

INFORMATION INTERACTION METHOD AND APPARATUS, ELECTRONIC DEVICE, STORAGE MEDIUM AND PROGRAM PRODUCT

[0001] The present application claims priority to Chinese Patent Application No. 202411322373.0, filed on September 20, 2024, which is incorporated herein by reference in its entirety as a part of the present application.

TECHNICAL FIELD

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

BACKGROUND

[0003] With the development of the Internet and streaming media technologies, livestream, as a social method with strong real-time and interactive characteristics, is widely favored by users. In livestream applications, the content presented in different livestream interfaces is often diverse. In practical applications, a livestream interface that meets the requirements is usually selected by searching for the content.

[0004] In the related art, search information is matched with a title or a picture of a livestream interface to obtain a livestream interface that matches the search information. Since the picture of the livestream interface comes from a live video stream, the content of the picture will change, and search results at different times may be different. Moreover, in the case where the title of the livestream interface is inaccurately expressed, the searched livestream interface may not match the search information, or a livestream interface with high relatedness with the search information may not be matched. If the specific content presented in the livestream interface needs to be searched, a secondary search is often required on the page presenting the searched object in the livestream interface. This content search method is cumbersome to operate, and the content search efficiency is low, which affects the information interaction experience in the livestream content search scenario.

SUMMARY

[0005] The present disclosure provides an information interaction method and apparatus, an electronic device, a storage medium, and a program product.

[0006] An embodiment of the present disclosure provides an information interaction method. The method includes:

- [0007] acquiring, in response to an object search request, object search information corresponding to the object search request, and displaying a livestream interface entrance of at least one livestream interface associated with the object search information, where a livestream display object associated with the livestream interface includes a target search object associated with the object search information;
- [0008] displaying, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered; and
- [0009] receiving, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, displaying an object display page in the livestream page, and displaying, in the object display page, search feedback information corresponding to the target search object.
- [0010] An embodiment of the present disclosure also provides an information interaction apparatus. The apparatus includes:
- [0011] an object search request module, configured to acquire, in response to an object search request, object search information corresponding to the object search request and display a livestream interface entrance of at least one livestream interface associated with the object search information, where a livestream display object associated with the livestream interface includes a target search object associated with the object search information;
- [0012] a livestream page display module, configured to display, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered; and
- [0013] a search result feedback module configured to receive, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, display an object display page in the livestream page, and display, in the object display page, search feedback information corresponding to the target search object.
- [0014] An embodiment of the present disclosure also provides an electronic device. The electronic device includes:
- [0015] one or more processors; and
- [0016] a memory configured to store one or more programs,
- [0017] where the one or more programs, when executed by the one or more processors, cause the one or more processors to implement the information interaction method according to any one of the embodiments of the present disclosure.
- [0018] An embodiment of the present disclosure also provides a storage medium including computer-executable instructions which, when executed by a computer processor, are configured to perform the information interaction method according to any one of the embodiments of the present disclosure.

[0019] An embodiment of the present disclosure also provides a computer program product including a computer program which, when executed by a processor, implements the information interaction method according to any one of the embodiments of the present disclosure.

BRIEF DESCRIPTION OF DRAWINGS

[0020] The foregoing and other features and advantages of the embodiments of the present disclosure become more apparent with reference to the following specific implementations and in conjunction with the drawings. Throughout the drawings, the same or similar reference numerals denote the same or similar elements. It should be understood that the drawings are schematic and that parts and elements are not necessarily drawn to scale.

[0021] Fig. 1A is a schematic flowchart of an information interaction method according to an embodiment of the present disclosure;

[0022] Fig. 1B is a schematic diagram of an information interaction interface for an information interaction method according to an embodiment of the present disclosure;

[0023] Fig. 2A is a schematic flowchart of another information interaction method according to an embodiment of the present disclosure;

[0024] Fig. 2B is a schematic diagram of another information interaction interface for an information interaction method according to an embodiment of the present disclosure;

[0025] Fig. 3A is a schematic flowchart of an information interaction method according to an embodiment of the present disclosure;

[0026] Fig. 3B is a schematic diagram of an object display page for an information interaction method according to an embodiment of the present disclosure;

[0027] Fig. 4 is a schematic diagram of a structure of an information interaction apparatus according to an embodiment of the present disclosure; and

[0028] Fig. 5 is a schematic diagram of a structure of an electronic device according to an embodiment of the present disclosure.

DETAILED DESCRIPTION

[0029] Embodiments of the present disclosure are 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 construed as 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.

[0030] It should be understood that various steps described in method implementations of the present disclosure may be performed in different orders and/or in parallel. Furthermore, the method implementations may include additional steps and/or omit the steps shown. The scope of the present disclosure is not limited in this respect.

