

METHOD, APPARATUS, DEVICE, AND STORAGE MEDIUM FOR PRESENT CONTENT AND FOR POSTING WORK

[0001] The present application claims priority to Chinese Patent Application No. 202410178235.3, filed on February 08, 2024 and entitled "INTERACTION METHOD, WORK POSTING METHOD, APPARATUS, DEVICE, AND STORAGE MEDIUM", which is hereby incorporated by reference in its entirety.

TECHNICAL FIELD

[0002] Example embodiments of the present disclosure generally relate to the field of computers, and in particular, to methods, apparatuses, devices, and computer-readable storage medium for presenting content and those for posting work.

BACKGROUND

[0003] With the development of computer technology, the Internet has become an important platform for people to share content and express opinions. In the process of people browsing information through the Internet, there is an appeal to share (for example, forward, etc.) some of the media works they see to others.

[0004] In the process of sharing content, people expect to be able to convey their own expression of the content at the same time, but the traditional content sharing method is difficult to fully meet the expression needs of users.

SUMMARY

[0005] In a first aspect of the present disclosure, a method for presenting content is provided. The method includes: receiving a viewing request for a first work, the first work being posted based on a preset operation of a first user on a second work; and presenting the first work in a target container, wherein first picture content of the first work is displayed in a first component of the target container, second picture content of the first work is displayed in a second component of the target container, the first component is different from the second component, the first picture content is associated with the second work, and the second picture content is associated with the preset operation of the first user.

[0006] In a second aspect of the present disclosure, a method for posing work is provided. The method includes: presenting a sharing window based on a sharing operation associated with a second work, the sharing window comprising an interactive control associated with the second work and a text input area; and presenting an editing interface based on a selection of the interactive control, the editing interface presenting a work draft to be edited, the work draft comprising first picture content and second picture content, the first picture content being associated with the second work, and the second picture content presenting sharing information determined based on content of the text input area; and posting a first work generated based on the work draft.

[0007] In a third aspect of the present disclosure, an apparatus for presenting content is provided. The apparatus includes: a receiving module configured to receive a viewing request for a first work, the first work being posted based on a preset operation of a first user on a second work; and a presenting module configured to present the

first work in a target container, wherein first picture content of the first work is displayed in a first component of the target container, second picture content of the first work is displayed in a second component of the target container, the first component is different from the second component, the first picture content is associated with the second work, and the second picture content is associated with the preset operation of the first user.

[0008] In a fourth aspect of the present disclosure, an apparatus for posting work is provided. The apparatus includes: a window presenting module configured to present a sharing window based on a sharing operation associated with a second work, the sharing window comprising an interactive control associated with the second work and a text input area; an interface presenting module configured to present an editing interface based on a selection of the interactive control, the editing interface presenting a work draft to be edited, the work draft comprising first picture content and second picture content, the first picture content being associated with the second work, and the second picture content presenting sharing information determined based on content of the text input area; and a posting module configured to post a first work generated based on the work draft.

[0009] In a fifth 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, causing the device to perform the method of the first aspect or the second aspect.

[0010] In a sixth 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 or the second aspect.

[0011] It should be understood that the content described in this Summary section 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

[0012] 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 numbers refer to the same or similar elements, where:

[0013] FIG. 1 shows a schematic diagram of an example environment in which embodiments according to the present disclosure may be implemented;

[0014] FIGS. 2A to 2C show example interfaces according to some embodiments of the present disclosure;

[0015] FIGS. 3A to 3B show example interfaces according to some embodiments of the present disclosure;

[0016] FIGS. 4A to 4C show example interfaces according to some embodiments of the present disclosure;

[0017] FIG. 5 shows a flowchart of an example interaction process according to some embodiments of the present disclosure;

[0018] FIG. 6 shows a flowchart of an example interaction process according to some embodiments of the present disclosure;

[0019] FIG. 7 shows a schematic structural block diagram of an example interaction apparatus according to some embodiments of the present disclosure;

[0020] FIG. 8 shows a schematic structural block diagram of an example interaction apparatus according to some embodiments of the present disclosure; and

[0021] FIG. 9 shows a block diagram of an electronic device capable of implementing multiple embodiments of the present disclosure.

DETAILED DESCRIPTION OF EMBODIMENTS

[0022] 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 should be understood that the present disclosure may be implemented in various forms, and should not be interpreted as being limited to the embodiments set forth herein. Instead, these embodiments are provided for a more thorough and complete understanding of the present disclosure. It should be understood that the drawings and embodiments of the present disclosure are only for illustrative purposes, and are not intended to limit the protection scope of the present disclosure.

[0023] 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. In addition, the embodiments described in any section/subsection may be combined with any other embodiments described in the same section/subsection and/or different sections/subsections in any way.

[0024] In the description of the embodiments of the present disclosure, the term "include/comprise" and similar terms should be understood as open-ended inclusions, that is, "include/comprise but not limited to". The term "based on" should be understood as "at least partially based on". The term "one 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.

[0025] The embodiments of the present disclosure may involve user data, data acquisition, and/or data use, etc. These aspects all follow the 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 under the premise that the user is aware and confirms. Accordingly, when implementing the embodiments of the present disclosure, the user should be informed of the type, scope of use, use scenarios, etc. of the data or information that may be involved in an appropriate manner in accordance with relevant laws and regulations, and the authorization of the user should be obtained. The specific manner of informing and/or authorizing may vary according to the actual situation and application scenarios, and the scope of the present disclosure is not limited in this regard.

