

METHOD, APPARATUS, DEVICE AND STORAGE MEDIUM FOR INTERFACE INTERACTION

[0001] The present application claims priority to Chinese Patent Application No. 202410592800.0, filed on May 13, 2024, and entitled "METHOD, APPARATUS, DEVICE AND STORAGE MEDIUM FOR INTERFACE INTERACTION", which is hereby incorporated by reference in its entirety.

FIELD

[0002] Example embodiments of the present disclosure generally relate to the field of computers, and in particular, to a method, apparatus, device and computer-readable storage medium for interface interaction.

BACKGROUND

[0003] With the development of computer technologies, various electronic devices are widely used. In some scenarios, the electronic devices may present media content, such as video works, image works, or the like, through different view modes. Such view modes may include, for example, a single-column view mode, a double-column view mode, or the like. Different view modes may be applied to different scenarios, and how to conveniently switch between the different view modes is a focus of attention.

SUMMARY

[0004] In a first aspect of the present disclosure, a method for interface interaction is provided, including: presenting a first viewing interface, the first viewing interface presenting media content in a first view mode; and presenting a dynamic switching process in response to receiving a preset operation, to switch the first viewing interface to a second viewing interface, the second viewing interface presenting the media content in a second view mode, the dynamic switching process comprising a shrinking process or an enlarging process of a target image, the target image being associated with a target media content item played in the first viewing interface or the second viewing interface.

[0005] In a second aspect of the present disclosure, an apparatus for interface interaction is provided. The apparatus includes: a viewing interface presenting module, configured to present a first viewing interface, the first viewing interface presenting media content in a first view mode; and a switching process presenting module, configured to presenting a dynamic switching process in response to receiving a preset operation, to switch the first viewing interface to a second viewing interface, the second viewing interface presenting the media content in a second view mode, the dynamic switching process comprising a shrinking process or an enlarging process of a target image, the target image being associated with a target media content item played in the first viewing interface or the second viewing interface.

[0006] In a third aspect of the present disclosure, an electronic device is provided. The device includes at least one processing unit; and at least one memory coupled to the at least one processing unit and storing instructions executable by the at least one processing unit. The instructions, when executed by the at least one processing unit, cause the device to perform the method of the first aspect.

[0007] In a fourth aspect of the present disclosure, a computer-readable storage medium is provided. The

computer-readable storage medium has a computer program stored thereon, the computer program being executable by a processor to implement the method of the first aspect.

[0008] In a fifth aspect of the present disclosure, a computer program product is provided. The computer program product includes computer-executable instructions, wherein the computer-executable instructions, when executed by a processor, implement the method of the first aspect.

[0009] It should be appreciated that the content described in the Summary section of the present disclosure is neither intended to identify key or essential features of the embodiments of the present disclosure, nor is it intended to limit the scope of the present disclosure. Other features of the present disclosure will be readily envisaged through the following description.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] The above and other features, advantages and aspects of the embodiments of the present disclosure will become more apparent in combination with the drawings and with reference to the following detailed description. In the drawings, the same or similar reference number refers to the same or similar element, where:

[0011] FIG. 1 shows a schematic diagram of an example environment in which the embodiments according to the present disclosure may be implemented;

[0012] FIGS. 2A to 2F show example interfaces according to some embodiments of the present disclosure;

[0013] FIG. 3 shows a flowchart of a process of example interface interaction according to some embodiments of the present disclosure;

[0014] FIG. 4 shows a schematic structural block diagram of an example apparatus for interface interaction according to some embodiments of the present disclosure; and

[0015] FIG. 5 shows a block diagram of an electronic device capable of implementing a plurality of embodiments of the present disclosure.

DETAILED DESCRIPTION

[0016] The embodiments of the present disclosure will be described in more detail below with reference to the drawings. Although some embodiments of the present disclosure are shown in the drawings, it would be appreciated that the present disclosure may be implemented in various forms and should not be construed as limited to the embodiments set forth herein. On the contrary, these embodiments are provided for a more thorough and complete understanding of the present disclosure. It would be appreciated that the drawings and embodiments of the present disclosure are only for illustrative purposes and are not intended to limit the scope of protection of the present disclosure.

[0017] It should be noted that the titles of any sections/subsections provided herein are not restrictive. Various embodiments are described throughout this article, and any type of embodiment may be included under any section/subsection. Furthermore, the embodiments described in any section/subsection may be combined in any way with any other embodiments described in the same section/subsection and/or different sections/subsections.

[0018] In the description of the embodiments of the present disclosure, the term "include" and similar terms thereof should be understood as open-ended inclusions, that is, "include but not limited to". The term "based on"

should be understood as "at least partially based on". The term "an embodiment" or "the embodiment" should be understood as "at least one embodiment". The term "some embodiments" should be understood as "at least some embodiments". Other explicit and implicit definitions may also be included below. The terms "first", "second", etc. may refer to different or same objects. Other explicit and implicit definitions may also be included below.