[0031] The term "include/comprise" and its variants used in the present disclosure are open-ended inclusions, that is, "include/comprise but not limited to". The term "based on" is "at least partially based on". The term "an 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.

[0032] 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 the functions performed by these apparatuses, modules, or units.

[0033] It should be noted that the modifiers "a" and "a plurality of" mentioned in the present disclosure are illustrative rather than restrictive, and those skilled in the art should understand that unless otherwise explicitly specified in the context, they should be understood as "one or more".

[0034] The names of messages or information exchanged between a plurality of apparatuses in the implementations of the present disclosure are for illustrative purposes only, and are not intended to limit the scope of these messages or information.

[0035] It may be understood that before the use of the technical solutions disclosed in the embodiments of the present disclosure, users should be informed of the type, range of use, use scenarios, etc., of personal information involved in the present disclosure in an appropriate manner and the authorization of the users should be obtained according to relevant laws and regulations.

[0036] For example, in response to reception of an active request from a user, prompt information is sent to the user to clearly inform the user that the requested operation will require access to and use of the user's personal information. In this way, 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.

[0037] As an optional but non-limiting implementation, in response to the reception of 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 choose whether to "agree" or "disagree" to provide the personal information to the electronic device.

- [0038] It may be understood that the above process of notifying and obtaining user authorization is only illustrative and does not constitute a limitation on the implementations of the present disclosure. Other manners that satisfy the relevant laws and regulations may also be applied to the implementations of the present disclosure.
- [0039] It may be understood that the data involved in the present disclosure (including but not limited to the data itself, acquisition or use of the data) should comply with the requirements of corresponding laws, regulations, and related provisions.
- [0040] Fig. 1A is a schematic flowchart of an information interaction method according to an embodiment of the present disclosure. The embodiment of the present disclosure is applicable to the case of searching for a livestream display object in a livestream interface. The method may be performed by an information interaction apparatus, which may be implemented in the form of software and/or hardware. Optionally, the information interaction apparatus is implemented by an electronic device, which may be a mobile terminal, a PC, a server, etc.
- [0041] As shown in Fig. 1A, the method in this embodiment may specifically include the following steps.
- [0042] S110: acquiring, in response to an object search request, object search information corresponding to the object search request, and displaying a livestream interface entrance of at least one livestream interface associated with the object search information, where a livestream display object associated with the livestream interface includes a target search object associated with the object search information.
- [0043] In the embodiment of the present disclosure, the object search request may be understood as a request to search for a target search object associated with the object search information from the livestream display object associated with the livestream interface. The object search information may be understood as search information carried in the object search request. More specifically, the object search information may be a sentence or a keyword that is set for searching the target search object. The target search object may be understood as a livestream display object associated with the object search information.
- [0044] As an optional implementation of the embodiment of the present disclosure, before acquiring, in response to the object search request, the object search information corresponding to the object search request, the method also includes: displaying a search interface, where the search interface includes at least a search box and a search trigger control; displaying, in response to a search setting operation for the search box, the object search information that is set in the search box; and generating, in response to a control trigger operation for the search trigger control, the object search request based on the object search information. The search setting operation for the search box may be an operation of filling in the object search information in the search box through a character input apparatus or an operation of filling in the object search information in the search box through an information selection operation for candidate search information. The candidate search information may be search record information within a preset time period or preset search options. The preset search options may specifically be object type identifiers.

[0045] In the embodiment of the present disclosure, the at least one livestream interface associated with the object search information may be understood as a livestream interface including a target search object that matches the object search information. In practical applications, the livestream interface may include one or more livestream display objects, and the target search object associated with the object search information may or may not exist among the livestream display objects. Through the object search information, a livestream interface of which the livestream display object includes the target search object associated with the object search information, that is, the livestream interface associated with the object search information, may be effectively selected, and the livestream interface entrance of the livestream interface is displayed, so as to enter the livestream interface to view the target search object.

[0046] The livestream interface may be understood as a virtual room for displaying a live video stream, which is determined based on a stream ingestion address of the live video stream. The livestream interface entrance may be understood as a control for entering the livestream interface. Exemplarily, the livestream interface entrance may be a link to enter the livestream interface. The link to enter the livestream interface may be presented in the form of an image and/or text, or may be presented through a livestream preview window. The livestream content in the livestream interface may be played synchronously in the livestream preview window.

[0047] In short, the livestream interface entrance of one or more livestream interfaces associated with the object search information may be presented on a target interface. The livestream interface entrance may be presented in one or more of the forms of a button, a link, a picture, a floating window, etc., to guide the entry into a specific livestream interface. The livestream interface entrance usually includes some basic information of the livestream interface, such as the name, a cover picture, and a tag of the livestream interface, so as to have a preliminary understanding of the livestream content of the livestream interface.