[0026] If the solutions in this specification and the embodiments involve personal information processing, the processing will be carried out on the premise that there is a legal basis (for example, the consent of the personal information subject is obtained, or it is necessary to perform a contract, etc.), and will only be carried out within the scope of provisions or agreements. If the user refuses to process personal information other than the necessary information required for the basic functions, it will not affect the user's use of the basic functions.

[0027] In the process of people browsing information through the Internet, there is an appeal to share (for

example, forward, etc.) some of the media works they see to others. In the process of sharing content, people expect to be able to convey their own expression of the content at the same time. However, the traditional content sharing method limits the expression needs of users, or is complicated in operation and poor in sharing compatibility, affecting the user experience.

[0028] The embodiments of the present disclosure propose a solution for presenting content. According to this solution, a viewing request for a first work is received, wherein the first work is posted based on a preset operation of a first user on a second work. Further, the first work is presented in a target container, wherein the first picture content of the first work is displayed in a first component of the target container, and the second picture content of the first work is displayed in a second component of the target container. The first component is different from the second component. The first picture content is associated with the second work, and the second picture content is associated with the preset operation of the first user.

[0029] In this way, the embodiments of the present disclosure are capable of simultaneously presenting, in a shared work, relevant content of the shared work and content related to the sharing operation, thereby improving the efficiency of content sharing and obtaining.

[0030] Various example implementations of this solution will be described in detail below in further conjunction with the drawings.

Example Environment

[0031] 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.

[0032] In this example environment 100, the electronic device 110 may run 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 video application, a social application, or other suitable applications. A user 140 may interact with the application 120 via the electronic device 110 and/or its attached devices.

[0033] In the environment 100 of FIG. 1, if the application 120 is active, the electronic device 110 may present, through the application 120, an interface 150 for supporting interface interaction.

[0034] In some embodiments, the electronic device 110 communicates with a server 130 to implement the 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 palmtop computer, a portable game terminal, a VR/AR device, 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 game 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-specific interface (such as "wearable" circuitry, etc.).

[0035] The server 130 may be an independent physical server, a server cluster or 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 so on. The server 130 may provide background services for the application 120 supporting a virtual scene in the electronic device 110.

[0036] A communication connection may be established between the server 130 and the electronic device 110. The communication connection may be established by 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 (USB) connection, a wireless fidelity (WiFi) connection, etc., 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 therebetween.

[0037] It should be understood that the structures and functions of the various elements in the environment 100 are described for illustrative purposes only, without suggesting any limitation to the scope of the present disclosure.

[0038] Some example embodiments of the present disclosure will be described below with continued reference to the drawings.

Example Interaction

[0039] The following will describe an example interaction process according to the embodiments of the present disclosure with reference to the drawings.

[0040] FIGS. 2A to 2C show example interfaces 200A to 200C according to some embodiments of the present disclosure. The interfaces 200A to 200C may be provided by the electronic device 110 shown in FIG. 1.

[0041] As shown in FIGS. 2A to 2C, the electronic device 110 may receive a viewing request for a first work, thereby presenting the interfaces 200A to 200C.

[0042] In some embodiments, such a viewing request may include a work viewing request initiated based on an appropriate operation of a user. For example, the viewing request may include a request initiated by the user by clicking on the first work, may include a request for the user to open the application and obtain the first work recommended by the application, or may include a request for the user to switch works through an operation such as swiping in the application and obtain the first work.

[0043] In some embodiments, the first work is posted based on a preset operation of a first user on a second work. The preset operation may include a first sharing operation with respect to the second work, wherein the first sharing operation indicates that the first work is generated based on obtained sharing information. The second work may be a work containing media information about pictures, videos, music, text, etc. The sharing information obtained by the electronic device 110 may be, for example, information about the second work shared by the user after forwarding the second work.

[0044] In another embodiment, the preset operation may further include a second sharing operation with respect to the second work, wherein the second sharing operation indicates that a comment about the second work is obtained and the first work generated based on the comment is posted. Specifically, after receiving the

forwarding operation of the user on the second work, the comment content edited by the user based on the second work may be received, and the first work generated based on the comment content may be posted.

[0045] The specific process of creating the first work based on the second work will be described in detail below, and will not be described in detail here.

[0046] In some embodiments, the first work is presented in a target container 210. The target container 210 may be a presentation container for carrying multimedia content such as videos, audios, pictures, etc. The target container 210 may include multiple components, each of which may be configured for achieving a specific function, and may have its own interaction logic and may further present a specific display style.

[0047] As shown in FIGS. 2A to 2C, the first picture content of the first work is displayed in the first component 212 of the target container 210. The first picture content is associated with the second work.

[0048] Further, with continued reference to FIGS. 2A to 2C, the first picture content may include a first image 212-1 associated with the second work. When the second work is a picture, the first image 212-1 may be, for example, the picture itself or a part of the content of the picture. When the second work is a video, the first image 212-1 may be a specific video frame or a part of the content in the frame in the video. Also, when the second work is a picture set, the first image 212-1 may be a specific picture or a part of the content of the picture in the picture set, and so on.

[0049] The first picture content may also include a first text 212-2 associated with the second work. The first text 212-2 may include but be not limited to the description content, title, label, topic, etc. of the second work.

[0050] The first picture content may further include posting information 212-3 of the second work. The posting information 212-3 may include, for example, relevant information about the author (which may also be referred to as a second user) of the second work, etc.