[0019] The embodiments of the present disclosure may involve user data, data acquisition and/or data use, etc. These aspects all comply with corresponding laws, regulations and related provisions. In the embodiments of the present disclosure, all data collection, acquisition, processing, machining, forwarding, use, etc. are carried out on the premise that the user knows and confirms. Correspondingly, when implementing the embodiments of the present disclosure, the user should be informed of the type, range of use, use scenarios, etc., of data or information that may be involved, and the authorization of the user should be obtained, in an appropriate manner in accordance with relevant laws and regulations. The specific manner of informing and/or authorizing may vary according to actual situations and application scenarios, and the scope of the present disclosure is not limited in this regard.

[0020] The solutions in this specification and the embodiments, if involving personal information processing, will all be processed on the premise that there is a legal basis (for example, the consent of the personal information subject is obtained, or it is necessary for fulfillment of a contract, etc.), and will only be processed within a specified or agreed scope. If a user refuses to process personal information other than necessary information required for a basic function, it will not affect the user's use of the basic function.

[0021] In some scenarios, an electronic device may present media content, such as video works, image works, or the like, through different view modes. Such view modes may include, for example, a single-column view mode, a double-column view mode, or the like. Different view modes may be applied to different scenarios, and how to conveniently switch between the different view modes is a focus of attention.

[0022] In view of this, embodiments of the present disclosure provide an interface interaction solution. According to this solution, a first viewing interface may be presented, the first viewing interface presenting media content in a first view mode. Furthermore, a dynamic switching process may be presented in response to receiving a preset operation, to switch the first viewing interface to a second viewing interface, the second viewing interface presenting the media content in a second view mode, the dynamic switching process comprising a shrinking process or an enlarging process of a target image, the target image being associated with a target media content item played in the first viewing interface or the second viewing interface.

[0023] In this way, the embodiments of the present disclosure are able to utilize the dynamic switching process to implement a switch between different view modes, so that the continuity of switching between interfaces and the smoothness of view mode switching may be improved, thereby enhancing the user experience.

[0024] Various example implementations of this solution are described in detail below in further connection with the drawings.

EXAMPLE ENVIRONMENT

[0025] FIG. 1 shows a schematic diagram of an example environment 100 in which the embodiments of the

present disclosure may be implemented. As shown in FIG. 1, the example environment 100 may include an electronic device 110.

[0026] In this example environment 100, the electronic device 110 may be running an application 120 supporting interface interaction. The application 120 may be any suitable type of application for interface interaction, examples of which may include but are not limited to: a media application or other suitable applications. A user 140 may interact with the application 120 via the electronic device 110 and/or its attached device.

[0027] In the environment 100 of FIG. 1, if the application 120 is in an active state, the electronic device 110 may present, through the application 120, an interface 150 for supporting interface interaction.

[0028] In some embodiments, the electronic device 110 communicates with a server 130 to enable provision of services of the application 120. The electronic device 110 may be any type of mobile terminal, fixed terminal, or portable terminal, including a mobile phone, a desktop computer, a laptop computer, a notebook computer, a netbook computer, a tablet computer, a media computer, a multimedia tablet, a personal communication system (PCS) device, a personal navigation device, a personal digital assistant (PDA), an audio/video player, a digital camera/video camera, a positioning device, a television receiver, a radio broadcast receiver, an e-book device, a gaming device, or any combination of the foregoing, including the accessories and peripherals of these devices, or any combination thereof. In some embodiments, the electronic device 110 may also support any type of user-directed interface (such as "wearable" circuitry and the like).

[0029] The server 130 may be an independent physical server, a server cluster or a distributed system composed of multiple physical servers, or a cloud server that provides basic cloud computing services such as cloud services, cloud databases, cloud computing, cloud functions, cloud storage, network services, cloud communications, middleware services, domain name services, security services, content delivery networks, and big data and artificial intelligence platforms. The server 130 may include, for example, a computing system/server, such as a mainframe, an edge computing node, a computing device in a cloud environment, and the like. The server 130 may provide back-end services for the application 120 supporting content presentation in the electronic device 110.

[0030] A communication connection may be established between the server 130 and the electronic device 110. The communication connection may be established by a wired or wireless means. The communication connection may include, but is not limited to, a Bluetooth connection, a mobile network connection, a Universal Serial Bus connection, a Wireless Fidelity connection, or the like, and the embodiments of the present disclosure are not limited in this regard. In the embodiments of the present disclosure, the server 130 and the electronic device 110 may implement signaling interaction through the communication connection between the two.

