Management of a recurring event on a calendar with a timeline is provided. An application such as a calendar application displays a context menu that includes an add control on a calendar, in response to a selection of an occurrence of a recurring event on a calendar. An activation of the add control is detected. A submenu that includes a recurring event control and an occurrence control is displayed. The recurring event is duplicated on the timeline of the calendar, in response to an activation of the recurring event control.
FIG. 8

START

810

DISPLAY A CONTEXT MENU THAT INCLUDES AN ADD CONTROL ON A CALENDAR IN RESPONSE TO A SELECTION OF AN OCCURRENCE OF A RECURRING EVENT ON THE CALENDAR

820

DETECT AN ACTIVATION OF THE ADD CONTROL

830

DISPLAY A SUBMENU THAT INCLUDES A RECURRING EVENT CONTROL AND AN OCCURRENCE CONTROL

840

DUPLICATE THE RECURRING EVENT ON A TIMELINE OF THE CALENDAR IN RESPONSE TO AN ACTIVATION OF THE RECURRING EVENT CONTROL

END
MANAGE RECURRING EVENT ON CALENDAR WITH TIMELINE

RELATED APPLICATIONS


BACKGROUND

[0002] Legacy calendar views in scheduling applications provide limited information. Alternatively, the legacy calendar views in scheduling applications provide excessive information. Legacy calendar views are usually used in detailed configurations for daily and weekly actions. However, users are unserved in long term synopsis of associated actions in legacy calendar views. Addition of actions and other items into legacy calendar views prove challenging for long term synopsis of associated actions.

SUMMARY

[0003] This summary is provided to introduce a selection of concepts in a simplified form that are further described below in the Detailed Description. This summary is not intended to exclusively identify key features or essential features of the claimed subject matter, nor is it intended as an aid in determining the scope of the claimed subject matter.

[0004] Embodiments are directed to managing a recurring event on a calendar with a timeline. In some example embodiments, a calendar application may display a context menu that includes an add control on a calendar, in response to a selection of an occurrence of the recurring event on the calendar. An activation of the add control may be detected. A submenu that includes a recurring event control and an occurrence control may be displayed. The recurring event may be duplicated on the timeline of the calendar, in response to an activation of the recurring event control.

[0005] These and other features and advantages will be apparent from a reading of the following detailed description and a review of the associated drawings. It is to be understood that both the foregoing general description and the following detailed description are explanatory and do not restrict aspects as claimed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] FIG. 1 is a conceptual diagram illustrating an example of managing a recurring event on a calendar with a timeline, according to embodiments;
[0007] FIG. 2 illustrates an example of adding a recurring event to a timeline, according to embodiments;
[0008] FIG. 3 illustrates an example of removing a recurring event from a timeline, according to embodiments;
[0009] FIG. 4 illustrates another example of removing a recurring event from a timeline, according to embodiments;
[0010] FIG. 5 illustrates an example of touch based user interface elements to add a recurring event to a timeline, according to embodiments;
[0011] FIG. 6 is a simplified networked environment, where a system according to embodiments may be implemented;
[0012] FIG. 7 illustrates a general purpose computing device, which may be configured to manage a recurring event on a calendar with a timeline; and

[0013] FIG. 8 illustrates a logic flow diagram for a process to manage a recurring event on a calendar with a timeline, according to embodiments.

DETAILED DESCRIPTION

[0014] As briefly described above, a recurring event may be managed on a calendar with a timeline by a calendar application. The calendar application may display a context menu that includes an add control on a calendar, in response to a selection of an occurrence of the recurring event on the calendar. An activation of the add control may be detected. A submenu that includes a recurring event control and an occurrence control may be displayed. The recurring event may be duplicated on the timeline of the calendar, in response to an activation of the recurring event control.

[0015] In the following detailed description, references are made to the accompanying drawings that form a part hereof, and in which are shown by way of illustrations specific embodiments or examples. These aspects may be combined, other aspects may be utilized, and structural changes may be made without departing from the spirit or scope of the present disclosure. The following detailed description is therefore not to be taken in a limiting sense, and the scope of the present invention is defined by the appended claims and their equivalents.