[0048] Specifically, in response to the object search request, the object search information corresponding to the object search request is acquired, the at least one livestream interface associated with the object search information is determined, and the livestream interface entrance of the livestream interface is displayed. Optionally, the determining at least one livestream interface associated with the object search information includes: determining a livestream interface that is currently livestream, and acquiring a livestream display object associated with the livestream interface, determining a target search object in the livestream display object based on the object search information, and determining a livestream interface that includes the target search object as the livestream interface associated with the object search information.

[0049] In the case where there are a plurality of livestream interfaces associated with the object search information, the plurality of livestream interfaces may be sorted and displayed according to livestream association data of the livestream interfaces. The livestream association data includes at least one of the following information: livestream interface attribute data, a count of the target search objects included, or a relatedness between the target search objects included and the object search information. The livestream interface attribute data may specifically include at least one of the following information: interaction data

with the livestream interface, a count of accounts viewing the livestream interface (including an accumulated count and/or an instantaneous count), a livestream duration, a livestream topic, volume of interaction information, livestream feedback information, a livestream account level, or livestream category information. The livestream feedback information may be understood as feedback information for the livestream content of the livestream interface.

[0050] S120: displaying, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered.

[0051] The entrance trigger operation may be understood as an operation of triggering the livestream interface entrance to enter the livestream interface. For example, the entrance trigger operation may be an operation of clicking on the livestream interface entrance. The livestream page may be understood as a page that presents the livestream content of the livestream interface. The livestream page may include a livestream display object. Optionally, the livestream display object may be at least one of the following objects that may be displayed in the livestream interface: an object in a video picture of a live video stream, an object interacting with an object in the live video stream (such as an effect or interaction information), and an object (such as a recommended item in the livestream interface) associated with the livestream interface through a preset association manner (such as binding an object link).

[0052] Specifically, the entrance trigger operation (such as an entrance click operation) may be detected, and after the entrance trigger operation is received, the livestream interface entrance to which the entrance trigger operation applies is acquired. Then, livestream interface information related to the livestream interface is acquired based on information (such as a livestream interface identifier and/or a uniform resource locator of the livestream interface) included in the livestream interface entrance. Then, the acquired livestream interface information is used to load and display the livestream page corresponding to the livestream interface. The livestream page may include one or more livestream associated components, such as a live video stream, a chat room, an object display list of livestream display objects, and streamer information, to provide a rich livestream experience.

[0053] S130: receiving, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, displaying an object display page in the livestream page, and displaying, in the object display page, search feedback information corresponding to the target search object.

[0054] As mentioned above, the livestream display object in the livestream interface may include one or more target search objects. That is, the count of the target search object associated with the livestream interface may be one or more. Different counts of target search objects may be displayed in different manners. The preset count may be a natural number greater than 1. The specific value of the preset count may be set according to actual requirements, and is not specifically limited herein. For example, the preset count may be 3, 4, or 5.

[0055] In the embodiment of the present disclosure, the object display request may be understood as a trigger request for displaying the target search object. The object display page is at least used to display the target search object. Optionally, the object display page includes a livestream object list. That is, the object display page may also be used to display the livestream object list. The livestream object list may be specifically used to display an object access entrance of the livestream display object. The search feedback information corresponding to the target search object may be understood as information for identifying the searched target search object. Exemplarily, the search feedback information may include a search feedback identifier and/or a search result list. The search result list may include object access entrances of a plurality of target search objects. The object access entrance may be understood as an entrance for accessing object detailed information of the target search object.

[0056] It should be noted that there may be one or more pieces of search feedback information corresponding to the plurality of target search objects. Exemplarily, the search feedback information corresponding to the plurality of target search objects may be a collection access entrance for accessing an object collection of the plurality of target search objects, or in other words, an entrance that is triggered to display the object access entrances of the plurality of target search objects. The search feedback information corresponding to the target search object may also be an object access entrance corresponding to each target search object, respectively.

[0057] As an optional implementation of the embodiment of the present disclosure, in the case where there are a plurality of pieces of search feedback information corresponding to the target search object, a display order of the plurality of pieces of search feedback information is determined based on sorting reference information. The sorting reference information may be preset information for determining the display order of the search feedback information. Exemplarily, the sorting reference information includes at least one of the following data: a relatedness between the target search object and the object search information, object attribute data of the target search object, first interaction data corresponding to the target search object, or second interaction data for an associated object of the target search object.

[0058] The relatedness between the target search object and the object search information may be determined by a similarity between object attribute information of the target search object and search feature information of the object search information. Specifically, the search feature information may be determined based on the object search information, where the search feature information may include at least one of the following feature keywords: a category, a color, a model, a size, a region, or a shape, of an object to be searched. Then, object attribute information of the livestream display object in the livestream interface is acquired based on the search feature information, and the search feature information is matched with the object attribute information to determine a relatedness between the livestream display object and the object search information. Then, the target search object and the relatedness between the target search object and the object search information are determined based on the relatedness between the livestream display object and the object search information. For example, the higher the relatedness between the target search object

and the object search information, the higher the ranking, and the easier it is for the target search object to be seen.