[0031] It should be appreciated that the structures and functions of various elements in the environment 100 are described for illustrative purposes only, without suggesting any limitation to the scope of the present disclosure.

EXAMPLE INTERACTION

[0032] A process of example single-column or multi-column view mode switching according to the embodiments of the present disclosure will be described below with reference to the drawings.

[0033] FIGS. 2A to 2F show example interfaces 200A to 200F according to some embodiments of the present

disclosure. The interfaces 200A to 200F may be provided, for example, by the electronic device 110 shown in FIG. 1.

[0034] In some embodiments, as shown in FIG. 2A, the electronic device 110 may present a viewing interface 205. As shown in the figure, the viewing interface 205 may, for example, present media content in a specific view mode (for example, a single-column view mode). As an example, the viewing interface 205 may, for example, display a target media content item 210 in a feed. As an example, the target media content item 210 may include, for example, a video work, an image work, a music work, or other appropriate media works.

[0035] As shown in FIG. 2A, in the viewing interface 205, the electronic device 110 may display one or more controls 220 associated with the target media content item 210 that is played. Such controls 220 may include, for example, but are not limited to: a like control, a comment control, a favorite control, a forwarding control, or the like.

[0036] As will be described below, the electronic device 110 may support the user to switch between viewing interfaces corresponding to different view modes through appropriate operations. For example, the electronic device 110 may support the user to switch the single-column view mode shown in FIG. 2A to a multi-column view mode (for example, a double-column view mode) shown in FIG. 2D through appropriate operations.

[0037] In some embodiments, the electronic device 110 may provide a switching entry 215 for switching the view, for example. In some embodiments, the display position of the switching entry 215 may be associated with the set of controls 220. For example, the switching entry 215 may be displayed above the set of controls 220. In some embodiments, different types of media content items (for example, video works, image works) may be associated with different controls 220. Correspondingly, the display position of the switching entry 215 corresponding to different media content items may be modified adaptively according to the arrangement of the controls 220, for example.

[0038] Alternatively or in addition, the switching entry 215 may also be enabled or disabled accordingly based on the user's configuration operation on the viewing interface. As an example, in the situation where the user enables a specific mode, the electronic device 110, for example, may not display such a switching entry 215 in the viewing interface or disable the capability of switching between different view modes.

[0039] As shown in FIGS. 2B and 2C, in a situation where the user triggers switching from the single-column view mode shown in FIG. 2A to the multi-column view mode (for example, the double-column view mode) shown in FIG. 2D, the electronic device 110 may present a corresponding dynamic switching process.

[0040] For example, the electronic device 110 may receive the user's selection on the switching entry 215 to trigger the view switching process. As another example, the electronic device 110 may also trigger the view switching process based on an appropriate operation (for example, a pinching operation of fingers) received in the viewing interface 205.

[0041] As shown in FIGS. 2B and 2C, in this dynamic switching process, the electronic device 110 may display a dynamic change process associated with a target image 225, for example, the shrinking process shown in FIGS. 2B and 2C.

[0042] In some embodiments, such a target image 225 may be associated with the target media content item 210 played in the viewing interface 205. For example, the target image 225 may be a current image in the target

media content item 210 played in the viewing interface 205 at the moment when the preset operation for triggering the view switching process is received, or an image at a preset moment near this moment. Alternatively, such a target image 225 may also be any appropriate image in the target media content item 210, such as a cover image, a first frame image, a last frame image, or the like.

[0043] In some embodiments, in the dynamic switching process, the electronic device 110 may first cease to play the target media content item 210 in the viewing interface 205. For example, taking a video work as an example, the video work may be in a pause playing state.

[0044] Furthermore, the electronic device 110 may display a shrinking process of the target image 225 (for example, a video frame of the video work at the time of pausing playing), for example, a process of shrinking from the full-screen state shown in FIG. 2A to the state shown in FIG. 2C.

[0045] In some embodiments, in such a dynamic switching process, the electronic device 110 may also display the viewing interface 230 (for example, corresponding to the multi-column view mode) to be switched to, with a preset transparency. Correspondingly, the shrinking process of the target image 225 may be dynamically superimposed on the viewing interface 230 displayed with the preset transparency.

[0046] Furthermore, as shown in FIG. 2C, when the target image 225 is shrunk to a predetermined size, the electronic device 110 may display a switching entry 235 associated with the viewing interface 230. As shown in FIG. 2D, as the target image 225 continues to shrink, the electronic device 110 may switch to completely display the viewing interface 230.

[0047] As shown in FIG. 2D, the viewing interface 230 may include the switching entry 235. The switching entry 235 may be used, for example, to switch back to the viewing interface 205 shown in FIG. 2A to switch from the multi-column view mode back to the single-column view mode. The view switching process will be described in detail below.

