

INTERACTION METHOD AND APPARATUS, DEVICE, AND STORAGE MEDIUM

[0001] This application claims priority to Chinese Patent Application No. 202410310100.8, filed on March 18, 2024, which is hereby incorporated by reference in its entirety as a part of this application.

TECHNICAL FIELD

[0002] Embodiments of the present disclosure relate to an interaction method, an apparatus, a device, and a storage medium.

BACKGROUND

[0003] With the development of mobile Internet, a progress of network technology and a popularization of intelligent terminals, more and more users watch live interaction. An anchor may explain an explained object in the live interaction process, and a user may complete an interactive event based on the explained object.

SUMMARY

[0004] Embodiments of the present disclosure provide an interaction method, an apparatus, a device, and a storage medium, which may optimize a live interaction-based interaction solution.

[0005] In a first aspect, an embodiment of the present disclosure provides an interaction method, including:

[0006] displaying, in response to a preset trigger instruction, multimedia information corresponding to a first media identification in a media display area of a preset page and displaying a target object set in an object display area of the preset page, where the first media identification is one candidate media identification displayed in an identification aggregation area of the preset page, and the target object set is determined based on objects corresponding to candidate media identifications in the identification aggregation area; and

[0007] determining, in response to a switching instruction for a candidate media identification in the identification aggregation area, the candidate media identification for which the switching instruction is provided as a second media identification, and switching the multimedia information displayed in the media display area from the multimedia information corresponding to the first media identification to multimedia information corresponding to the second media identification.

[0008] In a second aspect, an embodiment of the present disclosure further provides an interaction apparatus, including:

- [0009] a page display module configured to display, in response to a preset trigger instruction, multimedia information corresponding to a first media identification in a media display area of a preset page and display a target object set in an object display area of the preset page, where the first media identification is one candidate media identification displayed in an identification aggregation area of the preset page, and the target object set is determined based on objects corresponding to candidate media identifications in the identification aggregation area; and
- [0010] a switching module configured to determine, in response to a switching instruction for a candidate media identification in the identification aggregation area, the candidate media identification for which the switching instruction is provided as a second media identification, and switch the multimedia information displayed in the media display area from the multimedia information corresponding to the first media identification to multimedia information corresponding to the second media identification.
- [0011] In a third aspect, an embodiment of the present disclosure further provides an electronic device, including:
- [0012] one or more processors; and
- [0013] a storage apparatus configured to store one or more programs,
- [0014] where the one or more programs, when executed by the one or more processors, cause the one or more processors to implement the interaction method provided by the embodiment of the present disclosure.
- [0015] In a fourth aspect, an embodiment of the present disclosure further provides a storage medium including computer-executable instructions that, when executed by a computer processor, are configured to perform the interaction method provided by the embodiment of the present disclosure.

BRIEF DESCRIPTION OF DRAWINGS

- [0016] The above and other features, advantages and aspects of various embodiments of the present disclosure will become more apparent when taken in conjunction with the drawings and with reference to the following detailed description. Throughout the drawings, the same or similar reference numbers refer to the same or similar elements. It should be understood that the drawings are schematic and that the components and elements are not necessarily drawn to scale.
- [0017] Fig. 1 is a schematic flowchart of an interaction method provided by an embodiment of the present disclosure.
- [0018] Fig. 2 is a schematic diagram of an interface provided by an embodiment of the present disclosure.
- [0019] Fig. 3 is a schematic diagram of interface interaction provided by an embodiment of the present disclosure.
- [0020] Fig. 4 is a schematic diagram of another interface interaction provided by an embodiment of the present disclosure.

[0021] Fig. 5 is a schematic flowchart of another interaction method provided by an embodiment of the present disclosure.

[0022] Fig. 6 is a schematic diagram of another interface interaction provided by an embodiment of the present disclosure.

[0023] Fig. 7 is a schematic diagram of another interface interaction provided by an embodiment of the present disclosure.

[0024] Fig. 8 is a schematic structural diagram of an interaction apparatus provided by an embodiment of the present disclosure.

[0025] Fig. 9 is a schematic structural diagram of an electronic device provided by an embodiment of the present disclosure.

DETAILED DESCRIPTION

[0026] Hereinafter, embodiments of the present disclosure will be described in more detail 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 construed as being 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 should be understood that the drawings and embodiments of the present disclosure are only used for illustrative purposes, and are not used to limit the scope of protection of the present disclosure.

[0027] It should be understood that steps described in method implementations of the present disclosure may be executed in different orders and/or in parallel. Furthermore, the method implementations may include additional steps and/or omit the execution of illustrated steps. The scope of the present disclosure is not limited in this regard.

[0028] As used herein, the term "include" and its variants are open-ended inclusions, that is, "include but not limited to". The term "based on" is "at least partially based on". The term "one embodiment" means "at least one embodiment"; the term "another embodiment" means "at least one other embodiment"; the term "some embodiments" means "at least some embodiments". Relevant definitions of other terms will be given in the following description.

[0029] It should be noted that concepts such as "first" and "second" mentioned in the present disclosure are only used to distinguish different apparatuses, modules or units, and are not used to limit the order or interdependence of functions performed by these apparatuses, modules or units.

[0030] It should be noted that the modifiers "one" and "multiple" mentioned in the present disclosure are illustrative rather than restrictive, and those skilled in the art should understand that unless otherwise clearly indicated in the context, they should be understood as "one or multiple".

- [0031] It may be understood that before using the technical solutions disclosed in the embodiments of the present disclosure, the user should be informed of the type, scope of use, use scenarios, etc., of personal information involved in the present disclosure in an appropriate manner in accordance with relevant laws and regulations, and the authorization of the user should be obtained.
- [0032] For example, in response to receiving an active request from a user, prompt information is sent to the user to clearly prompt the user that the requested operation will require access to and use of personal information of the user. As such, the user may independently choose, based on the prompt information, whether to provide the personal information to software or hardware, such as an electronic device, an application, a server, or a storage medium, that performs the operations of the technical solutions of the present disclosure.
- [0033] As an optional but non-limiting implementation, in response to receiving the active request from the user, the prompt information may be sent to the user in the form of, for example, a pop-up window, in which the prompt information may be presented in text. Furthermore, the pop-up window may also include a selection control for the user to select whether to "agree" or "disagree" to provide the personal information to the electronic device.
- [0034] It should be understood that the above process of notifying the user and acquiring the authorization of the user is only illustrative and does not limit the implementations of the present disclosure, and other manners that satisfy the relevant laws and regulations may also be applied in the implementations of the present disclosure.
- [0035] It should be understood that the data involved in the technical solution (including but not limited to the data itself, acquisition or use of the data) should comply with requirements of corresponding laws, regulations, and related provisions.
- [0036] Fig. 1 is a schematic flowchart of an interaction method provided by an embodiment of the present disclosure. The embodiment of the present disclosure is applicable to a live interaction-related interaction scenario. The method may be performed by an interaction apparatus, which may be implemented in the form of software and/or hardware. Optionally, the method is implemented by an electronic device. The electronic device may be a mobile terminal, such as a mobile phone, a smart watch, a tablet computer, or a personal digital assistant, or may be a personal computer (PC) or a server.
- [0037] As shown in Fig. 1, the method includes:
- [0038] Step 101: displaying, in response to a preset trigger instruction, multimedia information corresponding to a first media identification in a media display area of a preset page and displaying a target object set in an object display area of the preset page, where the first media identification is one candidate media identification displayed in an identification aggregation area of the preset page, and the target object set is determined based on objects corresponding to candidate media identifications in the identification aggregation area.