[0051] As shown in FIGS. 2A to 2C, in some embodiments, the second picture content of the first work is displayed in the second component 214 of the target container 210. The second component 214 is different from the first component 212. The first component 212 and the second component 214 are two independent components, which may be independent of each other visually and may also be independent of each other in operation. For example, the two components may have different interaction logics, or the two components may present distinguished display styles.

[0052] Further, in some embodiments, the second picture content is associated with the preset operation of the first user. As shown in FIG. 2A, if the preset operation is the first sharing operation with respect to the second work, the first sharing operation indicating to generate the first work based on the obtained sharing information, the second picture content may include a second text 216 obtained via the first sharing operation. For example, when the first sharing operation is a forwarding operation, the electronic device 110 may receive the expression content of the first user for the second work posted based on the forwarding operation. The second text 216 may include but be not limited to the expression content, title, label, topic, etc. created by the first user. The second picture content may also include description information 214-1 associated with the first sharing operation. The description information 214-1 may contain information about the first user forwarding the second work, for example, the words "User X forwarded the work".

[0053] As shown in FIG. 2B, if the preset operation is the second sharing operation with respect to the second work, the second sharing operation indicating to obtain the comment about the second work and post the first

work generated based on the comment, the second picture content may include the second text 216 obtained via the second sharing operation. For example, assuming that the second sharing operation is an operation of commenting and forwarding, the electronic device 110 may receive the expression content of the first user for the second work posted based on the operation, and the expression content may also be posted as the comment content of the first user for the second work. The second text 216 may include but be not limited to the expression content, title, label, topic, etc. created by the first user. The second picture content may further include description information 214-2 associated with the second sharing operation. The description information 214-2 may contain information about the first user commenting and forwarding the second work, for example, the words "User X commented and forwarded the work".

[0054] As shown in FIG. 2C, if the preset operation is the second sharing operation with respect to the second work, the second picture content may include a second image 218 obtained via the second sharing operation, in addition to the second text 216 obtained via the second sharing operation and the description information 214-2 associated with the second sharing operation. The second image 218 may be a picture or a part of the content of the picture input by the first user during the sharing process, or a specific video frame or a part of the content in the frame in a video input by the first user, or the like. As an example, the second image 218 may be a comment picture of the user for the second work.

[0055] In some embodiments, the layout of the first component 212 and the second component 214 in the target container 210 is determined based on the second picture content. Further, in some embodiments, the layout of an image and a text in the first picture content is determined based on the second picture content.

[0056] As shown in FIG. 2C, in some embodiments, if the second picture content includes the second image 218 obtained via the preset operation, a first image 212-1 and the first text 212-2 are displayed in the first picture content based on a first layout.

[0057] Further, in some embodiments, the first layout indicates that a first size of the first image 212-1 in the target container 210 is smaller than a second size of the second image 218; and/or the first size of the first image 212-1 in the target container 210 is smaller than a third size corresponding to the first text 212-2. Taking the first layout shown in FIG. 2C as an example, after receiving the second sharing operation of the first user, the electronic device 110 highlights the second image 218 in the received comment, specifically by increasing the size of the second image 218, so as to fully satisfy the expression needs of the first user when sharing the content. Accordingly, the electronic device 110 reduces the size of the first image 212-1, so that the first size of the first image 212-1 is smaller than the second size of the second image 218. Further, the first size of the first image 212-1 may also be smaller than the third size corresponding to the first text 212-2, so as to keep the content proportion in the first image 212-1 unchanged.

[0058] As shown in FIGS. 2A to 2B, in some embodiments, if the second picture content does not include an image, the first image 212-1 and the first text 212-2 are displayed in the first picture content based on a second layout. For example, when the electronic device 110 receives the first sharing operation of the first user, such as a forwarding operation, or receives the second sharing operation of the first user, such as a commenting and forwarding operation, if the second picture content does not include an image, for example, does not include the image 218 shown in FIG. 2C, the first image 212-1 in the second work may be highlighted.

[0059] Further, in some embodiments, the second layout instructs that the first size of the first image 212-1 in

the target container 210 is greater than the third size corresponding to the first text 212-2. Taking the second layouts shown in FIGS. 2A and 2B as an example respectively, the first size of the first image 212-1 is greater than the third size corresponding to the first text 212-2.

[0060] In some embodiments, if the second picture content includes the second image obtained via the preset operation, the display size of the first component 212 is smaller than the second size of the second image 218. As shown in FIG. 2C, when the electronic device 110 receives the second sharing operation of the first user, such as a commenting and forwarding operation, if the second picture content includes the image 218, the display size of the first component 212 is smaller than the second size of the second image 218.

[0061] In some embodiments, if the second picture content does not include an image, the display size of the first component 212 is greater than the display size of the second component 214. As shown in FIGS. 2A to 2B, when the electronic device 110 receives the first sharing operation of the first user, such as a forwarding operation, or receives the second sharing operation of the first user, such as a commenting and forwarding operation, if the second picture content does not include an image, for example, does not include the image 218 shown in FIG. 2C, the display size of the first component 212 is greater than the display size of the second component 214.

[0062] For example, when the second picture content does not include an image, the first component is displayed in a preset first display size, and a cover of the forwarded work is displayed. When the second picture content includes an image, the first component is displayed in a preset second display size, and a thumbnail associated with the forwarded work is displayed in the first component.

[0063] In some embodiments, a target area corresponding to the first component 212 is distinctively displayed in the target container 210. As shown in FIGS. 2A to 2C, the background of the second work is presented with the target area corresponding to the first component 212, and the target area is distinctively displayed in the target container 210.