[0048] As shown in FIG. 2D, the switching entry 235 may display an image 240 associated with the target media content item 210, for example. As an example, the image 240 may be a cover image of the target media content item 210. Alternatively, the image 240 may also be other appropriate image of the target media content item 210, such as a first frame image, a last frame image, and the like.

[0049] In some embodiments, considering that the target image 225 may be different from the image 240, the electronic device 110 may also display a transition of a gradient change from the target image 225 to the image 240 after the target image 225 is shrunk to a predetermined size, so as to improve the continuity of view switching.

[0050] As shown in FIG. 2D, the viewing interface 230 may display media content in a multi-column view mode (for example, a double-column view mode). In some embodiments, after the viewing interface 205 is switched to the viewing interface 230, the target media content item 210 played in the viewing interface 205 may be played at a preset position (for example, the first position) in the viewing interface 230.

[0051] In some embodiments, in order to improve the continuity of view switching, the electronic device 110 may also determine a playing progress of the target media content item 210 in the viewing interface 230 based on the playing progress of the target media content item 210 in the viewing interface 205, for example. For example, the target media content item 210 may continue to play from the progress at which it is paused during the view switching.

[0052] In some embodiments, the display position and/or display style of the switching entry 235 in the viewing interface 230 may also change according to the operation received in the viewing interface 230. As shown in FIG. 2E, when receiving, for example, a swiping operation in a predetermined direction in the viewing interface 230 (for example, swiping up to view more works), the electronic device 110 may switch the switching entry 235 from the first state shown in FIG. 2D to the second state shown in FIG. 2E.

[0053] Different from the first state shown in FIG. 2D, the switching entry 235 may stop displaying the image 240 in the second state, for example, to reduce the occlusion of the media content displayed in the viewing interface 230. Additionally, the switching entry 235 may also be moved to an edge position of the viewing interface 230 in the second state, for example, to further reduce the occlusion of the media content.

[0054] Furthermore, as introduced above, the electronic device 110 may also support switching from the viewing interface 230 (for example, corresponding to the multi-column view mode) shown in FIG. 2D or FIG. 2E back to the viewing interface 205 (for example, corresponding to the single-column view mode) shown in FIG. 2A.

[0055] Specifically, the electronic device 110 may trigger the dynamic switching process of switching from the multi-column view mode to the single-column view mode based on the user's selection on the switching entry 235 in FIG. 2D or FIG. 2E, for example.

[0056] Similar to what is introduced above, such a dynamic switching process may also include a dynamic change process of an image associated with the target media content item 210 played in the viewing interface 205, for example. In some embodiments, as shown in FIG. 2F, the electronic device 110 may present an enlarging process of the image 240 presented in the switching entry 230. As introduced above, the image 240 may be, for example, a cover image of the target media content item 210 or other appropriate images.

[0057] Similar to the dynamic switching process from the single-column view mode to the multi-column view mode, in the process of switching from the multi-column view mode back to the single-column view mode, the electronic device 110 may display the enlarging process of the image 240, for example, from a preset size to filling the entire interface.

[0058] In some embodiments, different from the dynamic switching process from the single-column view mode to the multi-column view mode, the electronic device 110 may display the viewing interface 230 with a preset transparency and display the enlarging process of the image 240 by superimposing the enlarging process on the viewing interface 230.

[0059] After the image 240 is enlarged to a preset size, the electronic device 110 may cease to display the viewing interface and completely display the viewing interface 205. In some embodiments, in order to improve the continuity of view switching, the electronic device 110 may also display a transition of a gradient change from the image 240 to an image (for example, a video frame) to be played of the target media content item 210.

[0060] In some embodiments, the electronic device 110 may, for example, control the playing of the target media content item 210 in the viewing interface 205 based on the playing progress of the target media content item 210 in the viewing interface 230. For example, taking a video work as an example, the target media content item 210 may start the playing from a pause frame.

[0061] Based on the interface interaction process described above, the embodiments of the present disclosure are able to utilize the preset operation and the dynamic switching process to implement the switching between

different view modes, thereby improving the smoothness of view mode switching, avoiding the fragmentation feeling of view switching, and enhancing the user experience.

EXAMPLE PROCESS

[0062] FIG. 3 shows a flowchart of an example process 300 of interface interaction according to some embodiments of the present disclosure. Process 300 may be implemented at the electronic device 110. Process 300 is described below with reference to FIG. 1.

[0063] As shown in the figure, at block 310, the electronic device 110 presents a first viewing interface in a target interface, the first viewing interface presenting media content in a first view mode.