[0039] The page in the embodiment of the present disclosure may be a page in a preset application. The preset application may provide one or more functions and may be installed in an electronic device. The specific type of the preset application is not limited. For example, the preset application may be a video application, a live interaction application, a shopping application, an information application, a game application, or another type of application, for example, a composite application that combines video and shopping. The preset page may be a tab page, and the display of the preset page may be triggered based on a page tab corresponding to the preset page. The preset trigger instruction may be a trigger instruction for entering the preset page, such as a trigger operation for a page entry corresponding to the preset page; or the preset trigger instruction may be a trigger instruction for switching the selected candidate media identification in the preset page.

[0040] In the embodiment of the present disclosure, the preset page includes the identification aggregation area, the media display area, and the object display area, and the relative positional relationship between the areas is not limited. Exemplarily, the media display area includes the identification aggregation area, and the media display area and the object display area are separated from each other.

[0041] The identification aggregation area is used to accommodate a plurality of candidate media identifications, for example, preset channel identifications respectively corresponding to a plurality of preset live interaction channels, provider identifications of a plurality of object providers (such as merchants), or titles or themes of videos or images. The candidate media identification may be an identification related to information such as identity or source for representing the corresponding multimedia information. For example, the preset channel identification may be a channel name of the corresponding preset live interaction channel, and has a one-to-one relationship with the preset live interaction channel; the provider identification may be a name of the corresponding object provider, such as a shop name. The specific number of candidate media identifications in the identification aggregation area is not limited, and the candidate media identifications may be set by the platform side of the preset application, for example, the number of candidate media identifications may be set, which specific media identifications the candidate media identifications are may be set, and the display sequence of the plurality of candidate media identifications in the identification aggregation area may also be set. For example, the specific number of the plurality of preset live interaction channels is not limited, and the identification aggregation area may simultaneously display preset channel identifications of all preset live interaction channels in the plurality of preset live interaction channels or may simultaneously display preset channel identifications of some preset live interaction channels in the plurality of preset live interaction channels. The plurality of preset live interaction channels may be set by the platform side of the preset application, for example, the number of preset live interaction channels may be set, which specific live interaction channels the preset live interaction channels are may be set, the preset channel identifications corresponding to the preset live interaction channels may be set, and the display sequence of the plurality of preset channel identifications in the identification aggregation area may also be set. The plurality of preset live interaction channels may

include a preset live interaction channel in a live interaction state and may also include a preset live interaction channel in an off-air state, which is not specifically limited. Optionally, the display priority of the preset channel identification corresponding to the preset live interaction channel in the live interaction state is higher than the display priority of the preset channel identification corresponding to the preset live interaction channel in the off-air state. Optionally, the plurality of candidate media identifications accommodated in the identification aggregation area may include one candidate media identification in a selected state and at least one candidate media identification in an unselected state. For example, the plurality of preset channel identifications accommodated in the identification aggregation area may include one preset channel identification in a selected state and at least one preset channel identification in an unselected state. The first media identification is one candidate media identification displayed in the identification aggregation area of the preset page. In response to the preset trigger instruction, the candidate media identification currently in the selected state is determined and recorded as the first media identification.

[0042] The multimedia information corresponding to the first media identification is displayed in the media display area, and the multimedia information may include at least one of video, image, and live stream. The video may be a video work posted by a user, and the video work may be associated with objects such as a commodity, a service, or a scenic spot. The image may be an image work or an image-text work posted by the user, and the image may be associated with objects such as a commodity, a service, or a scenic spot. Exemplarily, when the multimedia information is live stream, the first media identification may be a preset channel identification of a target preset live interaction channel, a preview image of the target preset live interaction channel may be displayed in the media display area, and the target preset live interaction channel is a preset live interaction channel to which the preset channel identification in the selected state belongs. The preview image may include a live interaction preview image, a live interaction channel cover, or a live interaction trailer image. If the target preset live interaction channel is in the live interaction state, the preview image may include the live interaction preview image or the live interaction channel cover; if the target preset live interaction channel is in the off-air state, the preview image may include the live interaction trailer image. Exemplarily, when entering the preset page, the target preset live interaction channel may be a preset live interaction channel set by default, and during the display process of the preset page, the target preset live interaction channel may be dynamically determined according to user operation, so as to facilitate the user to choose to view preview images corresponding to different preset live interaction channels according to actual needs. Optionally, in a case where the target preset live interaction channel is in the live interaction state, a live interaction channel page of the target preset live interaction channel is displayed in response to a trigger operation for the media display area, and a live interaction image of the target preset live interaction channel is displayed in the live interaction channel page; and in a case where the target preset live interaction channel is in the off-air state, a live interaction trailer page of the target preset live interaction channel is displayed in response to the trigger operation for the media display area, and trailer

detailed information of the target preset live interaction channel is displayed in the live interaction trailer page.

[0043] The target object set is displayed in the object display area, and the target object set may be determined based on objects corresponding to all or part of the candidate media identifications in the identification aggregation area. The objects may include commodities, items, services, information, or the like. For example, the target object set includes display objects in preset live interaction channels corresponding to a plurality of preset channel identifications. The display objects may include commodities, items, services, information, or the like that are being explained, have been explained, or are to be explained in the preset live interaction channels, and may also be referred to as explained objects.

[0044] Exemplarily, the objects corresponding to the candidate media identifications in the identification aggregation area may come from the same object library. For example, the display objects in the plurality of preset live interaction channels may come from the same object library, and an anchor or an account manager corresponding to each preset live interaction channel may select, from the object library according to actual needs, an object to be explained in the live interaction channel he/she is responsible for. For example, the object library is a XX online supermarket, one preset live interaction channel may be a general account live interaction channel of the XX online supermarket, at least one preset live interaction channel may be a live interaction channel for objects of a preset category in the XX online supermarket, and at least one preset live interaction channel may be a live interaction channel for objects in the XX online supermarket that are explained by a designated anchor.

[0045] Exemplarily, the target objects contained in the target object set may come from the objects corresponding to the plurality of candidate media identifications. For example, the target objects may be display objects in any preset live interaction channel among all preset live interaction channels to which the candidate media identifications in the identification aggregation area belong, the target objects may be display objects in the target preset live interaction channel, or the target objects may be display objects in preset live interaction channels other than the target preset live interaction channel among all preset live interaction channels. When the target object set includes a plurality of target objects, for example, a plurality of display objects, the plurality of target objects may be objects corresponding to different candidate media identifications, for example, display objects from different preset live interaction channels. Optionally, when displaying the target object set, object information of the target objects in the target object set may be displayed, and the object information may include object attribute information and/or image resource information of the target objects, and may also include other information related to the display objects. The object attribute information may include, for example, an object identification (such as a commodity name), an object acquisition cost (such as a commodity price), an object inventory (such as whether there is stock or a remaining quantity), an object feature (such as a commodity selling point), a brand, a model, a material, or a composition. The image resource information may include information about resources such as an image and/or a video associated with the object, such as a commodity schematic diagram (such as a

commodity photo) or a commodity explanation video (such as a live interaction replay video of the commodity). The specific display manner of each target object and/or the object information of each target object in the target object set is not limited, and the target objects and/or the object information may be displayed in the form of a list or a matrix, for example, a commodity list.