[0016] While the embodiments will be described in the general context of program modules that execute in conjunction with an application program that runs on an operating system on a computing device, those skilled in the art will recognize that aspects may also be implemented in combination with other program modules.

[0017] Generally, program modules include routines, programs, components, data structures, and other types of structures that perform particular tasks or implement particular abstract data types. Moreover, those skilled in the art will appreciate that embodiments may be practiced with other computer system configurations, including hand-held devices, multiprocessor systems, microprocessor-based or programmable consumer electronics, minicomputers, mainframe computers, and comparable computing devices. Embodiments may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network. In a distributed computing environment, program modules may be located in both local and remote memory storage devices.

[0018] Embodiments may be implemented as a computer-implemented process (method), a computing system, or as an article of manufacture, such as a computer program product or computer readable media. The computer program product may be a computer storage medium readable by a computer system and encoding a computer program that comprises instructions for causing a computer or computing system to perform example process(es). The computer-readable storage medium is a computer-readable memory device. The computer-readable memory device includes a hardware device that includes a hard disk drive, a solid state drive, a compact disk, a memory chip, among others. The computer-readable storage medium can for example be implemented via one or more of a volatile computer memory, a non-volatile memory, a hard drive, and a flash drive.

[0019] Throughout this specification, the term “platform” may be a combination of software and hardware components to manage a recurring event on a calendar with a timeline.
Examples of platforms include, but are not limited to, a hosted service executed over a plurality of servers, an application executed on a single computing device, and comparable systems. The term “server” generally refers to a computing device executing one or more software programs typically in a networked environment. However, a server may also be implemented as a virtual server (software programs) executed on one or more computing devices viewed as a server on the network. More detail on these technologies and example embodiments may be found in the following description.

[0020] FIG. 1 is a conceptual diagram illustrating an example of managing a recurring event on a calendar with a timeline, according to embodiments.

[0021] In a diagram 100, a computing device 104 may execute a calendar application 102. The computing device may include a tablet device, a laptop computer, a desktop computer, a smart phone, among others. The computing device 104 may display the calendar application 102 to a user 106. The user 106 may be allowed to interact with the calendar application 102 through an input device or touch enabled display component of the computing device 104. The user 106 may interact with the calendar application 102 with a keyboard based input, a mouse based input, a voice based input, a pen based input, a gesture based input, among others. The gesture based input may include one or more touch based actions such as a touch action, a swipe action, a combination of each, among others.

[0022] The calendar application 102 may include a timeline 120 as a component placed adjacent to and below the calendar. The timeline 120 may also be presented as a stand-alone component. The timeline 120 may include a linear presentation of events during a time period divided based on a time unit such as a day. Events presented on the timeline may be duplicates of the events on the calendar displayed by the calendar application 102. A user 106 may be allowed to interact with the calendar and the timeline 120 to manage a recurring event. The recurring event may be displayed on the calendar and duplicated on the timeline 120.

[0023] While the example system in FIG. 1 has been described with specific components including the computing device 104, the calendar application 102, the timeline 120, embodiments are not limited to these components or system configurations and can be implemented with other system configuration employing fewer or additional components.

[0024] FIG. 2 illustrates an example of adding a recurring event on a timeline, according to embodiments.

[0025] In a diagram 200, a calendar application 202 that displays a calendar 226 used to add a recurring event to a timeline 220 may be described. The calendar application 202 may provide one or more components to manage the calendar 226 and the timeline 220. A date picker component 204 may allow a user to select a date from a displayed range. The selected date may be displayed in the calendar 226 that shows the date within a date range that is configurable. The date range of the calendar 226 may include a day, a week, a month, a year, among others. A current date range may be illustrated with a date range label 208. The date range may also be partitioned vertically based on a time unit such as a day 210. The time units may be scrollable. The calendar 226 may also be partitioned horizontally based on an hour based unit 212. The hour based units may be scrollable. An “all day” unit may persist on top section of the calendar 226 to show one or more events that last during a time unit such as a day.