[0064] In some embodiments, the electronic device 110 presents a viewing interface of the second work in response to receiving a first operation associated with the first component 212. The first operation may be, for example, a click operation. After receiving the click operation of the user on the first image 212-1 or the first text 212-2 of the second work, the electronic device 110 may redirect to the posting interface of the second work.

[0065] In some embodiments, the second picture content may include a comment. For example, the electronic device 110 may present a comment interface of the second work in response to receiving a second operation associated with the second component 214. As an example, the electronic device 110 may receive the second operation, such as a click operation, associated with the second component 214, and redirect to the comment interface based on the second operation, and display the comment in the comment interface.

[0066] In some embodiments, the background color of the target container 210 may be determined based on the image (for example, the image 212-1) of the shared second work, so that the background colors may match with each other. Alternatively, the background color may also be determined based on the image (for example, the image 218) obtained via the sharing operation.

[0067] In some embodiments, the background color of the first component 212 for displaying the first picture part may be determined based on the image (for example, the image 212-1) of the shared second work.

[0068] It should be understood that the corresponding background color may be determined based on the image 212-1 or the image 218 in an appropriate manner. For example, a color associated with the main hue or a

representative color of the second work or the image 218 may be selected as the background color.

[0069] Based on the interaction process described above, the embodiments of the present disclosure are capable of presenting, in a work presentation container, picture content associated with an original work and picture content related to a sharing operation through different components, which facilitates the improvement of content sharing and content obtaining efficiency.

[0070] The following will further describe an example interaction process with reference to FIGS. 3A to 3B. FIGS. 3A to 3B show example interfaces 300A to 300B according to some embodiments of the present disclosure. The interfaces 300A to 300B may be provided by the electronic device 110 shown in FIG. 1 for a user to perform a sharing operation associated with the second work.

[0071] As shown in FIG. 3A, the electronic device 110 presents a sharing window 320 based on a sharing operation associated with the second work. In some embodiments, the sharing operation includes: a first sharing operation with respect to the second work, or a sharing operation with respect to interactive content associated with the second work. The first sharing operation may be, for example, a forwarding operation with respect to the second work. The sharing operation with respect to the interactive content associated with the second work may be, for example, a commenting and forwarding operation with respect to the second work. Further, the sharing window 320 includes a text input area 321 and an interactive control 322 associated with the second work. The interactive control 322 may be, for example, any suitable type of control that provides an editing entry for the sharing operation of the second work. For example, the interactive control may be presented as an associated image of the second work, or the interactive control may display indication information of the editing entry.

[0072] As shown in FIG. 3B, the electronic device 110 presents an editing interface 300B based on a selection of the interactive control 322. The editing interface 300B presents a work draft to be edited, and the electronic device 110 may post a first work generated based on the work draft.

[0073] In some embodiments, the work draft includes first picture content 312 and second picture content 314. Further, the first picture content 312 is associated with the second work. The first picture content includes at least one of the following: a first image 312-1 associated with the second work, a first text 312-2 associated with the second work, and posting information 312-3 of the second work. When the second work is a picture, the first image 312-1 may be, for example, the picture itself or a part of the content of the picture. When the second work is a video, the first image 312-1 may be a specific video frame or a part of the content in the frame in the video. When the second work is a picture set, the first image 312-1 may also be a specific picture or a part of the content of the picture in the picture set, and so on. The first text 312-2 may include but be not limited to the description content, title, label, topic, etc. of the second work. The posting information 312-3 may include, for example, relevant information about the author (which may also be referred to as a second user) of the second work, etc.

[0074] In some embodiments, the second picture content 314 presents sharing information determined based on the content of the text input area 321. Further, in some embodiments, if text content is obtained via the text input area 321, the sharing information includes at least the text content. As shown in FIGS. 3A to 3B, if the electronic device 110 obtains the text content via the text input area 321, the sharing information including the text content may be presented in the second picture content 314.

[0075] If the content of the text input area 321 is empty, the sharing information includes preset second text

content. The second text content may be, for example, relevant words of "User X forwarded the work". In addition, in the case that the electronic device 110 obtains the text content via the text input area 321, the sharing information may also include the second text content.

[0076] As shown in FIG. 3A, in some embodiments, the interactive control 322 displays an image 322-1 associated with the second work. When the second work is a picture, the first image 322-1 may be, for example, the picture itself or a part of the content of the picture. When the second work is a video, the first image 322-1 may be a specific video frame or a part of the content in the frame in the video. When the second work is a picture set, the first image 322-1 may also be a specific picture or a part of the content of the picture in the picture set, and so on.

[0077] In some embodiments, the sharing window 320 further includes a posting control. The posting control may be, for example, any suitable type of control that provides a work posting entry based on a preset style. The electronic device 110 posts a third work generated based on the preset style in response to the selection of the posting control. Based on the default preset style, the third work may be quickly posted.

[0078] Further, in some embodiments, the third work includes third picture content and fourth picture content. The third picture content is associated with the second work. The third picture content may include at least one of the following: a third image associated with the second work, a third text associated with the second work, and posting information of the second work. The fourth picture content presents sharing information determined based on the content of the text input area 321.

[0079] The following will further describe an example interaction process with reference to FIGS. 4A to 4C. FIGS. 4A to 4C show example interfaces 400A to 400C according to some embodiments of the present disclosure. The interfaces 400A to 400C may be provided by the electronic device 110 shown in FIG. 1. The interfaces 400A to 400C (individually or collectively referred to as the interface 400) may be editing interfaces for editing a piece of work to be posted.