[0046] Fig. 2 is a schematic diagram of an interface provided by an embodiment of the present disclosure. Taking the multimedia information as live stream for an example, as shown in Fig. 2, an identification aggregation area 202, a media display area 203, and an object display area 204 are displayed in a preset page 201. Three preset channel identifications (candidate media identifications) respectively corresponding to three preset live interaction channels are currently displayed in the identification aggregation area 202, which are a live interaction channel a, a live interaction channel b, and a live interaction channel c. It should be noted that the identification aggregation area 202 may also accommodate preset channel identifications of other preset live interaction channels, such as a live interaction channel d and a live interaction channel e, and more preset channel identifications accommodated in the identification aggregation area 202 may be viewed through, for example, a sliding operation. Live stream (multimedia information) of a target preset live interaction channel corresponding to the live interaction channel a (first media identification) is displayed in the media display area 203. A target object set is displayed in the object display area 204, and the target object set includes a target object 205 determined based on an object corresponding to the candidate media identification in the identification aggregation area.

[0047] Optionally, the objects included in the target object set, and/or the display sequence of the objects in the target object set are determined based on a preset attribute of the objects, where the preset attribute of the objects includes at least one of: a historical interaction operation associated with the objects, historical business data of the objects, and historical evaluation data of the objects. In this way, the target object set may be more reasonably determined.

[0048] The historical interaction operation may include a browsing operation, a favoriting operation, a forwarding operation, an acquisition operation, or the like. It should be noted that the acquisition and application of relevant data of the historical interaction operation should be informed to the user in advance and fully authorized by the user. The historical business data may include the number of the objects acquired by the user, such as commodity sales, and may also include, for example, that the historical inventory is emptied and new inventory is currently replenished. The historical evaluation data of the objects may include, for example, evaluation data or evaluation information statistical data posted by the user who acquires the objects, such as the number of positive reviews.

[0049] Step 102: determining, in response to a switching instruction for a candidate media identification in the identification aggregation area, the candidate media identification for which the switching instruction is provided as a second media identification, and switching the multimedia information displayed in the media display area from the multimedia information corresponding to the first media identification to multimedia information corresponding to the second media identification.

[0050] Exemplarily, the switching instruction may be a click operation, a sliding operation, or the like, which is not specifically limited. Taking the click operation as an example, the candidate media identification is used to trigger the determination of the candidate media identification in the selected state, so as to implement the switching of the candidate media identification in the selected state. The second media identification may be understood as a new candidate media identification in the selected state, that is, a candidate media identification in the selected state after switching. Optionally, the preset channel identification is used to trigger the determination of the target preset live interaction channel. For example, in response to a trigger operation for a preset channel identification in the unselected state, a corresponding preset channel identification is determined as a new preset channel identification in the selected state, thereby implementing the switching of the target preset live interaction channel.

[0051] As shown in Fig. 2, after the user clicks on the live interaction channel b, the live interaction channel b is determined as the second media identification, and the live stream displayed in the media display area is switched from the live stream of the live interaction channel a to the live stream of the live interaction channel b.

[0052] According to the interaction method provided by the embodiment of the present disclosure, the plurality of candidate media identifications, the multimedia information corresponding to one of the candidate media identifications, and the target object set determined based on the objects corresponding to the candidate media identifications in the identification aggregation area may be viewed on the same page, and the switching of the multimedia information displayed in the media display area may be triggered based on the switching instruction for the candidate media identification, thereby improving the convenience of information viewing and the efficiency of information switching.

[0053] In some embodiments, the target object set includes a first target object and/or a second target object. In a case where the multimedia information displayed in the media display area is the multimedia information corresponding to the first media identification, the first target object is determined based on an object corresponding to the first media identification, and the second target object is determined based on objects corresponding to candidate media identifications other than the first media identification among all candidate media identifications in the identification aggregation area. In this way, the source of the target object in the target object set may be more flexibly determined. When the first target object and the second target object are both included, the richness of the objects in the target object set may be improved, so that the user may view the objects corresponding to different candidate media identifications in the object display area, thereby improving the viewing efficiency of the target object.

[0054] Optionally, in a case where the target object set includes both the first target object and the second target object, the first number of the first target object may be less than the number of the second target object, and the display priority of the first target object may be higher than the display priority of the second target object. For example, the first number is three, the second number is twenty, the target objects in the

target object set are displayed in the form of a list, the first three in the list are the first target object, and the second target objects are displayed from the fourth one.

[0055] In some embodiments, after switching the multimedia information displayed in the media display area from the multimedia information corresponding to the first media identification to the multimedia information corresponding to the second media identification, the method further includes: updating the target object set displayed in the object display area, where the target object set that is updated includes a first target object re-determined based on an object corresponding to the second media identification, and/or a second target object re-determined based on objects corresponding to candidate media identifications other than the second media identification among all candidate media identifications in the identification aggregation area. In this way, when the candidate media identification in the selected state changes, the first target object and/or the second target object may be re-determined, and the target object set may be updated synchronously, so as to meet the target object viewing requirements of the user after the media identification is switched.

[0056] Exemplarily, as shown in Fig. 2, when the live stream displayed in the media display area is the live stream of the live interaction channel a, a commodity A displayed in the object display area 204 is a display object in the live interaction channel a, and a commodity B is a display object in the live interaction channel c. After the live stream displayed in the media display area is switched from the live stream of the live interaction channel a to the live stream of the live interaction channel b, a commodity C displayed in the object display area 204 is a re-determined display object in the live interaction channel b, and a commodity D is a re-determined display object in the live interaction channel a.

[0057] In some embodiments, when the multimedia information is live stream, the objects include objects in a live interaction channel to which the live stream belongs; and the target object set includes a first type of target object set and/or a second type of target object set, the first type of target object set includes historical display objects, and the second type of target object set includes current display objects. In this way, it is convenient for the user to view the historical display objects and/or the current display objects of each live interaction channel in the object display area of the preset page, thereby further improving the object viewing efficiency.

[0058] The historical display objects may specifically be objects displayed during the live interaction within a preset historical period of the live interaction channel to which the historical display objects belong (such as the last month, which may be set according to actual needs). The current display objects may specifically be objects that have been displayed, are being displayed, or are to be displayed during the current live interaction of the live interaction channel to which the current display objects belong. The first type of target object set may include the first target object and/or the second target object; and the second type of target object set may also include the first target object and/or the second target object. Optionally, after displaying the target object set in the object display area of the preset page, the method further includes: triggering, in response to a preset trigger operation for a target object in the target object set, a preset

interactive event for the target object. The preset trigger operation corresponding to the target object in the first type of target object set is different from the preset trigger operation corresponding to the target object in the second type of target object set, and/or the preset interactive event corresponding to the target object in the first type of target object set is different from the preset interactive event corresponding to the target object in the second type of target object set. The preset interactive event may include an interactive event supported by the target object, which is not specifically limited, such as an acquisition event (such as purchasing a commodity), an addition to set event (such as adding to a shopping cart), and a detail viewing event (such as viewing commodity details).

[0059] In some embodiments, the method further includes: displaying a first set identification and a second set identification in the object display area, where the first type of target object set is displayed in the object display area in a case where the first set identification is in the selected state, and the second type of target object set is displayed in the object display area in a case where the second set identification is in the selected state. In this way, the object display area may be reused and the displayed target object set may be selected according to actual needs.