[0059] The first interaction data corresponding to the target search object may be at least one of the following data: click data, collection data, object transfer data, or feedback data, for the target search object. The associated object of the target search object may be a livestream display object that has at least part of the same object attribute data as the target search object, or a livestream display object that has a preset interaction operation within a preset time period, etc.

[0060] As an optional implementation of the embodiment of the present disclosure, after displaying the livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered, the method also includes: displaying, in response to the count of the target search object not reaching the preset count, the search feedback information for the target search object in the livestream page. With the present disclosure, in the case where the count of the target search object is small, the search feedback information for the target search object may be displayed in the livestream page. In this manner, the search feedback information for the target search object may be obtained intuitively, quickly, and conveniently without additional interaction operations, thus improving the information interaction experience.

[0061] Optionally, in response to the count of the target search object not reaching the preset count, a target count of target search objects to be displayed may be determined from the target search objects, and then the object access entrance of the target search object may be displayed at a target position (such as the lower right corner, the lower left corner, the upper right corner, or the middle area) in the livestream page.

[0062] Specifically, the determining a target count of a target search object to be displayed from the target search object includes: in the case where the count of the target search object is one, determining the one target search object as the target search object to be displayed; and in the case where there are a plurality of target search objects and the count of the target search object does not reach the preset count, selecting, based on object association information of the plurality of target search objects, the target search object to be displayed from the plurality of target search objects. The object association information of the target search object includes at least one of the following data: a relatedness between the target search object and the object search information, object attribute data of the target search object, first interaction data corresponding to the target search object, or second interaction data for an associated object of the target search object.

[0063] As an optional example of the embodiment of the present disclosure, as shown in Fig. 1B, the target interface 10 includes a display region 101 of a search box, a display region 102 of a search request control, and a display region 103 for displaying one or more category labels corresponding to media content displayable in the target interface 10. In the case where the search box is filled with object search information, the media content corresponding to a selected label may be presented by clicking on the search request control. In the embodiment of the present disclosure, the category labels corresponding to the media

content include at least a livestream category. In the case where the category label of the livestream category is selected, livestream interface information associated with the object search information is presented in the target interface 10. Specifically, a livestream interface identifier (such as a livestream interface name or a livestream interface account) of a livestream interface associated with the object search information may be displayed in a display region 104 of the target interface 10, a livestream window of the livestream interface may be displayed in a display region 105 of the target interface 10, and livestream content of the livestream interface is displayed in the livestream window. Then, the livestream page 20 of the livestream interface may be entered by clicking on the livestream window.

[0064] The livestream interface identifier is presented in a display region 201 of the livestream page 20, and picture content corresponding to a live video stream is presented in a display region 202 of the livestream page 20. In the case where the count of the target search object in the livestream interface is less than the preset count, one target search object to be displayed may be determined, and then a list access entrance of the target search object is displayed in a display region 203 of the livestream page 20, and a search feedback identifier, for example, "just searched", is displayed in a display region 204, which is used to prompt that the livestream display object displayed in the display region 203 is the target search object. Then, the object display page 30 may be displayed in the livestream page 20 by triggering the list access entrance, which is displayed in the display region 203, of the target search object. At this time, the object display page 30 may include a plurality of regions for displaying livestream display objects. The object access entrance corresponding to the target search object may be displayed in a display region 301 of the object display page 30. The search feedback identifier, for example, "just searched", is displayed in a display region 302 of the object display page 30, which is used to prompt that the livestream display object displayed in the display region 301 is the target search object. The object detailed page of the target search object may be jumped to by triggering the object access entrance corresponding to the target search object. The livestream display object being explained in the livestream interface or the livestream display object ranked first may also be displayed in a display region 303 of the object display page 30.

[0065] According to the technical solution of the embodiment of the present disclosure, the object search information corresponding to the object search request is acquired in response to the object search request, and the livestream interface entrance of the at least one livestream interface, of which the livestream display object includes the target search object associated with the object search information, is displayed, the livestream interface including the target search object associated with the object search information may be quickly located through the object search request for selection, which enriches the search manners of the livestream interface and improves the matching degree between the displayed livestream interface and the search expectation. Then, the livestream page of the livestream interface corresponding to the triggered livestream interface entrance is displayed in response to the entrance trigger operation for the livestream interface entrance, the livestream interface may be entered conveniently and quickly through the livestream interface entrance, so as to know the livestream content more comprehensively. Then, in response to the

count of the target search object associated with the livestream interface reaching the preset count, the object display request is received through the livestream page, the object display page is displayed in the livestream page, and the search feedback information corresponding to the target search object is displayed in the object display page, the display of the target search objects greater than or equal to the preset count is supported, that is, the display of the plurality of target search objects is supported, and the target search objects are displayed through the object display page, the target search objects may be displayed through one search without changing the original presentation logic of the livestream page, which solves the technical problems of inaccurate search results and low search efficiency of the livestream content in the livestream content search scenario in the related technologies, realizes the precise search for the livestream interface and the target search objects, improves the search efficiency, simplifies the search process for the livestream display objects associated with the livestream interface, and improves the information interaction experience in the livestream content search scenario.