[0080] As shown in FIGS. 4A to 4C, the electronic device 110 receives at least one editing operation for the work draft via the editing interface 400, and then posts the first work generated based on the edited work draft.

[0081] In some embodiments, the editing operation may include adjusting a first group of visual elements in the first picture content 312 independently of the second picture content 314. The visual elements refer to basic units that constitute a visual object, which may include graphic elements, color elements, shape elements, text elements, space elements, etc. The editing operation may be, for example, to separately adjust the size, layout, rotation, color style, etc. of the visual elements in the first picture content 312. The position of the first picture content 312 shown in FIG. 4C is changed compared with that shown in FIG. 4A.

[0082] In some embodiments, the editing operation may also include adjusting a second group of visual elements in the second picture content 314 independently of the first picture content 312. For example, the editing operation may also be to separately adjust the size, layout, rotation, color style, etc. of the visual elements in the second picture content 314.

[0083] In some embodiments, the editing operation may further include adjusting the first group of visual elements and the second group of visual elements in association. For example, the first group of visual elements in the first picture content 312 and the second group of visual elements in the second picture content 314 may be adjusted as a whole. As shown in FIG. 4B, the first group of visual elements in the first picture content 312

and the second group of visual elements in the second picture content 314 are scaled as a whole. In addition, the first group of visual elements and the second group of visual elements may also be enlarged as a whole. Further, one group of visual elements may be enlarged and the other group of visual elements may be adaptively reduced, and so on.

[0084] In some embodiments, the editing operation may further include adding an additional visual element to the work draft. As shown in FIGS. 4A and 4C, multiple media resources, such as stickers, art words, etc., are added to the work draft to meet the specific expression needs of the user. The media resources may also include any other appropriate media resources having visual content, including but not limited to static pictures, dynamic pictures, emoji resources, etc.

[0085] Based on the process described above, the embodiments of the present disclosure are capable of conveying the user's expression for the content during the user sharing the content, so as to fully satisfy the expression needs of the user, thereby improving the user experience.

Example Process

[0086] FIG. 5 shows a flowchart of an example interaction process 500 according to some embodiments of the present disclosure. The process 500 may be implemented at the electronic device 110. The process 500 will be described below with reference to FIG. 1.

[0087] As shown, at block 510, the electronic device 110 receives a viewing request for a first work, wherein the first work is posted based on a preset operation of a first user on a second work.

[0088] At block 520, the electronic device 110 presents the first work in a target container, wherein first picture content of the first work is displayed in a first component of the target container, second picture content of the first work is displayed in a second component of the target container, the first component is different from the second component, the first picture content is associated with the second work, and the second picture content is associated with the preset operation of the first user.

[0089] In some embodiments, the first picture content comprises at least one of: a first image associated with the second work; a first text associated with the second work; posting information of the second work.

[0090] In some embodiments, a layout of the first component and the second component in the target container is determined based on the second picture content.

[0091] In some embodiments, a layout of an image and a text in the first picture content is determined based on the second picture content.

[0092] In some embodiments, in response to the second picture content comprising a second image obtained via the preset operation, the first image and the first text are displayed in the first picture content based on a first layout; or in response to the second picture content not comprising an image, the first image and the first text are displayed in the first picture content based on a second layout.

[0093] In some embodiments, the first layout indicates that: a first size of the first image in the target container is smaller than a second size of the second image; and/or the first size of the first image in the target container is smaller than a third size corresponding to the first text.

[0094] In some embodiments, the second layout indicates that: a first size of the first image in the target container is greater than a third size corresponding to the first text.

[0095] In some embodiments, the process 500 further comprises at least one of: in response to the second picture content comprising a second image obtained via the preset operation, a display size of the first component is smaller than a second size of the second image; in response to the second picture content not comprising an image, the display size of the first component is greater than a display size of the second component.

[0096] In some embodiments, a target area corresponding to the first component is distinctively displayed in the target container.

[0097] In some embodiments, a first background color of the target container is determined based on an image of the second work and/or an image obtained via the preset operation; or a second background color of the first component is determined based on an image of the second work.

[0098] In some embodiments, the process 500 further comprises: presenting a viewing interface of the second work in response to receiving a first operation associated with the first component.

[0099] In some embodiments, the second picture content comprises at least one of: a second text obtained via the preset operation; a second image obtained via the preset operation; description information associated with the preset operation.

[0100] In some embodiments, the preset operation comprises: a first sharing operation with respect to the second work, the first sharing operation indicating that the first work is generated based on obtained sharing information; or a second sharing operation with respect to the second work, the second sharing operation indicating that a comment about the second work is obtained and the first work generated based on the comment is posted.

[0101] In some embodiments, the second picture content comprises the comment, and the method further comprises: presenting a comment interface of the second work in response to receiving a second operation associated with the second component.

[0102] FIG. 6 shows a flowchart of an example interaction process 600 according to some embodiments of the present disclosure. The process 600 may be implemented at the electronic device 110. The process 600 will be described below with reference to FIG. 1.

[0103] As shown, at block 610, the electronic device 110 presents a sharing window based on a sharing operation associated with a second work, the sharing window comprising an interactive control associated with the second work and a text input area.

[0104] At block 620, the electronic device 110 presents an editing interface based on a selection of the interactive control, wherein the editing interface presents a work draft to be edited, the work draft comprises first picture content and second picture content, the first picture content is associated with the second work, and the second picture content presents sharing information determined based on content of the text input area.