[0060] Exemplarily, in response to a trigger operation for the first set identification and/or the second set identification, a selection state corresponding to the first set identification and/or the second set identification is changed, and the selection state includes a selected state and an unselected state.

[0061] In some embodiments, the method further includes: displaying a corresponding preset control in an association area of each of the historical display objects in the first type of target object set; and adding, in response to a first preset operation for a preset control corresponding to a target historical display object, the target historical display object to a preset object set, where the objects in the preset object set are objects to be acquired, and the target historical display object is one of the historical display objects in the first type of target object set. In this way, the user may conveniently add the target historical display object to the preset object set by triggering the preset control in the preset page, so as to further acquire the target historical display object.

[0062] Exemplarily, the preset object set may include commodities in a shopping cart, that is, commodities to be settled, and the preset control may be, for example, a control containing text such as "add to shopping cart". In this way, it is convenient for the user to conveniently perform the operation of adding the historical display object to the shopping cart without switching pages, thereby improving the interaction efficiency. Exemplarily, the preset object set may include commodities in a favorites list, and the preset control may be, for example, a control containing text such as "add to favorites list". In this way, it is convenient for the user to conveniently perform the operation of adding the historical display object to the favorites list without switching pages, thereby improving the interaction efficiency.

[0063] In some embodiments, the displaying the target object set in the object display area of the preset page includes: displaying the current display objects in the second type of target object set in the object display area, where the method further includes: displaying, in response to a second preset operation for a

target current display object, a first live interaction channel page corresponding to the target current display object, and displaying a first object detail page of the target current display object on an upper layer of the first live interaction channel page, where the size of the first object detail page is smaller than that of the first live interaction channel page, and the target current display object is one of the current display objects in the second type of target object set. In this way, it is convenient for the user to quickly enter the live interaction channel corresponding to the selected current display object to watch the live interaction content, and at the same time directly view the details of the selected current display object, thereby improving the interaction efficiency.

[0064] Optionally, in response to a first target operation (such as an upward sliding operation) for the first object detail page, the first object detail page is controlled to slide and be displayed in a preset direction until the size of the first object detail page is greater than or equal to that of the first live interaction channel page. In this way, more object details may be conveniently viewed.

[0065] Fig. 3 is a schematic diagram of interface interaction provided by an embodiment of the present disclosure. As shown in Fig. 3, a first set identification 302 and a second set identification 303 are displayed in an object display area 301. In a case where the first set identification 302 is in a selected state, a first type of target object set is displayed in the object display area 301, and the first type of target object set includes two historical display objects (such as a commodity a and a commodity b) as shown in Fig. 3. A corresponding preset control 304 is displayed in an association area of the historical display objects, such as an "add to shopping cart" control as shown in the figure. After the user clicks on the preset control 304 corresponding to the commodity a, the commodity a is added to the shopping cart. When the user wants to view the current display objects in the plurality of preset live interaction channels, the user may trigger the second set identification 303 by clicking or the like, then the second set identification 303 is changed to the selected state, and the first set identification 302 is changed to an unselected state. A second target object set is displayed in the object display area 301, and specifically, object information respectively corresponding to the two current display objects (such as a commodity c and a commodity d, which respectively come from a live interaction channel b and a live interaction channel e) included in the second target object set as shown in Fig. 3 may be displayed. When the user triggers object information 305 of a target current display object by clicking or the like, a first live interaction channel page 306 of a first preset live interaction channel (live interaction channel e) to which the target current display object (commodity d) to which the object information 305 of the current display object belongs is displayed. A live interaction image is displayed in the first live interaction channel page 306, and a first object detail page 307 of the target current display object (commodity d) is displayed on an upper layer of the first live interaction channel page 306. The first object detail page 307 may include, for example, a commodity picture and commodity description information.

[0066] In some embodiments, the method may further include: displaying, in response to a trigger operation input for a target control in the identification aggregation area, an identification list, where the

identification list includes all candidate media identifications in the target object set. In this way, the optional candidate media identifications may be viewed at the same time, and the selection efficiency of the candidate media identification may be improved.

[0067] Exemplarily, a "view more" button (target control) is displayed in the identification aggregation area, and the identification list is displayed by clicking on the "view more" button. The user may trigger a certain candidate media identification in the identification list by clicking or the like to set the selected state of the candidate media identification.

[0068] In some embodiments, the method further includes: gradually increasing, in response to a third preset operation input based on the preset page, the display area of the object display area, and when a spacing between a preset boundary of the object display area and an edge of a preset screen is less than a preset distance threshold, continuing to gradually increase the display area of the object display area to display an object set page, where the target object set is displayed in the object set page, and the number of the objects in the target object set displayed in the object set page is greater than the number of the objects in the target object set displayed in the preset page. In this way, the user may be supported to view more objects in the target object set at the same time in the object set page, thereby further improving the convenience of triggering the preset interactive event and improving the interaction efficiency.

[0069] The third preset operation may be a sliding operation, the edge of the preset screen may be, for example, the top of the screen, and the preset distance threshold may be set according to actual needs.

[0070] Optionally, after displaying the object set page, the method may further include: displaying a target identification in the object set page, and switching from displaying the object set page to displaying the preset page in response to the target identification being triggered.

[0071] Optionally, before displaying the multimedia information corresponding to the first media identification in the media display area of the preset page, the method further includes: displaying, in response to a trigger operation based on a live interaction tab in a function aggregation page, the preset page, where the function aggregation page is used to display function entrances of a plurality of preset functions, and the function entrances include an object category screening entrance, a virtual resource acquisition entrance, and the like.

[0072] Optionally, after displaying the object set page, the method may further include: switching from displaying the object set page to displaying the function aggregation page in response to a page return operation.

[0073] Fig. 4 is another schematic diagram of interface interaction provided by an embodiment of the present disclosure. As shown in Fig. 4, a live interaction tab 402 is displayed in a function aggregation page 401 (such as a homepage of an XX supermarket), and after the live interaction tab 402 is clicked on, a preset page 403 is entered. An object display area 404 is displayed in the preset page 403. The user inputs an upward sliding operation based on the object display area 404, and the object display area 404 moves upward to be displayed following the upward sliding operation, so as to gradually increase the display area of the

object display area 404. When a spacing between an upper boundary of the object display area 404 and the top of the screen is less than a preset distance threshold, the display area of the object display area continues to gradually increase to display an object set page 405, and the number of the objects in the target object set displayed in the object set page 405 is greater than the number of the objects in the target object set displayed in the preset page 403. A page rollback control 406 and a return to page top control 407 are displayed in the object set page 405. When the user clicks on the page rollback control 406, the function aggregation page 401 is returned to, and when the user clicks on the return to page top control 407, the preset page 403 is displayed.