[0066] Fig. 2A is a schematic flowchart of another information interaction method according to an embodiment of the present disclosure. On the basis of the preceding embodiment, the technical solution of the present embodiment further specifies the display manner of the search feedback information corresponding to the target search object in the object display page. Optionally, the object display page includes a livestream object list, and the livestream object list is configured to display an object access entrance of the livestream display object; and the displaying in the object display page the search feedback information corresponding to the target search object includes: displaying the search feedback information corresponding to the target search object at a target position in the livestream object list of the object display page. Reference may be made to the description of the present embodiment for specific implementations. Technical features identical to or similar to those in the preceding embodiment are not repeated herein.

[0067] As shown in Fig. 2A, the method of the present embodiment may specifically include the steps described below.

[0068] S210: acquiring, in response to an object search request, object search information corresponding to the object search request, and displaying a livestream interface entrance of at least one livestream interface associated with the object search information, where a livestream display object associated with the livestream interface includes a target search object associated with the object search information.

[0069] S220: displaying, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered.

[0070] S230: receiving, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, and displaying an object display page in the livestream page, where the object display page includes a livestream object list, and the livestream object list is configured to display an object access entrance of the livestream display object.

- [0071] In the embodiment of the present disclosure, the livestream object list is configured to present object access entrances of all the livestream display objects in the livestream interface. The display order of the plurality of livestream display objects in the livestream object list may be determined by an adding order of the livestream display objects and/or an order adjustment operation for the display order of the at least one livestream display object.
- [0072] S240: displaying the search feedback information corresponding to the target search object at a target position in the livestream object list of the object display page.
- [0073] As mentioned above, the search feedback information corresponding to the target search object may be search feedback information corresponding to one or more target search objects. In the embodiment of the present disclosure, the search feedback information corresponding to the target search object may include a search feedback identifier corresponding to the plurality of target search objects and an object access entrance corresponding to each of the target search objects. The search feedback identifier and the object access entrance corresponding to the target search object may be displayed at the same time, or the object access entrance corresponding to the target search object may be displayed by triggering the search feedback identifier.
- [0074] As an optional technical solution of the embodiment of the present disclosure, in the case where the search feedback information includes the object access entrance, the displaying the search feedback information corresponding to the target search object at a target position in the livestream object list of the object display page may include: adjusting an object access entrance corresponding to the target search object in the livestream object list of the object display page, to a preset position in the livestream object list for display. That is, the display position, in the livestream object list, of the object access entrance corresponding to the target search object in the livestream object list is adjusted, such that the object access entrance corresponding to the target search object is located at the target position in the livestream object list. Exemplarily, the object access entrances of the plurality of target search objects may be adjusted to be arranged and presented one by one from the second display position in the livestream object list, that is, the object access entrances of the plurality of target search objects are inserted into the second display position and the display positions after the second display position for display. For example, the livestream object list includes 30 livestream objects, and the livestream display object includes four target search objects. The four target search objects may be displayed at the second to fifth display positions in the livestream object list.
- [0075] As another optional technical solution of the embodiment of the present disclosure, in the case where the search feedback information includes the object access entrance, the displaying the search feedback information corresponding to the target search object at a target position in the livestream object list of the object display page may include: generating a search object list based on object access entrances of a plurality of target search objects, and inserting the search object list into the target position in the livestream object list for display. Optionally, an arrangement direction of target object identifiers of the

plurality of target search objects in the search object list may be perpendicular to an arrangement direction of the object access entrance of the livestream display object in the livestream object list. With the present disclosure, the display positions, in the livestream object list, the search feedback information for the target search objects may be reduced, the search feedback information for the target search objects may be displayed distinctively, and the original layout of the livestream display objects in the livestream display object may be maintained to a great extent.