[0105] At block 630, the electronic device 110 posts a first work generated based on the work draft.

[0106] In some embodiments, the sharing operation comprises: a first sharing operation with respect to the second work; or a sharing operation with respect to interactive content associated with the second work.

[0107] In some embodiments, the sharing information comprises at least the text content in response to text content being obtained via the text input area; or in response to the content of the text input area being empty, the sharing information comprises preset second text content.

[0108] In some embodiments, the first picture content comprises at least one of: a first image associated with the second work; a first text associated with the second work; posting information of the second work.

[0109] In some embodiments, posting the first work generated based on the work draft comprises: receiving at least one editing operation for the work draft via the editing interface; and posting the first work generated based on the edited work draft.

[0110] In some embodiments, the at least one editing operation comprises at least one of: adjusting a first group of visual elements in the first picture content independently of the second picture content; adjusting a second group of visual elements in the second picture content independently of the first picture content; adjusting the first group of visual elements and the second group of visual elements in association; adding an additional visual element to the work draft.

[0111] In some embodiments, the interactive control displays an image associated with the second work.

[0112] In some embodiments, the sharing window further comprises a posting control, and the process 600 further comprises: posting, in response to a selection of the posting control, a third work generated based on a preset style, the third work comprising third picture content and fourth picture content, the third picture content being associated with the second work, and the fourth picture content presenting sharing information determined based on the content of the text input area.

Example Apparatus and Device

[0113] The embodiments of the present disclosure further provide corresponding apparatuses for implementing the above methods or processes. FIG. 7 shows a schematic structural block diagram of an example interaction apparatus 700 according to some embodiments of the present disclosure. The apparatus 700 may be implemented as or included in the electronic device 110. Each module/component in the apparatus 700 may be implemented by hardware, software, firmware, or any combination thereof.

[0114] As shown in FIG. 7, the apparatus 700 includes a receiving module 710 configured to receive a viewing request for a first work, the first work being posted based on a preset operation of a first user on a second work; and a presenting module 720 configured to present the first work in a target container, wherein first picture content of the first work is displayed in a first component of the target container, second picture content of the first work is displayed in a second component of the target container, the first component is different from the second component, the first picture content is associated with the second work, and the second picture content is associated with the preset operation of the first user.

[0115] In some embodiments, the first picture content comprises at least one of: a first image associated with the second work; a first text associated with the second work; posting information of the second work.

[0116] In some embodiments, a layout of the first component and the second component in the target container is determined based on the second picture content.

[0117] In some embodiments, a layout of an image and a text in the first picture content is determined based on the second picture content.

[0118] In some embodiments, in response to the second picture content comprising a second image obtained via the preset operation, the first image and the first text are displayed in the first picture content based on a first layout; or in response to the second picture content not comprising an image, the first image and the first text are displayed in the first picture content based on a second layout.

[0119] In some embodiments, the first layout indicates that: a first size of the first image in the target container

is smaller than a second size of the second image; and/or the first size of the first image in the target container is smaller than a third size corresponding to the first text.

[0120] In some embodiments, the second layout indicates that: a first size of the first image in the target container is greater than a third size corresponding to the first text.

[0121] In some embodiments, in response to the second picture content comprising a second image obtained via the preset operation, a display size of the first component is smaller than a second size of the second image; and/or in response to the second picture content not comprising an image, the display size of the first component is greater than a display size of the second component.

[0122] In some embodiments, a target area corresponding to the first component is distinctively displayed in the target container.

[0123] In some embodiments, a first background color of the target container is determined based on an image of the second work and/or an image obtained via the preset operation; or a second background color of the first component is determined based on an image of the second work.

[0124] In some embodiments, the apparatus 700 further comprises a viewing interface presenting module, configured to present a viewing interface of the second work in response to receiving a first operation associated with the first component.

[0125] In some embodiments, the second picture content comprises at least one of: a second text obtained via the preset operation; a second image obtained via the preset operation; description information associated with the preset operation.

[0126] In some embodiments, the preset operation comprises: a first sharing operation with respect to the second work, the first sharing operation indicating that the first work is generated based on obtained sharing information; or a second sharing operation with respect to the second work, the second sharing operation indicating that a comment about the second work is obtained and the first work generated based on the comment is posted.

[0127] In some embodiments, the second picture content comprises the comment, and the method further comprises: presenting a comment interface of the second work in response to receiving a second operation associated with the second component.

[0128] FIG. 8 shows a schematic structural block diagram of an example interaction apparatus 800 according to some embodiments of the present disclosure. The apparatus 800 may be implemented as or included in the electronic device 110. Each module/component in the apparatus 800 may be implemented by hardware, software, firmware, or any combination thereof.

[0129] As shown in FIG. 8, the apparatus 800 includes a window presenting module 810 configured to present a sharing window based on a sharing operation associated with a second work, the sharing window comprising an interactive control associated with the second work and a text input area; an interface presenting module 820 configured to present an editing interface based on a selection of the interactive control, the editing interface presenting a work draft to be edited, the work draft comprising first picture content and second picture content, the first picture content being associated with the second work, and the second picture content presenting sharing information determined based on content of the text input area; and a posting module 830 configured to post a first work generated based on the work draft.

[0130] In some embodiments, the sharing operation comprises: a first sharing operation with respect to the

second work; or a sharing operation with respect to interactive content associated with the second work.

[0131] In some embodiments, the sharing information comprises at least the text content in response to text content being obtained via the text input area; or in response to the content of the text input area being empty, the sharing information comprises preset second text content.