[0074] In some embodiments, the displaying the multimedia information corresponding to the first media identification in the media display area of the preset page includes: displaying an association image of a target live interaction channel corresponding to the first media identification in the media display area of the preset page, where the target live interaction channel is in an off-air state, where the method further includes: displaying a reservation control corresponding to the target live interaction channel in the media display area; generating, in response to a trigger operation for the reservation control, a reservation record for the target live interaction channel; displaying, in a process of displaying a target page, live interaction starting reminder information based on the reservation record in response to a live interaction reminder event of the target live interaction channel being triggered; and switching from displaying the target page to displaying the preset page in response to a trigger operation for the live interaction starting reminder information, and displaying a live stream of the target live interaction channel in the media display area in the preset page. In this way, for the live interaction channel in the off-air state, the corresponding reservation control may be displayed in the media display area, and the user may reserve for the live interaction of the live interaction channel by triggering the reservation control. In a process of the user browsing the target page, if the live interaction reminder event is triggered, the user may quickly enter the preset page by triggering the live interaction starting reminder information, and the live stream of the reserved target live interaction channel is displayed in the media display area in the preset page, thereby improving the interaction efficiency and convenience.

[0075] It should be noted that after the multimedia information displayed in the media display area is switched from the multimedia information corresponding to the first media identification to the multimedia information corresponding to the second media identification, if the live interaction channel corresponding to the second media identification is in the off-air state, the reservation control corresponding to the live interaction channel corresponding to the second media identification may also be displayed in the media display area of the preset page. Reservation-related interaction steps are similar to the aforementioned interaction steps for the first media identification, and details are not repeated here.

[0076] Fig. 5 is a schematic flowchart of another interaction method provided by an embodiment of the present disclosure. The embodiment of the present disclosure is optimized based on various optional

solutions in the aforementioned embodiments, and steps related to the interaction with the reservation function of the not live interaction channel are added. Specifically, the method includes the following steps.

[0077] Step 501: displaying, in response to a preset trigger instruction, multimedia information corresponding to a first media identification in a media display area of a preset page.

[0078] Exemplarily, a preset page is displayed in response to a trigger operation based on a live- interaction tab in a function aggregation page, and multimedia information corresponding to a first media identification is displayed in a media display area of the preset page.

[0079] Preset channel identifications respectively corresponding to at least two of a plurality of preset live interaction channels are displayed in an identification aggregation area; and a preview image of a target preset live interaction channel is displayed in the media display area, where the target preset live interaction channel is a preset live interaction channel to which a preset channel identification (first media identification) in a selected state belongs.

[0080] Optionally, a target object identification is displayed in the media display area, and the target object identification includes object information of an object in explanation in the live interaction channel to which the live stream displayed in the media display area belongs. In response to a fourth preset operation for the object information of the object in explanation, a second live interaction channel page corresponding to the object in explanation is displayed, and a second object detail page of the object in explanation is displayed on an upper layer of the second live interaction channel page, where the size of the second object detail page is smaller than that of the second live interaction channel page. In this way, the user may trigger the object information of the object in explanation in the target object identification.

[0081] Fig. 6 is another schematic diagram of interface interaction provided by an embodiment of the present disclosure. As shown in Fig. 6, a preset page 601 includes an identification aggregation area 602, a media display area, and an object display area. Optionally, a target object identification 603 is displayed in the media display area, and the display object to which the target object identification belongs is a display object being explained in a live interaction channel a (current target preset live interaction channel, that is, a live interaction channel corresponding to the first media identification).

[0082] Step 502: displaying a first set identification in an unselected state and a second set identification in a selected state in the object display area, and displaying a second type of target object set, where the second type of target object set includes current display objects respectively corresponding to the plurality of preset live interaction channels.

[0083] Step 503: displaying, in response to a trigger operation for the first set identification in the selected state, the first set identification in the selected state and the second set identification in the unselected state in the object display area, and displaying a first type of target object set, where the first type of target object set includes historical display objects respectively corresponding to the plurality of preset live interaction channels.

- [0084] Step 504: adding, in response to a first preset operation for a preset control corresponding to a target historical display object, the target historical display object to a preset object set.
- [0085] The objects in the preset object set are objects to be acquired, and the target historical display object is one of the historical display objects in the first type of target object set.
- [0086] Step 505: updating, in response to an update operation input based on the identification aggregation area, candidate media identifications currently displayed in the identification aggregation area.
- [0087] As shown in Fig. 6, the user inputs a leftward sliding operation in the identification aggregation area 602, and the preset channel identifications of the live interaction channel a, the live interaction channel b, and the live interaction channel c displayed in the identification aggregation area 602 are updated to the preset channel identifications of the live interaction channel c, a live interaction channel d, and a live interaction channel e.
- [0088] Step 506: determining, in response to a switching instruction for a candidate media identification in the identification aggregation area, the candidate media identification for which the switching instruction is provided as a second media identification, and switching the multimedia information displayed in the media display area from the multimedia information corresponding to the first media identification to multimedia information corresponding to the second media identification.
- [0089] As shown in Fig. 6, assuming that the user wants to enter the live interaction channel d, the user may click on the preset channel identification of the live interaction channel d to determine the live interaction channel d as a new target preset live interaction channel, that is, determine the preset channel identification corresponding to the live interaction channel d as the second media identification, and the multimedia information displayed in the media display area is switched from the live stream corresponding to the live interaction channel a to the live stream corresponding to the live interaction channel d.
- [0090] Step 507: displaying, in a case where a target live interaction channel corresponding to the second media identification is in an off-air state, a reservation control corresponding to the target live interaction channel corresponding to the second media identification in the media display area of the preset page.
- [0091] As shown in Fig. 6, if the live interaction channel d is currently in the off-air state, a trailer image of the live interaction channel d and a reservation control 604 may be displayed in the media display area.
- [0092] Step 508: generating, in response to a trigger operation for the reservation control, a reservation record for the target live interaction channel corresponding to the second media identification.
- [0093] As shown in Fig. 6, after the user clicks on the reservation control 604, a reservation record for the live interaction channel d is generated.
- [0094] Step 509: displaying, in a process of displaying a target page, live interaction starting reminder information based on the reservation record in response to a live interaction reminder event of the target live interaction channel corresponding to the second media identification being triggered.
- [0095] Exemplarily, the target page may be any page in the preset application.

[0096] Fig. 7 is another schematic diagram of interface interaction provided by an embodiment of the present disclosure. Assuming that a target page 701 is a media stream display page, when the live interaction time of the live interaction channel d arrives while the user is viewing a media stream, live interaction starting reminder information 702 may be displayed in the target page 701.

[0097] Step 510: switching from displaying the target page to displaying the preset page in response to a trigger operation for the live interaction starting reminder information, and displaying a live stream of the target live interaction channel corresponding to the second media identification in the media display area in the preset page.

[0098] As shown in Fig. 7, after the user clicks on the live interaction starting reminder information 702, the target page 701 switches to a preset page 703, and the preview image of the live interaction channel d, which may specifically be a live interaction preview image, is displayed in the media display area. In this way, the user does not need to first enter the function aggregation page and then enter the preset page by triggering the live interaction tab, which reduces operations and improves the interaction efficiency.

[0099] According to the interaction method provided by the embodiment of the present disclosure, in a live interaction scenario, a preset page is displayed in response to a preset trigger instruction, channel identifications of a plurality of live interaction channels, a preview image of a live interaction channel in a selected state, and object information of display objects in the plurality of live interaction channels may be viewed on the same page. The live interaction channel in the selected state may be switched by triggering the channel identifications, and relevant interactive events of the display objects to which the object information belongs may be triggered based on the object information. When the live interaction channel in the selected state is not live interaction, a reservation may be made by triggering a reservation control in the preview image, and when the reserved live interaction channel starts to live stream, the preset page may be quickly entered by triggering live interaction starting reminder information, thereby effectively improving the convenience of information viewing and the interaction efficiency.