[0026] The calendar 222 may also be selectable through a calendar selection control 206. The calendar application 202 may display one or more calendars that may be selectable through the calendar selection control 206 and other calendar selection controls displayed adjacent to the calendar selection control 206.

[0027] The timeline 220 may be displayed stand-alone or in conjunction with a calendar. The events displayed in the timeline 220 may be duplicates of events stored in the calendar 226. In addition, the timeline 220 may display a date range of events that may be scrollable through a scroll control 224. The date range may be presented with a date range label 222. The date range may be partitioned based on time units such as an hour, a day 228, a week, a month, a year, among others. The date range may be selectable based on a selection of the range by a user through a range selection control such as “weekly,” among others.

[0028] The calendar application 202 may display a recurring event 214 on the calendar 226. The recurring event 214 may include an event that repeats based on a time pattern. The time pattern may include an hourly, a daily, a weekly, a monthly, a yearly time pattern, or a combination pattern that includes a number of other time patterns. An occurrence 213 of the recurring event 214 may include one of the events associated with the recurring event at a timeslot.

[0029] The calendar application 202 may detect a selection on the occurrence 213 of the recurring event 214. The selection may include a touch based input, a mouse based input, among others. Another example may include a click event by the mouse based input. Another example may include a tap action by the touch based input. A context menu 216 may be displayed in response to the selection. The context menu 216 may be displayed in a location that is adjacent to, in proximity to, or superimposed on the occurrence 213 of the recurring event 214. The context menu 216 may include an add control to execute an operation to add the recurring event or an occurrence 213 of the recurring event 214 on to the timeline 220.

[0030] A submenu 217 may be displayed in response to an activation of the add control. The submenu 217 may be displayed adjacent to the add control. The submenu may include an occurrence control and a recurring event control. The occurrence control may be activated to add the occurrence 213 of the recurring event 214 that was selected to display the context menu 216. The recurring event control may be activated to add the recurring event 214 to the timeline 220.

[0031] In response to an activation of the occurrence control, the occurrence 213 of the recurring event 214 may be added into the timeline on a date of the timeline that matches a date of the occurrence 213. In response to an activation 218 of the recurring event control, the recurring event 214 may be added to the timeline 220 on a date range of the timeline that matches the date range of the recurring event. The timeline may be scrolled to a date range that include the occurrence 213 or the recurring event to display the occurrence 213 or the recurring event on the timeline 220.

[0032] FIG. 3 illustrates an example of removing a recurring event from a timeline, according to embodiments.

[0033] In a diagram 300, a calendar application 302 may display a recurring event 314 on a calendar that is duplicated as a recurring event 304 on a timeline 320. The calendar application 302 may detect a selection on an occurrence of the recurring event 304. A context menu 316 may be displayed in response to the selection. The context menu 316 may be
displayed in a location that is in proximity to, adjacent to, and superimposed on the occurrence. The context menu 316 may also include a delete control to remove the recurring event 304 or the selected occurrence from the timeline 320.

[0034] In response to an activation of the delete control, a submenu 317 may be displayed adjacent to the context menu 316. The submenu 317 may include an occurrence control to remove the selected occurrence from the timeline 320. The submenu 317 may also include a recurring event control to remove the recurring event 304 from the timeline 320. In response to an activation of the occurrence control, the occurrence of the recurring event 304 may be removed from the timeline 320. In response to an activation 318 of the recurring event control, the recurring event 304 may be removed from the timeline 320.

[0035] FIG. 4 illustrates another example of removing a recurring event from a timeline, according to embodiments.

[0036] In a diagram 400, a calendar application 402 may display a recurring event 414 on a calendar 426 and a recurring event 414 on a timeline 420 that is a duplicate of the recurring event 414 on the calendar 426. A selection of an occurrence of the recurring event 414 may be detected on the calendar 426. A context menu 416 may be displayed that includes a delete control, in response to the selection and detecting the recurring event 414 duplicated on the timeline 420. The recurring event 404 may not fully duplicate the recurring event 414. In an example scenario, the recurring event 404 or the recurring event 414 may lack one or more occurrences that are not duplicated in the other recurring event. However, as long as the recurring event 404 and the recurring event 414 share a subject, they may be considered as duplicates.