[0132] In some embodiments, the first picture content comprises at least one of: a first image associated with the second work; a first text associated with the second work; posting information of the second work.

[0133] In some embodiments, the posting module 930 is further configured to receive at least one editing operation for the work draft via the editing interface; and post the first work generated based on the edited work draft.

[0134] In some embodiments, the at least one editing operation comprises at least one of: adjusting a first group of visual elements in the first picture content independently of the second picture content; adjusting a second group of visual elements in the second picture content independently of the first picture content; adjusting the first group of visual elements and the second group of visual elements in association; adding an additional visual element to the work draft.

[0135] In some embodiments, the interactive control displays an image associated with the second work.

[0136] In some embodiments, the sharing window further comprises a posting control, and the apparatus 800 further comprises: a posting control module configured to post, in response to a selection of the posting control, a third work generated based on a preset style, the third work comprising third picture content and fourth picture content, the third picture content being associated with the second work, and the fourth picture content presenting sharing information determined based on the content of the text input area.

[0137] FIG. 9 shows a block diagram of an electronic device 900 in which one or more embodiments of the present disclosure may be implemented. It should be understood that the electronic device 900 shown in Fig. 9 is only exemplary, and should not constitute any limitation on the functions and scope of the embodiments described herein. The electronic device 900 shown in FIG. 9 may be used to implement the electronic device 110 in FIG. 1.

[0138] As shown in FIG. 9, the electronic device 900 is in the form of a general electronic device. The components of the electronic device 900 may include, but are not limited to, one or more processors or processing units 910, a memory 920, a storage device 930, one or more communication units 940, one or more input devices 950, and one or more output devices 960. The processing unit 910 may be an actual or virtual processor, and may execute various processes based on the programs stored in the memory 920. In a multi-processor system, multiple processing units execute computer executable instructions in parallel to improve the parallel processing capability of the electronic device 900.

[0139] The electronic device 900 typically includes multiple computer storage medium. Such medium may be any available medium that is accessible to the electronic device 900, including, but not limited to, volatile and non-volatile medium, and removable and non-removable medium. The memory 920 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 930 may be any 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 900.

[0140] The electronic device 900 may further include additional removable/non-removable, volatile/non-volatile memory medium. Although not shown in FIG. 9, 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 may be provided. In these cases, each driver may be connected to the bus (not shown) by one or more data medium interfaces. The memory 920 may include a computer program product 925, which has one or more program modules configured to perform various methods or actions of the various embodiments of the present disclosure.

[0141] The communication unit 940 enables communication with other electronic devices through a communication medium. Additionally, the functions of the components of the electronic device 900 may be implemented by a single computing cluster or multiple computing machines, which may communicate through a communication connection. Therefore, the electronic device 900 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.

[0142] The input device 950 may be one or more input devices, such as a mouse, a keyboard, a tracking ball, etc. The output device 960 may be one or more output devices, such as a display, a speaker, a printer, etc. The electronic device 900 may further communicate with one or more external devices (not shown) through the communication unit 940 as needed, the external devices 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 900, or communicate with any devices (for example, a network card, a modem, etc.) that enable the electronic device 900 to communicate with one or more other electronic devices. Such communication may be performed via input/output (I/O) interfaces (not shown).

[0143] According to an exemplary 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 executed by a processor to implement the method described above. According to an exemplary 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, which are executed by a processor to implement the method described above.

[0144] Various aspects of the present disclosure are described herein with reference to the flowcharts and/or block diagrams of the methods, apparatuses, devices, and computer program products implemented according to the present disclosure. It should be understood that each block of the flowcharts and/or block diagrams, and combinations of blocks in the flowcharts and/or block diagrams, may be implemented by computer-readable program instructions.

[0145] 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, such that a machine is produced, and these instructions, when executed by the processing unit of the computer or other programmable data processing apparatus, create means for implementing the functions/actions specified in one or more blocks of the flowcharts and/or block diagrams. These computer-readable program instructions may also be stored in a computer-readable storage medium, and these instructions enable the computer, the programmable data

processing apparatus, and/or other devices to work in a specific manner, such that the computer-readable medium storing the instructions includes an article of manufacture, which includes instructions for implementing various aspects of the functions/actions specified in one or more blocks of the flowcharts and/or block diagrams.

[0146] The computer-readable program instructions may be loaded onto a computer, another programmable data processing apparatus, or another device, such that a series of operations and steps are performed on the computer, the another programmable data processing apparatus, or the another device, to generate a computer-implemented process, thereby enabling the instructions executed on the computer, the another programmable data processing apparatus, or the another device to implement the functions/actions specified in one or more blocks of the flowcharts and/or block diagrams.

[0147] The flowcharts and block diagrams 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 an instruction, which includes 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 performed substantially in parallel, or they may sometimes be performed in the reverse order, depending on the functions involved. It should also be noted that each block in the block diagram and/or the flowchart, and the combination of the blocks in the block diagram and/or the flowchart may be implemented by a special-purpose hardware-based system that executes the specified functions or actions, or may be implemented by a combination of special-purpose hardware and computer instructions.

[0148] The implementations of the present disclosure have been described above, and the above description is exemplary, non-exhaustive, and not limited to the disclosed implementations. Many modifications and variations will be apparent to those of ordinary skill in the art without departing from the scope and spirit of the described implementations. The terms used herein are chosen to best explain the principles of the implementations, the practical applications, or improvements to the technologies in the market, or to enable those of ordinary skill in the art to understand the implementations disclosed herein.