[0076] Further, the generating a search object list based on the object access entrances of the plurality of target search objects includes: for each target search object, generating a target object identifier corresponding to the target search object based on object display information of the target search object in the livestream object list, and then generating the search object list based on the target object identifiers corresponding to the plurality of target search objects. Exemplarily, the object display information of the target search object in the livestream object list may include first object description information and an object access entrance, and the target object identifier includes an object image of the target search object and/or second object description information. On this basis, the generating the target object identifier corresponding to the target search object based on the object display information of the target search object in the livestream object list includes: generating the object image corresponding to the target search object based on the object access entrance of the target search object; and/or generating the second object description information corresponding to the target search object based on the first object description information of the target search object, where the information length of the second object description information is shorter than the information length of the first object description information. With the present disclosure, the target search object may be identified briefly and clearly, which is particularly suitable for a mobile terminal with limited display controls, and helps to improve the convenience of information interaction.

[0077] As an optional example of the embodiment of the present disclosure, as shown in Fig. 2B, the target interface 10 includes a display region 101 of a search box, a display region 102 of a search request control, and a display region 103 for displaying one or more category labels corresponding to media content displayable in the target interface 10. In the case where the search box is filled with object search information, the media content corresponding to a selected label may be presented by clicking on the search request control. In the embodiment of the present disclosure, the category labels corresponding to the media content include at least a livestream category. In the case where the category label of the livestream category is selected, livestream interface information associated with the object search information is presented in the target interface 10. Specifically, a livestream interface identification (such as a livestream interface name or a livestream interface account) of a livestream interface associated with the object search information may be displayed in a display region 104 of the target interface 10, a livestream window of the livestream interface may be displayed in a display region 105 of the target interface 10, and livestream content of the

livestream interface is displayed in the livestream window. Then, the livestream page 20 of the livestream interface may be entered by clicking on the livestream window.

[0078] The livestream interface identifier is presented in a display region 201 of the livestream page 20, and picture content corresponding to a live video stream is presented in a display region 202 of the livestream page 20. In the case where the count of target search object in the livestream interface is less than the preset count, one target search object to be displayed may be determined, and then an object access entrance of a livestream display object in a being-explained state, a livestream display object ranked first in the livestream object list, or a livestream display object with the highest interaction volume in the livestream display objects of the livestream interface may be displayed in a display region 203 of the livestream page 20. A preset object display control may also be displayed in the livestream page 20, and the object display page 30 may be displayed in the livestream page 20 by triggering the object display control. At this time, a search object list may be displayed in a display region 304 of the object display page 30, and the search object list may include a sub-display region 3041 for displaying a search feedback identifier and a plurality of sub-display regions 3042 for displaying target object identifiers. The object detailed page of the target search object may be entered by triggering the target object identifier. A preset entrance display control may also be displayed in the display region 304 of the object display page 30, and the display content of the object display page may be updated by triggering the entrance display control (such as "more"). The object access entrance corresponding to the target search object is displayed in a display region 301 of the object display page 30.

[0079] According to the technical solution of the embodiment of the present disclosure, the search feedback information corresponding to the target search object is displayed at the target position in the livestream object list of the object display page, the search feedback information corresponding to the target search object may be displayed without changing the original page display layout of the object display page, which reduces the page development cost. Moreover, the search feedback information corresponding to the target search object is displayed in the livestream object list in which the livestream display object is displayed, which supports the viewing of the livestream display objects other than the target search object, enriches the display content of the object display page, provides more interaction possibilities, and improves the information interaction experience in the object display page.

[0080] Fig. 3A is a schematic flowchart of another information interaction method according to an embodiment of the present disclosure. On the basis of the preceding embodiment, the technical solution of the present embodiment further specifies the display manner of the search feedback information corresponding to the target search object in the object display page. Optionally, the search feedback information includes a search feedback identifier; and the displaying in the object display page the search feedback information corresponding to the target search object includes: displaying a search feedback identifier corresponding to the target search object in the object display page, and displaying a search object list in response to an identifier trigger operation for the search feedback identifier, where the search object

list includes object access entrances corresponding to a plurality of target search objects. Reference may be made to the description of the present embodiment for specific implementations. Technical features identical to or similar to those in the preceding embodiment are not repeated herein.

[0081] As shown in Fig. 3A, the method of the present embodiment may specifically include the steps described below.

[0082] S310: acquiring, in response to an object search request, object search information corresponding to the object search request, and displaying a livestream interface entrance of at least one livestream interface associated with the object search information, where a livestream display object associated with the livestream interface includes a target search object associated with the object search information.

[0083] S320: displaying, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered.

[0084] S330: receiving, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, displaying an object display page in the livestream page, and displaying, in the object display page, a search feedback identifier corresponding to the target search object.

[0085] Optionally, in the case where the object display page includes a livestream object list, the displaying the search feedback identifier corresponding to the target search object in the object display page includes: displaying, in the object display page, the livestream object list, a livestream list identifier corresponding to the livestream object list, and the search feedback identifier corresponding to the target search object. The livestream list identifier corresponding to the livestream object list and the search feedback identifier corresponding to the target search object may be displayed correspondingly. With the present disclosure, when the object display page is opened, the original display content of the object display page may be retained, and the display of the search feedback identifier corresponding to the target search object may be added at the same time. Then, when needed, the object access entrance corresponding to the target search object is displayed by triggering the search feedback identifier.