[0037] The context menu 416 may be displayed in a location that is in proximity to, adjacent to, or superimposed on the selected occurrence. In response to an activation of the delete control, a submenu may be displayed that includes an occurrence control and a recurring event control. The submenu may be displayed adjacent to the delete control. In response to an activation of the occurrence control, the selected occurrence may be removed from the timeline 420. In response to an activation of the recurring event control, the recurring event 404 may be removed from the timeline 420.

[0038] FIG. 5 illustrates an example of touch based user interface elements to add a recurring event to a timeline, according to embodiments.

[0039] In a diagram 500, a calendar application 502 may display a recurring event 514 on a calendar 526. A touch action 504 may be detected on an occurrence of the recurring event 514 to select the occurrence. The touch action 504 may include a tap action, a tap and hold action, a swipe action that concludes on the occurrence, among others. A touch based menu 516 may be displayed in response to the touch action 504. The touch based menu 516 may be displayed on a location that is adjacent to, in proximity to, or superimposed on the selected occurrence. The touch based menu 516 may include a recurring event control, an occurrence control, a cancel control, among others. In response to another touch based action to activate the occurrence control, the selected occurrence of the recurring event 514 may be duplicated on a timeline 520 of the calendar 526 on a date of the occurrence. The timeline may be scrolled to a date range that includes a date of the occurrence on the timeline. The occurrence may be displayed on the timeline 520.

[0040] In response to detecting the touch action 504 that activates the recurring event control, recurring event 514 on the calendar 526 may be duplicated on the timeline 520. The recurring event 514 may be added to a date range on the timeline 520 that corresponds to the date range of the recurring event 514. The timeline 520 may be scrolled to a date range that corresponds to the date range of the recurring event on the timeline 520. The recurring event may be displayed on the timeline 520. In response to detection of another touch based event that activates the cancel control, the touch based menu 516 may be removed from the calendar.

[0041] The recurring event 514 and the occurrence may be duplicated on the timeline 520 with an animation. The animation may include a transition motion of the recurring event 514 or the occurrence from the calendar 526 to the timeline 520. The animation may also include a blinking animation applied on the recurring event 514 or the occurrence upon duplication on the timeline 520.

[0042] The technical advantage of managing a recurring event on a calendar with a timeline may be improved usability and enhanced reliability of display devices in recurring event addition, removal, and management, among other features compared to static event presentation based solutions.

[0043] The example scenarios and schemas in FIG. 1 through 5 are shown with specific components, data types, and configurations. Embodiments are not limited to systems according to these example configurations. Managing a recurring event on a calendar with a timeline may be implemented in configurations employing fewer or additional components in applications and user interfaces. Furthermore, the example schema and components shown in FIG. 1 through 5 and their subcomponents may be implemented in a similar manner with other values using the principles described herein.

[0044] FIG. 6 is an example networked environment, where embodiments may be implemented. A calendar application configured to manage a recurring event on a calendar with a timeline may be implemented via software executed over one or more servers 614 such as a hosted service. The platform may communicate with client applications on individual computing devices such as a smart phone 613, a laptop computer 612, or desktop computer 611 (‘client devices’) through network(s) 610.

[0045] Client applications executed on any of the client devices 611-613 may facilitate communications via application(s) executed by servers 614, or on individual server 616. A calendar application may display a context menu with an add control, in response to a selection of an occurrence of a recurring event. A submenu that includes a recurring event control and an occurrence control may be displayed adjacent to the context menu, in response to an activation of the add control. The recurring event on a calendar may be duplicated on a timeline of the calendar, in response to an activation of the recurring event control. The calendar application may store data associated with the calendar and the timeline in data store(s) 619 directly or through database server 618.

[0046] Network(s) 610 may comprise any topology of servers, clients, Internet service providers, and communication media. A system according to embodiments may have a static or dynamic topology. Network(s) 610 may include secure networks such as an enterprise network, an unsecured network such as a wireless open network, or the Internet. Network(s) 610 may also coordinate communication over other networks such as Public Switched Telephone Network (PSTN) or cellular.
lular networks. Furthermore, network(s) 610 may include short range wireless networks such as Bluetooth or similar ones. Network(s) 610 provide communication between the nodes described herein. By way of example, and not limitation, network(s) 610 may include wireless media such as acoustic, RF, infrared and other wireless media.