[0064] At block 320, the electronic device 110 presents a dynamic switching process in response to receiving a preset operation, to switch the first viewing interface to a second viewing interface, the second viewing interface presenting the media content in a second view mode, the dynamic switching process comprising a shrinking process or an enlarging process of a target image, the target image being associated with a target media content item played in the first viewing interface or the second viewing interface.

[0065] In some embodiments, the first view mode is a single-column view mode or a single-row view mode, the second view mode is a multi-column view mode or a multi-row view mode, and the method further comprises: playing the target media content item with the first viewing interface; and determining the target image based on a playing progress of the target media content item at the time of receiving the preset operation.

[0066] In some embodiments, the preset operation comprises triggering of a first switching control in the first viewing interface, a display position of the first switching control is determined based on a display position of a set of interaction controls for the target media content item in the first viewing interface.

[0067] In some embodiments, presenting the dynamic switching process comprises: pausing playing of the target media content item in response to receiving the preset operation; presenting the shrinking process of the target image until the second viewing interface is completely presented; and presenting, in the second viewing interface, a second switching control for switching to the first viewing interface.

[0068] In some embodiments, the second switching control presents a cover image of the target media content item.

[0069] In some embodiments, presenting the dynamic switching process further comprises: presenting a first transition of a gradient change from the target image to the cover image in the second switching control in response to the target image being shrunk to a first preset size.

[0070] In some embodiments, the process 300 further includes: playing the target media content item at a preset position of the second viewing interface, a first playing progress of the target media content item in the second viewing interface being determined based on a second playing progress of the target media content item in the first viewing interface.

[0071] In some embodiments, presenting the dynamic switching process comprises: presenting the second viewing interface with a first transparency; presenting the shrinking process of the target image by superimposing the shrinking process on the second viewing interface; and changing the first transparency of the second viewing interface to a second transparency, to completely present the second viewing interface.

[0072] In some embodiments, the first view mode is a multi-column view mode or a multi-row view mode, the second view mode is a single-column view mode or a single-row view mode, and the target image comprises a cover image of the target media content item.

[0073] In some embodiments, the preset operation comprises a selection on a third switching entry in the first viewing interface, and the third switching entry presents, in a first state, the cover image of the target media content item.

[0074] In some embodiments, changing the third switching entry to a second state in response to receiving a target operation for the first viewing interface, the third switching entry in the second state having a presentation position and/or a presentation style different from a presentation position and/or a presentation style of the third switching entry in the first state.

[0075] In some embodiments, the third switching entry ceases to present the cover image in the second state.

[0076] In some embodiments, presenting the dynamic switching process comprises: pausing playing of the target media content item in response to receiving the preset operation; presenting the enlarging process of the cover image until the second viewing interface is completely presented; and playing the target media content item in the second viewing interface.

[0077] In some embodiments, presenting the dynamic switching process further comprises: presenting a second transition of a gradient change from the cover image to a preset image in the target media content item in response to the cover image being enlarged to a second preset size, the preset image being determined based on a playing progress of the target media content item in the first viewing interface and/or the second viewing interface.

[0078] In some embodiments, presenting the dynamic switching process comprises: presenting the first viewing interface with a third transparency; presenting the enlarging process of the target image by superimposing the enlarging process on the first viewing interface; and ceasing to display the first viewing interface and completely presenting the second viewing interface.

[0079] In some embodiments, the process 300 further includes: presenting a switching entry for receiving the preset operation in response to configuration information associated with the first viewing interface satisfying a preset condition.

EXAMPLE APPARATUS AND DEVICE

[0080] The embodiments of the present disclosure also provide corresponding apparatus for implementing the above methods or processes. FIG. 4 shows a schematic structural block diagram of an apparatus 400 for example interface interaction according to some embodiments of the present disclosure. The apparatus 400 may be implemented as or included in the electronic device 110. Each module/component in the apparatus 400 may be implemented by hardware, software, firmware, or any combination thereof.

[0081] As shown in FIG. 4, the apparatus 400 includes a viewing interface presenting module 410, configured to present a first viewing interface, the first viewing interface presenting media content in a first view mode; and a switching process presenting module 420, configured to present a dynamic switching process in response to receiving a preset operation, to switch the first viewing interface to a second viewing interface, the second viewing interface presenting the media content in a second view mode, the dynamic switching process

comprising a shrinking process or an enlarging process of a target image, the target image being associated with a target media content item played in the first viewing interface or the second viewing interface.

[0082] In some embodiments, the first view mode is a single-column view mode or a single-row view mode, the second view mode is a multi-column view mode or a multi-row view mode, and the method further comprises: playing the target media content item with the first viewing interface; and determining the target image based on a playing progress of the target media content item at the time of receiving the preset operation.