CLAIMS

1. A method for presenting content, comprising:
receiving a viewing request for a first work, the first work being posted based on a preset operation of a first user on a second work; and
presenting the first work in a target container, wherein first picture content of the first work is displayed in a first component of the target container, second picture content of the first work is displayed in a second component of the target container, the first component is different from the second component, the first picture content is associated with the second work, and the second picture content is associated with the preset operation of the first user.
2. The method of claim 1, wherein the first picture content comprises at least one of:
a first image associated with the second work;
a first text associated with the second work;
posting information of the second work.
3. The method of claim 2, wherein a layout of the first component and the second component in the target container is determined based on the second picture content.
4. The method of claim 3, wherein a layout of an image and a text in the first picture content is determined based on the second picture content.
5. The method of claim 3, wherein:
in response to the second picture content comprising a second image obtained via the preset operation, the first image and the first text are displayed in the first picture content based on a first layout; or
in response to the second picture content not comprising an image, the first image and the first text are displayed in the first picture content based on a second layout.
6. The method of claim 5, wherein the first layout indicates that:
a first size of the first image in the target container is smaller than a second size of the second image;
and/or
the first size of the first image in the target container is smaller than a third size corresponding to the first text.
7. The method of claim 5, wherein the second layout indicates that:
a first size of the first image in the target container is greater than a third size corresponding to the first text.
8. The method of claim 3, further comprising at least one of:

in response to the second picture content comprising a second image obtained via the preset operation, a display size of the first component is smaller than a second size of the second image;

in response to the second picture content not comprising an image, the display size of the first component is greater than a display size of the second component.

9. The method of claim 1, wherein a target area corresponding to the first component is distinctively displayed in the target container.

10. The method of claim 1, wherein:

a first background color of the target container is determined based on an image of the second work and/or an image obtained via the preset operation; or

a second background color of the first component is determined based on an image of the second work.

11. The method of claim 1, further comprising:

presenting a viewing interface of the second work in response to receiving a first operation associated with the first component.

12. The method of claim 1, wherein the second picture content comprises at least one of:

a second text obtained via the preset operation;

a second image obtained via the preset operation;

description information associated with the preset operation.

13. The method of claim 1, wherein the preset operation comprises:

a first sharing operation with respect to the second work, the first sharing operation indicating that the first work is generated based on obtained sharing information; or

a second sharing operation with respect to the second work, the second sharing operation indicating that a comment about the second work is obtained and the first work generated based on the comment is posted.

14. The method of claim 13, wherein the second picture content comprises the comment, and the method further comprises:

presenting a comment interface of the second work in response to receiving a second operation associated with the second component.

15. A method for posting work, comprising:

presenting a sharing window based on a sharing operation associated with a second work, the sharing window comprising an interactive control associated with the second work and a text input area; and

presenting an editing interface based on a selection of the interactive control, the editing interface presenting a work draft to be edited, the work draft comprising first picture content and second picture content, the first picture content being associated with the second work, and the second picture content presenting sharing

information determined based on content of the text input area; and
posting a first work generated based on the work draft.

16. The method of claim 15, wherein the sharing operation comprises:
a first sharing operation with respect to the second work; or
a sharing operation with respect to interactive content associated with the second work.

17. The method of claim 15, wherein:
the sharing information comprises at least the text content in response to text content being obtained via the text input area; or
in response to the content of the text input area being empty, the sharing information comprises preset second text content.

18. The method of claim 15, wherein the first picture content comprises at least one of:
a first image associated with the second work;
a first text associated with the second work;
posting information of the second work.

19. The method of claim 15, wherein posting the first work generated based on the work draft comprises:
receiving at least one editing operation for the work draft via the editing interface; and
posting the first work generated based on the edited work draft.

20. The method of claim 19, wherein the at least one editing operation comprises at least one of:
adjusting a first group of visual elements in the first picture content independently of the second picture content;
adjusting a second group of visual elements in the second picture content independently of the first picture content;
adjusting the first group of visual elements and the second group of visual elements in association;
adding an additional visual element to the work draft.

21. The method of claim 15, wherein the interactive control displays an image associated with the second work.

22. The method of claim 15, wherein the sharing window further comprises a posting control, and the method further comprises:
posting, in response to a selection of the posting control, a third work generated based on a preset style, the third work comprising third picture content and fourth picture content, the third picture content being associated with the second work, and the fourth picture content presenting sharing information determined based on the content of the text input area.

23. An apparatus for presenting content, comprising:

a receiving module configured to receive a viewing request for a first work, the first work being posted based on a preset operation of a first user on a second work; and

a presenting module configured to present the first work in a target container, wherein first picture content of the first work is displayed in a first component of the target container, second picture content of the first work is displayed in a second component of the target container, the first component is different from the second component, the first picture content is associated with the second work, and the second picture content is associated with the preset operation of the first user.

24. An apparatus for posing work, comprising:

a window presenting module configured to present a sharing window based on a sharing operation associated with a second work, the sharing window comprising an interactive control associated with the second work and a text input area;

an interface presenting module configured to present an editing interface based on a selection of the interactive control, the editing interface presenting a work draft to be edited, the work draft comprising first picture content and second picture content, the first picture content being associated with the second work, and the second picture content presenting sharing information determined based on content of the text input area; and

a posting module configured to post a first work generated based on the work draft.

25. 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, the instructions, when executed by the at least one processing unit, causing the electronic device to perform the method of any of claims 1 to 14 or claims 15 to 22.

26. 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 14 or claims 15 to 22.