[0047] Many other configurations of computing devices, applications, data sources, and data distribution systems may be employed to manage a recurring event on a calendar with a timeline. Furthermore, the networked environments discussed in FIG. 6 are for illustration purposes only. Embodyments are not limited to the example applications, modules, or processes.

[0048] FIG. 7 illustrates a general purpose computing device, which may be configured to manage a recurring event on a calendar with a timeline, arranged in accordance with at least some embodiments described herein.

[0049] For example, the computing device 700 may be used to manage a recurring event on a calendar with a timeline. In an example of a basic configuration 702, the computing device 700 may include one or more processors 704 and a system memory 706. A memory bus 708 may be used for communication between the processor 704 and the system memory 706. The basic configuration 702 may be illustrated in FIG. 7 by those components within the inner dashed line.

[0050] Depending on the desired configuration, the processor 704 may be of any type, including, but not limited to, a microprocessor (μP), a microcontroller (μC), a digital signal processor (DSP), or any combination thereof. The processor 704 may include one or more levels of caching, such as a level 1 cache memory 712, a processor core 714, and registers 716. The processor core 714 may include an arithmetic logic unit (ALU), a floating point unit (FPU), a digital signal processing core (DSP Core), any combination thereof. A memory controller 718 may also be used with the processor 704, or in some implementations, the memory controller 718 may be an internal part of the processor 704.

[0051] Depending on the desired configuration, the system memory 706 may be of any type including but not limited to volatile memory (such as RAM), non-volatile memory (such as ROM, flash memory, etc.), or any combination thereof. The system memory 706 may include an operating system 720, a calendar application 722, and a program data 724. The calendar application 722 may display a context menu with an add control, in response to a selection of an occurrence of a recurring event. A sub-menu that includes a recurring event control and an occurrence control may be displayed adjacent to the context menu, in response to an activation of the add control. The recurring event on a calendar may be duplicated on a timeline of the calendar, in response to an activation of the recurring event control. Components of the calendar application 722 (such as a user interface) may also be displayed on a display device associated with the computing device 700. An example of the display device may include a hardware screen that may be communicatively coupled to the computing device 700. The display device may include a touch based device that detects gestures such as a touch action. The display device may also provide feedback in response to detected gestures (or any other form of input) by transforming one or more user interfaces of the calendar application 722 such as the calendar and the timeline, displayed by the touch based device. The program data 724 may include, among other data, a timeline data 728, or the like, as described herein. The timeline data 728 may include the recurring event, subject name of the recurring event, the recurring event date range, among others.

[0052] The computing device 700 may have additional features or functionality, and additional interfaces to facilitate communications between the basic configuration 702 and any desired devices and interfaces. For example, a bus/interface controller 730 may be used to facilitate communications between the basic configuration 702 and one or more data storage devices 732 via a storage interface bus 734. The data storage devices 732 may be one or more removable storage devices 736, one or more non-removable storage devices 738, or a combination thereof. Examples of the removable storage and the non-removable storage devices may include magnetic disk devices, such as flexible disk drives and hard-disk drives (HDD), optical disk drives such as compact disk (CD) drives or digital versatile disk (DVD) drives, solid state drives (SSD), and tape drives, to name a few. Example computer storage media may include volatile and nonvolatile, removable, and non-removable media implemented in any method or technology for storage of information, such as computer-readable instructions, data structures, program modules, or other data.

[0053] The system memory 706, the removable storage devices 736, and the non-removable storage devices 738 may be examples of computer storage media. Computer storage media may include, but may not be limited to, RAM, ROM, EEPROM, flash memory or other memory technology, CD-ROM, digital versatile disks (DVD), solid state drives, or other optical storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other medium which may be used to store the desired information and which may be accessed by the computing device 700. Any such computer storage media may be part of the computing device 700.