[0100] Fig. 8 is a schematic structural diagram of an interaction apparatus provided by an embodiment of the present disclosure. As shown in Fig. 8, the apparatus includes:

[0101] a page display module 801 configured to display, in response to a preset trigger instruction, multimedia information corresponding to a first media identification in a media display area of a preset page and display a target object set in an object display area of the preset page, where the first media identification is one candidate media identification displayed in an identification aggregation area of the preset page, and the target object set is determined based on objects corresponding to candidate media identifications in the identification aggregation area; and

[0102] a switching module 802 configured to determine, in response to a switching instruction for a candidate media identification in the identification aggregation area, the candidate media identification for which the switching instruction is provided as a second media identification, and switch the multimedia

information displayed in the media display area from the multimedia information corresponding to the first media identification to multimedia information corresponding to the second media identification.

[0103] According to the interaction apparatus provided by the embodiment of the present disclosure, the plurality of candidate media identifications, the multimedia information corresponding to one of the candidate media identifications, and the target object set determined based on the objects corresponding to the candidate media identifications in the identification aggregation area may be viewed on the same page, and the switching of the multimedia information displayed in the media display area may be triggered based on the switching instruction for the candidate media identification, thereby improving the convenience of information viewing and the efficiency of information switching.

[0104] Optionally, the target object set includes a first target object and/or a second target object. In a case where the multimedia information displayed in the media display area is the multimedia information corresponding to the first media identification, the first target object is determined based on an object corresponding to the first media identification, and the second target object is determined based on objects corresponding to candidate media identifications other than the first media identification among all candidate media identifications in the identification aggregation area; and

[0105] the apparatus further includes:

[0106] an object set update module configured to update the target object set displayed in the object display area after the multimedia information displayed in the media display area is switched from the multimedia information corresponding to the first media identification to the multimedia information corresponding to the second media identification, where the target object set that is updated includes a first target object re-determined based on an object corresponding to the second media identification, and/or a second target object re-determined based on objects corresponding to candidate media identifications other than the second media identification among all candidate media identifications in the identification aggregation area.

[0107] Optionally, the multimedia information includes at least one of a video, an image, and live stream.

[0108] Optionally, when the multimedia information is live stream, the objects include objects in a live interaction channel to which the live stream belongs; and the target object set includes a first type of target object set and/or a second type of target object set, the first type of target object set includes historical display objects, and the second type of target object set includes current display objects.

[0109] Optionally, the apparatus further includes:

[0110] an identification set display module configured to display a first set identification and a second set identification in the object display area, where the first type of target object set is displayed in the object display area when the first set identification is in a selected state, and the second type of target object set is displayed in the object display area when the second set identification is in the selected state.

[0111] Optionally, the apparatus further includes:

[0112] a preset control display module configured to display a corresponding preset control in an association area of each of the historical display objects in the first type of target object set; and

- [0113] an object addition module configured to add, in response to a first preset operation for a preset control corresponding to a target historical display object, the target historical display object to a preset object set, where objects in the preset object set are objects to be acquired, and the target historical display object is one of the historical display objects in the first type of target object set.
- [0114] Optionally, the displaying the target object set in the object display area of the preset page includes: displaying the current display objects in the second type of target object set in the object display area; and
- [0115] the apparatus further includes:
- [0116] a first detail page display module configured to display, in response to a second preset operation for a target current display object, a first live interaction channel page corresponding to the target current display object, and display a first object detail page of the target current display object on an upper layer of the first live interaction channel page, where the size of the first object detail page is smaller than that of the first live interaction channel page, and the target current display object is one of the current display objects in the second type of target object set.
- [0117] Optionally, the objects included in the target object set and/or the display sequence of the objects in the target object set are determined based on a preset attribute of the objects, where the preset attribute of the objects includes at least one of: an historical interaction operation associated with the objects, historical business data of the objects, and historical evaluation data of the objects.
- [0118] Optionally, the apparatus further includes:
- [0119] an object set page display module configured to gradually increase a display area of the object display area in response to a third preset operation input based on the preset page, and continue to gradually increase the display area of the object display area to display an object set page when a spacing between a preset boundary of the object display area and an edge of a preset screen is less than a preset distance threshold, where the target object set is displayed in the object set page, and the number of the objects in the target object set displayed in the object set page is greater than the number of the objects in the target object set displayed in the preset page.
- [0120] Optionally, the displaying the multimedia information corresponding to the first media identification in the media display area of the preset page includes: displaying an association image of a target live interaction channel corresponding to the first media identification in the media display area of the preset page, where the target live interaction channel is in a off-air state; and
- [0121] the apparatus further includes:
- [0122] a reservation control display module configured to display a reservation control corresponding to the target live interaction channel in the media display area;
- [0123] a reservation record generation module configured to generate, in response to a trigger operation for the reservation control, a reservation record for the target live interaction channel;

- [0124] a live interaction reminder display module configured to display, in a process of displaying a target page, live interaction starting reminder information based on the reservation record in response to a live interaction reminder event of the target live interaction channel being triggered; and
- [0125] a page switching module configured to switch from displaying the target page to displaying the preset page in response to a trigger operation for the live interaction starting reminder information, and display a live stream of the target live interaction channel in the media display area in the preset page.
- [0126] Optionally, when the multimedia information is live stream, a target object identification is further displayed in the media display area, and the target object identification includes object information of an object in explanation in the live interaction channel to which the live stream displayed in the media display area belongs; and
- [0127] the apparatus further includes:
- [0128] a second detail page display module configured to display, in response to a fourth preset operation for the target object identification, a second live interaction channel page corresponding to the object in explanation, and display a second object detail page of the object in explanation on an upper layer of the second live interaction channel page, where the size of the second object detail page is smaller than that of the second live interaction channel page.
- [0129] The interaction apparatus provided by the embodiment of the present disclosure may perform the interaction method provided by any embodiment of the present disclosure, and has corresponding functional modules and beneficial effects for performing the method.
- [0130] It is worth noting that the units and modules included in the above apparatus are only divided according to functional logic, but are not limited to the above division, as long as the corresponding functions may be realized. In addition, the specific names of the functional units are only for the convenience of distinguishing from each other, and are not used to limit the protection scope of the embodiments of the present disclosure.
- [0131] Fig. 9 is a schematic structural diagram of an electronic device provided by an embodiment of the present disclosure. Reference is made to Fig. 9 below, which illustrates a schematic structural diagram of an electronic device (such as the terminal device or the server in Fig. 9) 900 suitable for implementing the embodiments of the present disclosure. The terminal device in the embodiments of the present disclosure may include, but is not limited to, mobile terminals such as a mobile phone, a laptop, a digital broadcast receiver, a personal digital assistant (PDA), a tablet computer (PAD), a portable multimedia player (PMP), and an in-vehicle terminal (such as an in-vehicle navigation terminal), and fixed terminals such as a digital TV and a desktop computer. The electronic device shown in Fig. 9 is only an example, and should not impose any limitation on the function and scope of use of the embodiments of the present disclosure.
- [0132] As shown in Fig. 9, the electronic device 900 may include a processing apparatus (such as a central processing unit and a graphics processing unit) 901, which may perform various appropriate actions and processing according to a program stored in a read-only memory (ROM) 902 or a program loaded from a

storage apparatus 908 into a random access memory (RAM) 903. The RAM 903 further stores various programs and data required for the operation of the electronic device 900. The processing apparatus 901, the ROM 902, and the RAM 903 are connected to each other through a bus 904. An editing/output (I/O) interface 905 is also connected to the bus 904.