[0083] In some embodiments, the preset operation comprises triggering of a first switching control in the first viewing interface, a display position of the first switching control is determined based on a display position of a set of interaction controls for the target media content item in the first viewing interface.

[0084] In some embodiments, the viewing interface presenting module 410 is further configured to: pause playing of the target media content item in response to receiving the preset operation; present the shrinking process of the target image until the second viewing interface is completely presented; and present, in the second viewing interface, a second switching control for switching to the first viewing interface.

[0085] In some embodiments, the second switching control presents a cover image of the target media content item.

[0086] In some embodiments, the switching process presenting module 420 is further configured to: present a first transition of a gradient change from the target image to the cover image in the second switching control in response to the target image being shrunk to a first preset size.

[0087] In some embodiments, the apparatus 400 further includes an interface presenting module configured to: play the target media content item at a preset position of the second viewing interface, a first playing progress of the target media content item in the second viewing interface being determined based on a second playing progress of the target media content item in the first viewing interface.

[0088] In some embodiments, the switching process presenting module 420 is further configured to: present the second viewing interface with a first transparency; present the shrinking process of the target image by superimposing the shrinking process on the second viewing interface; and change the first transparency of the second viewing interface to a second transparency, to completely present the second viewing interface.

[0089] In some embodiments, the first view mode is a multi-column view mode or a multi-row view mode, the second view mode is a single-column view mode or a single-row view mode, and the target image comprises a cover image of the target media content item.

[0090] In some embodiments, the preset operation comprises a selection on a third switching entry in the first viewing interface, and the third switching entry presents, in a first state, the cover image of the target media content item.

[0091] In some embodiments, changing the third switching entry to a second state in response to receiving a target operation for the first viewing interface, the third switching entry in the second state having a presentation position and/or a presentation style different from a presentation position and/or a presentation style of the third switching entry in the first state.

[0092] In some embodiments, the third switching entry ceases to present the cover image in the second state.

[0093] In some embodiments, the switching process presenting module 420 is further configured to: pause

playing of the target media content item in response to receiving the preset operation; present the enlarging process of the cover image until the second viewing interface is completely presented; and play the target media content item in the second viewing interface.

[0094] In some embodiments, the switching process presenting module 420 is further configured to: present a second transition of a gradient change from the cover image to a preset image in the target media content item in response to the cover image being enlarged to a second preset size, the preset image being determined based on a playing progress of the target media content item in the first viewing interface and/or the second viewing interface.

[0095] In some embodiments, the switching process presenting module 420 is further configured to: present the first viewing interface with a third transparency; present the enlarging process of the target image by superimposing the enlarging process on the first viewing interface; and cease to display the first viewing interface and completely presenting the second viewing interface.

[0096] In some embodiments, the apparatus 400 further includes an interface presenting module configured to: present a switching entry for receiving the preset operation in response to configuration information associated with the first viewing interface satisfying a preset condition.

[0097] The modules included in the apparatus 400 may be implemented in various ways, including software, hardware, firmware, or any combination thereof. In some embodiments, one or more units may be implemented using software and/or firmware, for example machine-executable instructions stored on a storage medium. In addition to machine-executable instructions or as an alternative, some or all modules in the apparatus 400 may be implemented at least partially by one or more hardware logic components. As an example, rather than a limitation, example types of hardware logic components that may be used include field programmable gate array (FPGA), application specific integrated circuit (ASIC), application specific standard (ASSP), system on chip (SOC), complex programmable logic device (CPLD), and the like.

[0098] FIG. 5 shows a block diagram of an electronic device 500 in which one or more embodiments of the present disclosure may be implemented. It should be appreciated that the electronic device 500 shown in FIG. 5 is only illustrative, without suggesting any limitation to the function and scope of the embodiments described herein. The electronic device 500 shown in FIG. 5 may be used to implement the electronic device 110 of FIG. 1.

[0099] As shown in FIG. 5, the electronic device 500 is in a form of a general-purpose electronic device. The components of the electronic device 500 may include, but are not limited to, one or more processors or processing units 510, a memory 520, a storage device 530, one or more communication units 540, one or more input devices 550, and one or more output devices 560. The processing unit 510 may be an actual or virtual processor and may execute various processes based on the programs stored in the memory 520. In a multi-processor system, multiple processing units execute computer-executable instructions in parallel to improve the parallel processing capability of the electronic device 500.

[0100] The electronic device 500 typically includes multiple computer storage medium. Such medium may be any available medium that is accessible to the electronic device 500, including, but not limited to, volatile and non-volatile medium, removable and non-removable medium. The memory 520 may be a volatile memory (for

example, a register, cache, a random access memory (RAM)), a non-volatile memory (such as a read-only memory (ROM), an electrically erasable programmable read-only memory (EEPROM), a flash memory), or any combination thereof. The storage device 530 may be a removable or non-removable medium, and may include a machine-readable medium such as a flash drive, a disk, or any other medium, which may be used to store information and/or data and may be accessed within the electronic device 500.