[0054] The computing device 700 may also include an interface bus 740 for facilitating communication from various interface devices (for example, one or more output devices 742, one or more peripheral interfaces 744, and one or more communication devices 766) to the basic configuration 702 via the bus/interface controller 730. Some of the example output devices 742 may include a graphics processing unit 748 and an audio processing unit 750, which may be configured to communicate to various external devices, such as a display or speakers via one or more A/V ports 752. One or more example peripheral interfaces 744 may include a serial interface controller 754 or a parallel interface controller 756, which may be configured to communicate with external devices, such as input devices (for example, keyboard, mouse, pen, voice input device, touch input device, etc.) or other peripheral devices (for example, printer, scanner, etc.) via one or more I/O ports 758. An example communication device 766 may include a network controller 760, which may be arranged to facilitate communications with one or more other computing devices 762 over a network communication link via one or more communication ports 764. The one or more other computing devices 762 may include servers, client equipment, and comparable devices.

[0055] The network communication link may be one example of a communication media. Communication media may be embodied by computer-readable instructions, data structures, program modules, or other data in a modulated data signal, such as a carrier wave or other transport mechanism, and may include any information delivery media. A "modulated data signal" may be a signal that has one or more
of the modulated data signal characteristics set or changed in such a manner as to encode information in the signal. By way of example, and not limitation, communication media may include wired media such as a wired network or direct-wired connection, and wireless media such as acoustic, radio frequency (RF), microwave, infrared (IR), and other wireless media. The term computer-readable media, as used herein, may include both storage media and communication media.

[0056] The computing device 700 may be implemented as a part of a general purpose or specialized server, mainframe, or similar computer, which includes any of the above functions. The computing device 700 may also be implemented as a personal computer including both laptop computer and non-laptop computer configurations.

[0057] Example embodiments may also include managing a recurring event on a calendar with a timeline. These methods may be implemented in any number of ways, including the structures described herein. One such way may be by machine operations, using devices of the type described in the present disclosure. Another optional way may be for one or more of the individual operations of the methods to be performed in conjunction with one or more human operators performing some of the operations while other operations may be performed by machines. These human operators need not be co-located with each other, but each may be with a machine that performs a portion of the program. In other examples, the human interaction may be automated such as by pre-selected criteria that may be machine automated.

[0058] FIG. 8 illustrates a logic flow diagram for a process to manage a recurring event on a calendar with a timeline, according to embodiments. Process 800 may be implemented on a calendar application.

[0059] Process 800 begins with operation 810, where a context menu that includes an add control may be displayed on a calendar, in response to a selection of an occurrence of the recurring event on the calendar. At operation 820, an activation of the add control may be detected. A submenu that includes a recurring event control and an occurrence control may be displayed at operation 830. At operation 840, the recurring event may be duplicated on the timeline of the calendar, in response to an activation of the recurring event control.

[0060] The operations included in process 800 are for illustration purposes. A calendar application according to embodiments may be implemented by similar processes with fewer or additional steps, as well as in different order of operations using the principles described herein.

[0061] According to some examples, a method that is executed on a computing device to manage a recurring event on a calendar with a timeline may be described. The method may include displaying a context menu that includes an add control on a calendar, in response to a selection of an occurrence of the recurring event on the calendar, detecting an activation of the add control, displaying a submenu that includes a recurring event control and an occurrence control, and duplicating the recurring event on the timeline of the calendar, in response to an activation of the recurring event control.

[0062] According to other examples, the method may further include duplicating the occurrence on the timeline, in response to an activation of the occurrence control. The context menu may be displayed in a location that includes one from a set of: in proximity to, adjacent to, and superimposed on the occurrence. The submenu may be displayed adjacent to the add control.

[0063] According to further examples, the method may further include displaying a second context menu that includes a delete control in the timeline, in response to a second selection of the occurrence on the timeline and displaying a second submenu that includes the recurring event control and the occurrence control on the timeline, in response to an activation of the delete control. The second context menu may be displayed in a location that includes one from a set of: in proximity to, adjacent to, and superimposed on the occurrence on the timeline and the second submenu may be displayed adjacent to the delete control. The recurring event may be removed from the timeline, in response to an activation of the recurring event control. The occurrence may be removed from the timeline, in response to an activation of the occurrence control.