[0133] Usually, the following apparatuses may be connected to the I/O interface 905: an input apparatus 906 including, for example, a touch screen, a touchpad, a keyboard, a mouse, a camera, a microphone, an accelerometer, and a gyroscope; an output apparatus 907 including, for example, a liquid crystal display (LCD), a loudspeaker, and a vibrator; a storage apparatus 908 including, for example, a magnetic tape and a hard disk; and a communication apparatus 909. The communication apparatus 909 may allow the electronic device 900 to perform wireless or wired communication with other devices to exchange data. Although Fig. 9 shows the electronic device 900 having various apparatuses, it should be understood that not all of the illustrated apparatuses are necessarily implemented or provided. Alternatively, more or fewer apparatuses may be implemented or provided.

[0134] In particular, according to the embodiments of the present disclosure, the process described above with reference to the flowchart may be implemented as a computer software program. For example, the embodiments of the present disclosure include a computer program product, which includes a computer program carried on a non-transitory computer-readable medium, where the computer program includes program code for performing the method shown in the flowchart. In such an embodiment, the computer program may be downloaded and installed from a network through the communication apparatus 909, or installed from the storage apparatus 908, or installed from the ROM 902. When the computer program is executed by the processing apparatus 901, the above-mentioned functions defined in the method of the embodiments of the present disclosure are executed.

[0135] The names of messages or information exchanged between a plurality of apparatuses in the implementations of the present disclosure are only used for illustrative purposes, and are not used to limit the scope of these messages or information.

[0136] The electronic device provided by the embodiment of the present disclosure belongs to the same inventive concept as the interaction method provided by the above embodiment. For technical details not described in detail in this embodiment, reference may be made to the above embodiment, and this embodiment has the same beneficial effects as the above embodiment.

[0137] An embodiment of the present disclosure provides a computer storage medium having a computer program stored thereon, where the interaction method provided by the above embodiment is implemented when the program is executed by a processor.

[0138] An embodiment of the present disclosure provides a computer program product including a computer program, where the interaction method provided by the above embodiment is implemented when the program is executed by a processor.

[0139] It should be noted that the above computer-readable medium in the present disclosure may be a computer-readable signal medium, a computer-readable storage medium, or any combination thereof. The computer-readable storage medium may be, for example, but is not limited to, an electrical, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, or device, or any combination thereof. More specific examples of the computer-readable storage medium may include, but are not limited to: an electrical connection having one or more wires, a portable computer magnetic disk, a hard disk, a random access memory (RAM), a read-only memory (ROM), an erasable programmable read-only memory (EPROM or flash memory), an optical fiber, a portable compact disk read-only memory (CD-ROM), an optical storage device, a magnetic storage device, or any suitable combination thereof. In the present disclosure, the computer-readable storage medium may be any tangible medium that contains or stores a program, which may be used by or in combination with an instruction execution system, apparatus, or device. In the present disclosure, the computer-readable signal medium may include a data signal propagated on a baseband or as a part of a carrier wave, and computer-readable program code is carried therein. The data signal propagated in this way may be in multiple forms, and includes, but is not limited to, an electromagnetic signal, an optical signal, or any suitable combination thereof. The computer-readable signal medium may also be any computer-readable medium other than the computer-readable storage medium, and the computer-readable signal medium may send, propagate, or transmit the program used by or in combination with the instruction execution system, apparatus, or device. The program code contained on the computer-readable medium may be transmitted in any suitable medium, including but not limited to: a wire, an optical cable, a radio frequency (RF), or any suitable combination thereof.

[0140] The above computer-readable medium may be contained in the above electronic device, or may exist alone without being assembled into the electronic device.

[0141] The above computer-readable medium carries one or more programs, which, when executed by the electronic device, cause the electronic device to: display, in response to a preset trigger instruction, multimedia information corresponding to a first media identification in a media display area of a preset page and display a target object set in an object display area of the preset page, where the first media identification is one candidate media identification displayed in an identification aggregation area of the preset page, and the target object set is determined based on objects corresponding to candidate media identifications in the identification aggregation area; and determine, in response to a switching instruction for a candidate media identification in the identification aggregation area, the candidate media identification for which the switching instruction is provided as a second media identification, and switch the multimedia information displayed in the media display area from the multimedia information corresponding to the first media identification to multimedia information corresponding to the second media identification.

[0142] The computer program code for performing the operations of the present disclosure may be written in one or more programming languages or a combination thereof, where the programming languages include, but are not limited to, an object-oriented programming language, such as Java, Smalltalk, and C++, and

further include conventional procedural programming languages, such as "C" language or similar programming languages. The program code may be completely executed on a computer of the user, partially executed on a computer of the user, executed as an independent software package, partially executed on a computer of the user and partially executed on a remote computer, or completely executed on the remote computer or a server. In the case of involving the remote computer, the remote computer may be connected to the computer of the user through any kind of network, including a local area network (LAN) or a wide area network (WAN), or may be connected to an external computer (for example, connected through the Internet with the aid of an Internet service provider).

[0143] The flowcharts and block diagrams in the drawings illustrate the architecture, functionality, and operation of possible implementations of the systems, methods and computer program products according to various embodiments of the present disclosure. In this regard, each block in the flowchart or block diagrams may represent a module, program segment, or portion of code, which includes one or more executable instructions for implementing the specified logical function(s). It should also be noted that, in some alternative implementations, the functions noted in the block may occur in an order different from that noted in the drawings. For example, two blocks shown in succession may, in fact, be executed substantially concurrently, or the blocks may sometimes be executed in a reverse order, depending upon the functionality involved. It will also be noted that each block of the block diagrams and/or flowchart, and combinations of blocks in the block diagrams and/or flowchart, may be implemented by special purpose hardware-based systems that perform the specified functions or operations, or combinations of special purpose hardware and computer instructions.

[0144] The units involved in the embodiments of the present disclosure may be implemented in a software manner or in a hardware manner. The name of a module does not constitute a limitation on the module itself under certain circumstances. For example, the page display module may also be described as "a module that displays multimedia information corresponding to a first media identification in a media display area of a preset page and displays a target object set in an object display area of the preset page in response to a preset trigger instruction".

[0145] The functions described above may be performed, at least in part, by one or more hardware logic components. For example, without limitation, exemplary types of hardware logic components that may be used include: field programmable gate array (FPGA), application specific integrated circuit (ASIC), application specific standard product (ASSP), system on chip (SOC), complex programmable logical device (CPLD), etc.

[0146] In the context of the present disclosure, a machine-readable medium may be a tangible medium that may contain or store a program for use by or in combination with an instruction execution system, apparatus, or device. The machine-readable medium may be a machine-readable signal medium or a machine-readable storage medium. The machine-readable medium may include, but is not limited to, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, or device, or

any suitable combination of the foregoing. More specific examples of the machine-readable storage medium would include an electrical connection on the basis of one or more wires, a portable computer disk, a hard disk, a random access memory (RAM), a read-only memory (ROM), an erasable programmable read-only memory (EPROM or flash memory), an optical fiber, a portable compact disk read-only memory (CD-ROM), an optical storage device, a magnetic storage device, or any suitable combination of the foregoing.

