresh operation has completed, automatically scrolling the scrollable list of content items such that the scrollable refresh trigger is not displayed.

8. The method of 1, further comprising: in response to displaying the scrollable refresh trigger, providing first audio feedback; and in response to determining that the scrollable refresh trigger has been activated, providing second audio feedback.

9. The method of claim 1, wherein the scrollable list of content items includes a plurality of discrete content items arranged chronologically.

10. The method of claim 1, wherein the received input represents touch-based user input.

## **Summary**

A method includes displaying a scrollable list of content items, receiving input associated with a scroll command, based on the scroll command, displaying a scrollable refresh trigger, and in response to a determining event of determining, based on the scroll command, that the scrollable refresh trigger has been activated, refreshing the scrollable list of content items.