[0064] According to further examples, the method may further include detecting the recurring event as duplicated on the timeline, displaying a second context menu that includes a delete control on the calendar, in response to a second selection of the occurrence of the recurring event on the calendar, wherein the second context menu is displayed in a location that includes one from a set of: in proximity to, adjacent to, and superimposed on the occurrence on the calendar, and displaying a second submenu that includes the recurring event control and the occurrence control, adjacent to the delete control. The recurring event may be removed from the timeline, in response to an activation of the recurring event control. The occurrence may be removed from the timeline, in response to an activation of the occurrence control.

[0065] According to some examples, a computing device to manage a recurring event on a calendar with a timeline may be described. The computing device may include a display device, a memory, a processor coupled to the memory and the display device. The processor may be configured to execute a calendar application in conjunction with instructions stored in the memory. The calendar application may be configured to detect a touch action on an occurrence of the recurring event displayed on a calendar, display a touch based menu that includes a recurring event control, an occurrence control, and a cancel control, wherein the touch based menu is displayed in a location that includes one from a set of: in proximity to, adjacent to, and superimposed on the occurrence, on the display device, and duplicate the recurring event on the timeline of the calendar, in response to an activation of the recurring event control.

[0066] According to other examples, the calendar application is further configured to scroll the timeline to a date range of the recurring event on the timeline and display the recurring event on the timeline, on the display device. The calendar application is further configured to detect an activation of the occurrence control, duplicate the occurrence on the timeline, in response to the activation of the occurrence control, scroll the timeline to a date range of the occurrence on the timeline, and display the occurrence on the timeline, on the display device. An activation of the cancel control may be detected and the touch based menu may be removed from the calendar, on the display device. The recurring event may be duplicated on the timeline with an animation, wherein the animation includes one or more from a set of: a transition motion of the
recurring event from the calendar to the timeline and a blinking animation applied on the recurring event on the timeline.

[0067] According to some examples, a computer-readable memory device with instructions stored thereon to manage a recurring event on a calendar with a timeline may be described. The instructions may include actions that are similar to the method described above.

[0068] According to some examples, a means to manage a recurring event on a calendar with a timeline may be described. The means to manage a recurring event on a calendar with a timeline may include a means for displaying a context menu that includes an add control on a calendar, in response to a selection of an occurrence of the recurring event on the calendar, a means for detecting an activation of the add control, a means for displaying a submenu that includes a recurring event control and an occurrence control, and a means for duplicating the recurring event on the timeline of the calendar, in response to an activation of the recurring event control.

[0069] The above specification, examples and data provide a complete description of the manufacture and use of the composition of the embodiments. Although the subject matter has been described in language specific to structural features and/or methodological acts, it is to be understood that the subject matter defined in the appended claims is not necessarily limited to the specific features or acts described above. Rather, the specific features and acts described above are disclosed as example forms of implementing the claims and embodiments.

What is claimed is:

1. A method executed on a computing device to manage a recurring event on a calendar with a timeline, the method comprising:
   displaying a context menu that includes an add control on a calendar, in response to a selection of an occurrence of the recurring event on the calendar;
   detecting an activation of the add control;
   displaying a submenu that includes a recurring event control and an occurrence control; and
   duplicating the recurring event on the timeline of the calendar, in response to an activation of the recurring event control.

2. The method of claim 1, further comprising:
   duplicating the occurrence on the timeline, in response to an activation of the occurrence control.

3. The method of claim 1, further comprising:
   displaying the context menu in a location that includes one from a set of: in proximity to, adjacent to, and superimposed on the occurrence.

4. The method of claim 1, further comprising:
   displaying the submenu adjacent to the add control.

5. The method of claim 1, further comprising:
   displaying a second context menu that includes a delete control on the timeline, in response to a second selection of the occurrence on the timeline; and
   displaying a second submenu that includes the recurring event control and the occurrence control, on the timeline, in response to an activation of the delete control.