[0147] The above description only illustrates preferred embodiments of the present disclosure and applied technical principles. Those skilled in the art should understand that the disclosed scope involved in the present disclosure is not limited to the technical solutions formed by the specific combination of the above technical features, and should also cover other technical solutions formed by any combination of the above technical features or equivalent features thereof without departing from the above disclosed concept. For example, the above features and the technical features provided in the present disclosure (but not limited to) with similar functions may be replaced each other to form a technical solution.

[0148] Furthermore, although the various operations are depicted in a particular order, this should not be understood as requiring the operations to be performed in the particular order shown or in a sequential order. Under certain circumstances, multitasking and parallel processing may be advantageous. Likewise, although several specific implementation details are included in the above discussion, these should not be construed as limiting the scope of the present disclosure. Certain features described in the context of separate embodiments may also be implemented in combination in a single embodiment. Conversely, various features described in the context of a single embodiment may also be implemented in multiple embodiments individually or in any suitable sub-combination.

[0149] Although the subject matter has been described in a language specific to structural features and/or method logic actions, it should be understood that the subject matter defined in the appended claims is not necessarily limited to the specific features or actions described above. Conversely, the specific features and actions described above are merely exemplary forms for implementing the claims.

CLAIMS

1. An interaction method, comprising:

displaying, in response to a preset trigger instruction, multimedia information corresponding to a first media identification in a media display area of a preset page and displaying a target object set in an object display area of the preset page, wherein the first media identification is one candidate media identification displayed in an identification aggregation area of the preset page, and the target object set is determined based on objects corresponding to candidate media identifications in the identification aggregation area; and

determining, in response to a switching instruction for a candidate media identification in the identification aggregation area, the candidate media identification for which the switching instruction is provided as a second media identification, and switching the multimedia information displayed in the media display area from the multimedia information corresponding to the first media identification to multimedia information corresponding to the second media identification.

2. The method of claim 1, wherein the target object set comprises at least one selected from a group consisting of a first target object and a second target object, and in a case wherein the multimedia information displayed in the media display area is the multimedia information corresponding to the first media identification, the first target object is determined based on an object corresponding to the first media identification, and the second target object is determined based on objects corresponding to candidate media identifications other than the first media identification among all candidate media identifications in the identification aggregation area; and

after the multimedia information displayed in the media display area is switched from the multimedia information corresponding to the first media identification to the multimedia information corresponding to the second media identification, the method further comprises:

updating the target object set displayed in the object display area, wherein the target object set that is updated comprises at least one selected from a group consisting of a first target object re-determined based on an object corresponding to the second media identification, and a second target object re-determined based on objects corresponding to candidate media identifications other than the second media identification among all candidate media identifications in the identification aggregation area.

3. The method of claim 1 or 2, wherein the multimedia information comprises at least one of a video, an image, or live stream.

4. The method of claim 3, wherein when the multimedia information is live stream, the objects comprise objects in a live interaction channel to which the live stream belongs, and the target object set comprises at least one selected from a group consisting of a first type of target object set and a second type of target object set, the first type of target object set comprises historical display objects, and the second type of target object set comprises current display objects.

5. The method of claim 4, further comprising:
displaying a first set identification and a second set identification in the object display area,
wherein the first type of target object set is displayed in the object display area in a case that the first set identification is in a selected state, and
the second type of target object set is displayed in the object display area in a case that the second set identification is in the selected state.

6. The method of claim 4, further comprising:
displaying a corresponding preset control in an association area of each of the historical display objects in the first type of target object set; and
adding, in response to a first preset operation for a preset control corresponding to a target historical display object, the target historical display object to a preset object set, wherein objects in the preset object set are objects to be acquired, and the target historical display object is one of the historical display objects in the first type of target object set.

7. The method of any of claims 4 to 6, wherein displaying the target object set in the object display area of the preset page comprises:
displaying the current display objects in the second type of target object set in the object display area; and
the method further comprises:
displaying, in response to a second preset operation for a target current display object, a first live interaction channel page corresponding to the target current display object, and displaying a first object detail page of the target current display object on an upper layer of the first live interaction channel page, wherein a size of the first object detail page is smaller than a size of the first live interaction channel page, and the target current display object is one of the current display objects in the second type of target object set.

8. The method of any of claims 1 to 7, wherein at least one selected from a group consisting of the objects comprised in the target object set and a display sequence of the objects in the target object set is determined based on a preset attribute of the objects, wherein the preset attribute of the objects comprises at least one selected from a group consisting of: an historical interaction operation associated with the objects, historical business data of the objects, and historical evaluation data of the objects.

9. The method of any of claims 1 to 8, further comprising:
gradually increasing a display area of the object display area in response to a third preset operation input based on the preset page, and continuing to gradually increase the display area of the object display area to display an object set page when a spacing between a preset boundary of the object display area and an edge of a preset screen

is less than a preset distance threshold, wherein the target object set is displayed in the object set page, and a count of the objects in the target object set displayed in the object set page is greater than a count of the objects in the target object set displayed in the preset page.

10. The method of any of claims 1 to 9, wherein displaying the multimedia information corresponding to the first media identification in the media display area of the preset page comprises:

displaying an association image of a target live interaction channel corresponding to the first media identification in the media display area of the preset page, wherein the target live interaction channel is in an off-air state; and

the method further comprises:

displaying a reservation control corresponding to the target live interaction channel in the media display area; generating, in response to a trigger operation for the reservation control, a reservation record for the target live interaction channel;

displaying, in a process of displaying a target page, live interaction starting reminder information based on the reservation record in response to a live interaction reminder event of the target live interaction channel being triggered; and

switching from displaying the target page to displaying the preset page in response to a trigger operation for the live interaction starting reminder information and displaying live stream of the target live interaction channel in the media display area in the preset page.

11. The method of claim 3, wherein when the multimedia information is live stream, a target object identification is further displayed in the media display area, and the target object identification comprises object information of an object in explanation in the live interaction channel to which the live stream displayed in the media display area belongs; and

the method further comprises:

displaying, in response to a fourth preset operation for the target object identification, a second live interaction channel page corresponding to the object in explanation, and displaying a second object detail page of the object in explanation on an upper layer of the second live interaction channel page, wherein a size of the second object detail page is smaller than a size of the second live interaction channel page.

12. An interaction apparatus, comprising:

a page display module configured to display, in response to a preset trigger instruction, multimedia information corresponding to a first media identification in a media display area of a preset page and display a target object set in an object display area of the preset page, wherein the first media identification is one candidate media identification displayed in an identification aggregation area of the preset page, and the target object set is determined based on objects corresponding to candidate media identifications in the identification aggregation area; and

a switching module configured to determine, in response to a switching instruction for a candidate media identification in the identification aggregation area, the candidate media identification for which the switching instruction is provided as a second media identification, and switch the multimedia information displayed in the media display area from the multimedia information corresponding to the first media identification to multimedia information corresponding to the second media identification.

13. An electronic device, comprising:

one or more processors; and

a storage apparatus configured to store one or more programs, wherein

the one or more programs, when executed by the one or more processors, cause the one or more processors to implement the interaction method of any one of claims 1 to 11.

14. A storage medium comprising computer-executable instructions that, when executed by a computer processor, are configured to perform the interaction method of any of claims 1 to 11.