[0086] As shown in Fig. 3B, the object display page 30 may include an identifier display region, the search feedback identifier corresponding to the target search object may be presented in a sub-display region 305 in the identifier display region, and the livestream list identifier corresponding to the livestream object list may be presented in a sub-display region 306 in the identifier display region. The object access entrance of the target search object in the search object list is displayed in the display region 301 in the case where the search feedback identifier corresponding to the target search object is triggered, and the object access entrance of the livestream display object in the livestream object list is displayed in the display region 301 in the case where the livestream list identifier corresponding to the livestream object list is triggered.

[0087] As an optional implementation of the embodiment of the present disclosure, the displaying the search feedback identifier corresponding to the target search object in the object display page may include:

highlighting the search feedback identifier corresponding to the target search object in the object display page in response to an initial display of the object display page. With the present disclosure, the search feedback identifier corresponding to the target search object may be highlighted, so as to quickly locate the search feedback identifier corresponding to the target search object.

[0088] The highlighting may be displaying the search feedback identifier by using preset display information, and/or adding a preset prominent identifier (such as an underline or a preset identifier pattern) to the search feedback identifier. Specifically, the preset display information may include at least one of the following display information: a preset state (such as a flashing state), a preset format, a preset color, a preset line, and a preset size.

[0089] After the search feedback identifier corresponding to the target search object is highlighted in the object display page, the method also includes: when the object display page is closed and then reopened, canceling the highlighting of the search feedback identifier; or after the duration of highlighting the search feedback identifier reaches a preset duration, canceling the highlighting of the search feedback identifier, etc.

[0090] S340: displaying a search object list in response to an identifier trigger operation for the search feedback identifier, where the search object list includes object access entrances corresponding to a plurality of target search objects.

[0091] The identifier trigger operation for the search feedback identifier may be a click operation for the search feedback identifier. The search object list may be understood as a list used to centrally display the plurality of target search objects. Specifically, the search object list includes the object access entrances corresponding to the plurality of target search objects.

[0092] As an optional implementation of the embodiment of the present disclosure, optionally, in the case where the livestream object list is displayed in the object display page, the livestream object list displayed in the object display page is switched to the search object list. Specifically, the livestream object list displayed in the object display page is overwritten with the search object list, or the livestream object list displayed in the object display page is deleted and then the livestream object list is displayed in the object display page. In this manner, the search object list may be highlighted in the object display page, and the target search object may be displayed as clearly as possible, so as to quickly locate the target search object in the search object list.

[0093] As another optional implementation of the embodiment of the present disclosure, optionally, in the case where the livestream object list is displayed in the object display page, the livestream object list and the search object list are correspondingly displayed in the object display page. In this manner, the livestream object list and the search object list may be simultaneously displayed in the object display page, that is, the livestream display object and the target search object may be distinctively displayed, and the interaction with the livestream display object and the target search object is also supported, which enriches the display content and interaction content in the object display page.

[0094] Exemplarily, the correspondingly displaying the livestream object list and the search object list in the object display page may include: displaying the livestream object list in a first display region in the object display page, and displaying the search object list in a second display region in the object display page. The first display region and the second display region may be independent regions in the object display page. It may be understood that the display size and/or display position of the first display region and the display size and/or display position of the second display region may be set according to actual requirements, which are not specifically limited herein. For example, the first display region and the second display region may be arranged left and right or up and down in the object display page.

[0095] As an optional implementation of the embodiment of the present disclosure, in the case where the object display page is displayed for the first time after the object search request is responded to, the search object list may be generated based on the object access entrances of the plurality of target search objects, the search object list is inserted into the target position in the livestream object list for display, and the arrangement direction of the target object identifiers of the plurality of target search objects in the search object list is perpendicular to the arrangement direction of the object access entrance of the livestream display object in the livestream object list for display. In the case where the object display page is displayed again, the search feedback identifier corresponding to the target search object may be displayed in the object display page, and the search object list is displayed in response to the identifier trigger operation for the search feedback identifier, where the search object list includes the object access entrances corresponding to the plurality of target search objects.

[0096] According to the technical solution of the embodiment of the present disclosure, the search feedback identifier corresponding to the target search object is displayed in the object display page, that is, the search feedback identifier is added to the object display page to identify the search result. Since the display space occupied by the search feedback identifier is smaller than the space occupied by displaying the searched target search object, the manner of displaying the search feedback identifier in the object display page may increase the display of the search result of the target search object while ensuring the original layout of the object display page as much as possible. Then, the search object list including the object access entrances corresponding to the plurality of target search objects is displayed in response to the identifier trigger operation for the search feedback identifier, the object access entrance of the target search object may be quickly and conveniently accessed by triggering the search feedback identifier, which realizes the flexible display of the target search object on demand and improves the access experience of the target search object.