[0101] The electronic device 500 may further include other removable/non-removable, volatile/non-volatile memory medium. Although not shown in FIG. 5, it is possible to provide a disk driver for reading from or writing to a removable, non-volatile disk (such as a "floppy disk"), and an optical disk driver for reading from or writing to a removable, non-volatile optical disk. In these cases, each driver may be connected to the bus (not shown) by one or more data medium interfaces. The memory 520 may include a computer program product 525 having one or more program modules configured to perform various methods or acts of the various embodiments of the present disclosure.

[0102] The communication unit 540 enables communication with other electronic devices through the communication medium. Additionally, the functions of the components of the electronic device 500 may be implemented by a single computing cluster or multiple computing machines, which may communicate through communication connections. Therefore, the electronic device 500 may use a logical connection with one or more other servers, a network personal computer (PC) or another network node to operate in a networked environment.

[0103] The input device 550 may be one or more input devices, such as a mouse, a keyboard, a tracking ball, or the like. The output device 560 may be one or more output devices, such as a display, a speaker, a printer, or the like. The electronic device 500 may further communicate with one or more external devices (not shown) as needed through the communication unit 540, such as a storage device, a display device, etc., communicate with one or more devices that enable the user to interact with the electronic device 500, or communicate with any devices (for example, a network card, a modem, etc.) that enable the electronic device 500 to communicate with one or more other electronic devices. Such communication may be performed via input/output (I/O) interfaces (not shown).

[0104] According to an illustrative implementation of the present disclosure, there is provided a computer-readable storage medium having computer-executable instructions stored thereon, where the computer-executable instructions are executable by a processor to implement the method described above. According to an illustrative implementation of the present disclosure, there is further provided a computer program product tangibly stored on a non-transitory computer-readable medium and including computer-executable instructions, where the computer-executable instructions are executable by a processor to implement the method described above.

[0105] Various aspects of the present disclosure are described herein with reference to the flowcharts and/or block diagrams of the method, apparatus, device and computer program product implemented according to the present disclosure. It should be appreciated that each block of the flowchart and/or block diagram, and combinations of blocks in the flowchart and/or block diagram, may be implemented by computer-readable program instructions.

[0106] These computer-readable program instructions may be provided to a processing unit of a general-purpose

computer, a special-purpose computer, or other programmable data processing apparatus to produce a machine, such that these instructions, when executed by the processing unit of the computer or other programmable data processing apparatus, create an apparatus for implementing the functions/acts specified in one or more blocks of the flowchart and/or block diagram. These computer-readable program instructions may also be stored in a computer-readable storage medium, these instructions cause the computer, programmable data processing apparatus, and/or other devices to work in a particular manner, and thus, the computer-readable medium storing the instructions includes an article of manufacture including instructions for implementing various aspects of the functions/acts specified in one or more blocks of the flowchart and/or block diagram.

[0107] The computer-readable program instructions may be loaded onto a computer, other programmable data processing apparatus, or other devices, so that a series of operations and steps are performed on the computer, other programmable data processing apparatus or other devices to generate a computer-implemented process, such that the instructions executed on the computer, other programmable data processing apparatus, or other devices implement the functions/acts specified in one or more blocks of the flowchart and/or block diagram.

[0108] The flowchart and block diagram in the drawings show the possibly implemented architectures, functions, and operations of the system, method and computer program product according to multiple implementations of the present disclosure. In this regard, each block in the flowchart or block diagram may represent a module, program segment, or part of instruction, and the module, program segment, or part of instruction contains one or more executable instructions for implementing the specified logical functions. In some alternative implementations, the functions marked in the blocks may also occur in an order different from that marked in the drawings. For example, two consecutive blocks may actually be executed substantially in parallel, or they may sometimes be executed in the reverse order, depending on the functions involved. It should also be noted that each block in the block diagram and/or flowchart, and a combination of the blocks in the block diagram and/or flowchart, may be implemented by a special-purpose hardware-based system that perform specified functions or acts, or may be implemented by a combination of special-purpose hardware and computer instructions.

[0109] The implementations of the present disclosure have been described above, and the above description is illustrative, non-exhaustive, and not limited to the disclosed implementations. Without departing from the scope and spirit of the described implementations, many modifications and changes will be apparent to those of ordinary skill in the art. The terms used herein are chosen to best explain the principles of the implementations, the practical applications or improvements to the technology in the market, or to enable other ordinary skilled persons in the art to understand the implementations disclosed herein.