6. The method of claim 5, further comprising:
   displaying the second context menu in a location that includes one from a set of: in proximity to, adjacent to, and superimposed on the occurrence on the timeline; and
   displaying the second submenu adjacent to the delete control.

7. The method of claim 5, further comprising:
   removing the recurring event from the timeline, in response to an activation of the recurring event control.

8. The method of claim 5, further comprising:
   removing the occurrence from the timeline, in response to an activation of the occurrence control.

9. The method of claim 1, further comprising:
   displaying a second context menu that includes a delete control on the calendar, in response to a second selection of the occurrence of the recurring event on the calendar, wherein the second context menu is displayed in a location that includes one from a set of: in proximity to, adjacent to, and superimposed on the occurrence on the calendar; and
   displaying a second submenu that includes the recurring event control and the occurrence control, adjacent to the delete control.

10. The method of claim 9, further comprising:
    removing the recurring event from the timeline, in response to an activation of the recurring event control.

11. The method of claim 9, further comprising:
    removing the occurrence from the timeline, in response to an activation of the occurrence control.

12. A computing device to manage a recurring event on a calendar with a timeline, the computing device comprising:
    a display device;
    a memory;
    a processor coupled to the memory and the display device;
    the processor executing a calendar application in conjunction with instructions stored in the memory, wherein the calendar application is configured to:
    detect a touch action on an occurrence of the recurring event displayed on a calendar;
    display a touch based menu that includes a recurring event control, an occurrence control, and a cancel control, wherein the touch based menu is displayed in a location that includes one from a set of: in proximity to, adjacent to, and superimposed on the occurrence, on the display device; and
    duplicate the recurring event on the timeline of the calendar, in response to an activation of the recurring event control.

13. The computing device of claim 12, wherein the calendar application is further configured to:
    scroll the timeline to a date range of the recurring event on the timeline; and
    display the recurring event on the timeline, on the display device.

14. The computing device of claim 12, wherein the calendar application is further configured to:
    detect an activation of the occurrence control; and
    duplicate the occurrence on the timeline, in response to the activation of the occurrence control.

15. The computing device of claim 14, wherein the calendar application is further configured to:
    scroll the timeline to a date range of the occurrence on the timeline; and
    display the occurrence on the timeline, on the display device.

16. The computing device of claim 12, wherein the calendar application is further configured to:
detect an activation of the cancel control; and
remove the touch based menu from the calendar, on the
display device.

17. The computing device of claim 12, wherein the calen-
dar application is further configured to:
duplicate the recurring event on the timeline with an ani-
mation, wherein the animation includes one or more
from a set of: a transition motion of the recurring event
from the calendar to the timeline and a blinking anima-
tion applied on the recurring event on the timeline.

18. A computer-readable memory device with instructions
stored thereon to manage a recurring event on a calendar with
a timeline, the instructions comprising:
displaying a context menu that includes an add control on
the calendar, in response to a selection of an occurrence
of the recurring event on the calendar;
detecting an activation of the add control;
displaying a submenu that includes a recurring event con-
trol and an occurrence control;
duplicating the recurring event on a timeline of the calen-
dar, in response to an activation of the recurring event
control; and
duplicating the occurrence on the timeline, in response to
an activation of the occurrence control.

19. The computer-readable memory device of claim 18,
wherein the instructions further comprise:
displaying a second context menu that includes a delete
control on the timeline, in response to a second selection
of the occurrence on the timeline;
displaying a second submenu that includes the recurring
event control and the occurrence control, on the time-
line, in response to an activation of the delete control;
and
removing the recurring event from the timeline, in response
to an activation of the recurring event control.

20. The computer-readable memory device of claim 18,
wherein the instructions further comprise:
detecting the recurring event as duplicated on the timeline;
displaying a second context menu that includes a delete
control on the calendar, in response to a second selection
of the occurrence of the recurring event on the calendar,
wherein the second context menu is displayed in a loca-
tion that includes one from a set of: in proximity to,
adjacent to, and superimposed on the occurrence on the
calendar;
displaying a second submenu that includes the recurring
event control and the occurrence control, adjacent to the
delete control; and
removing the recurring event from the timeline, in response
to an activation of the recurring event control.

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