CLAIMS

1. A method for interface interaction, comprising:
 - presenting a first viewing interface, the first viewing interface presenting media content in a first view mode; and
 - presenting a dynamic switching process in response to receiving a preset operation, to switch the first viewing interface to a second viewing interface, the second viewing interface presenting the media content in a second view mode, the dynamic switching process comprising a shrinking process or an enlarging process of a target image, the target image being associated with a target media content item played in the first viewing interface or the second viewing interface.
2. The method of claim 1, wherein the first view mode is a single-column view mode or a single-row view mode, the second view mode is a multi-column view mode or a multi-row view mode, and the method further comprises:
 - playing the target media content item with the first viewing interface; and
 - determining the target image based on a playing progress of the target media content item at the time of receiving the preset operation.
3. The method of claim 2, wherein the preset operation comprises triggering of a first switching control in the first viewing interface, a display position of the first switching control is determined based on a display position of a set of interaction controls for the target media content item in the first viewing interface.
4. The method of claim 2, wherein presenting the dynamic switching process comprises:
 - pausing playing of the target media content item in response to receiving the preset operation;
 - presenting the shrinking process of the target image until the second viewing interface is completely presented; and
 - presenting, in the second viewing interface, a second switching control for switching to the first viewing interface.
5. The method of claim 4, wherein the second switching control presents a cover image of the target media content item.
6. The method of claim 5, wherein presenting the dynamic switching process further comprises:
 - presenting a first transition of a gradient change from the target image to the cover image in the second switching control in response to the target image being shrunk to a first preset size.
7. The method of claim 2, further comprising:
 - playing the target media content item at a preset position of the second viewing interface, a first playing

progress of the target media content item in the second viewing interface being determined based on a second playing progress of the target media content item in the first viewing interface.

8. The method of claim 2, wherein presenting the dynamic switching process comprises:
presenting the second viewing interface with a first transparency;
presenting the shrinking process of the target image by superimposing the shrinking process on the second viewing interface; and
changing the first transparency of the second viewing interface to a second transparency, to completely present the second viewing interface.

9. The method of claim 1, wherein the first view mode is a multi-column view mode or a multi-row view mode, the second view mode is a single-column view mode or a single-row view mode, and the target image comprises a cover image of the target media content item.

10. The method of claim 9, wherein the preset operation comprises a selection on a third switching entry in the first viewing interface, and the third switching entry presents, in a first state, the cover image of the target media content item.

11. The method of claim 10, further comprising:
changing the third switching entry to a second state in response to receiving a target operation for the first viewing interface, the third switching entry in the second state having a presentation position and/or a presentation style different from a presentation position and/or a presentation style of the third switching entry in the first state.

12. The method of claim 11, wherein the third switching entry ceases to present the cover image in the second state.

13. The method of claim 9, wherein presenting the dynamic switching process comprises:
pausing playing of the target media content item in response to receiving the preset operation;
presenting the enlarging process of the cover image until the second viewing interface is completely presented; and
playing the target media content item in the second viewing interface.

14. The method of claim 13, wherein presenting the dynamic switching process further comprises:
presenting a second transition of a gradient change from the cover image to a preset image in the target media content item in response to the cover image being enlarged to a second preset size, the preset image being determined based on a playing progress of the target media content item in the first viewing interface and/or the second viewing interface.

15. The method of claim 9, wherein presenting the dynamic switching process comprises:
presenting the first viewing interface with a third transparency;
presenting the enlarging process of the target image by superimposing the enlarging process on the first viewing interface; and
ceasing to display the first viewing interface and completely presenting the second viewing interface.

16. The method of claim 1, further comprising: presenting a switching entry for receiving the preset operation in response to configuration information associated with the first viewing interface satisfying a preset condition.

17. An apparatus for interface interaction, comprising:
a viewing interface presenting module, configured to present a first viewing interface, the first viewing interface presenting media content in a first view mode;
a switching process presenting module, configured to presenting a dynamic switching process in response to receiving a preset operation, to switch the first viewing interface to a second viewing interface, the second viewing interface presenting the media content in a second view mode, the dynamic switching process comprising a shrinking process or an enlarging process of a target image, the target image being associated with a target media content item played in the first viewing interface or the second viewing interface.

18. An electronic device, comprising:
at least one processing unit; and
at least one memory coupled to the at least one processing unit and storing instructions executable by the at least one processing unit, wherein the instructions, when executed by the at least one processing unit, cause the electronic device to perform the method of any of claims 1 to 16.

19. A computer-readable storage medium having a computer program stored thereon, the computer program being executable by a processor to implement the method of any of claims 1 to 16.

20. A computer program product tangibly stored in a computer storage medium and comprising computer-executable instructions, wherein the computer-executable instructions, when executed by a device, cause the device to perform the method of any of claims 1 to 16.