[0097] Fig. 4 is a schematic diagram of a structure of an information interaction apparatus according to an embodiment of the present disclosure. As shown in Fig. 4, the information interaction apparatus includes an object search request module 410, a livestream page display module 420, and a search result feedback module 430. The object search request module 410 is configured to acquire, in response to an object search request, object search information corresponding to the object search request and display a livestream

interface entrance of at least one livestream interface associated with the object search information, where a livestream display object associated with the livestream interface includes a target search object associated with the object search information. The livestream page display module 420 is configured to display, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered. The search result feedback module 430 is configured to receive, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, display an object display page in the livestream page, and display, in the object display page, search feedback information corresponding to the target search object.

[0098] According to the technical solution of the embodiment of the present disclosure, the object search request module 410 acquires the object search information corresponding to the object search request in response to the object search request and displays the livestream interface entrance of the at least one livestream interface, of which the livestream display object includes the target search object associated with the object search information, the livestream interface including the target search object associated with the object search information may be quickly located through the object search request for selection, which enriches the search manners of the livestream interface and improves the matching degree between the displayed livestream interface and the search expectation. Then, the livestream page display module 420 displays the livestream page of the livestream interface corresponding to the triggered livestream interface entrance in response to the entrance trigger operation for the livestream interface entrance, the livestream interface may be entered conveniently and quickly through the livestream interface entrance, so as to know the livestream content more comprehensively. Then, the search result feedback module 430 receives the object display request through the livestream page in response to the count of the target search object associated with the livestream interface reaching the preset count, displays the object display page in the livestream page, and displays the search feedback information corresponding to the target search object in the object display page, which supports the display of the target search objects greater than or equal to the preset count, that is, supports the display of the plurality of target search objects, and the target search objects are displayed through the object display page, the target search objects may be displayed through one search without changing the original presentation logic of the livestream page, which solves the technical problems of inaccurate search results and low search efficiency of the livestream content in the livestream content search scenario in the related technologies, realizes the precise search for the livestream interface and the target search objects, improves the search efficiency, simplifies the search process for the livestream display objects associated with the livestream interface, and improves the information interaction experience in the livestream content search scenario.

[0099] On the basis of any preceding optional technical solution, optionally, the object display page includes a livestream object list, and the livestream object list is configured to display an object access entrance of the livestream display object. Further, the search result feedback module 430 may be further

configured to display the search feedback information corresponding to the target search object at a target position in the livestream object list of the object display page.

[0100] On the basis of any preceding optional technical solution, optionally, the search feedback information includes an object access entrance. On this basis, the search result feedback module 430 may be further configured to: adjust an object access entrance corresponding to the target search object in the livestream object list of the object display page, to a preset position in the livestream object list for display; or generate a search object list based on the object access entrances of the plurality of target search objects and insert the search object list into the target position in the livestream object list for display.

[0101] On the basis of any preceding optional technical solution, optionally, an arrangement direction of target object identifiers of the plurality of target search objects in the search object list is perpendicular to an arrangement direction of the object access entrance of the livestream display object in the livestream object list.

[0102] On the basis of any preceding optional technical solution, optionally, the search feedback information includes a search feedback identifier; further, the search result feedback module 430 may include a search identifier feedback unit and a search list display unit. The search identifier feedback unit is configured to display a search feedback identifier corresponding to the target search object in the object display page. The search list display unit is configured to display a search object list in response to an identifier trigger operation for the search feedback identifier, where the search object list includes object access entrances corresponding to a plurality of target search objects.

[0103] On the basis of any preceding optional technical solution, optionally, the object display page includes a livestream object list, and the livestream object list is configured to display an object access entrance of the livestream display object. On this basis, the search identifier feedback unit may be further configured to display, in the object display page, the livestream object list, a livestream list identifier corresponding to the livestream object list, and the search feedback identifier corresponding to the target search object.

[0104] On the basis of any preceding optional technical solution, optionally, the search list display unit is configured to switch the livestream object list displayed in the object display page to the search object list.

[0105] On the basis of any preceding optional technical solution, optionally, the search identifier feedback unit is further configured to highlight the search feedback identifier corresponding to the target search object in the object display page in response to an initial display of the object display page.

[0106] On the basis of any preceding optional technical solution, optionally, the information interaction apparatus also includes a search object display module. The search object display module is configured to, after the livestream page of the livestream interface corresponding to the triggered livestream interface entrance is displayed, display, in response to the count of the target search object not reaching the preset count, the search feedback information for the target search object in the livestream page.

[0107] On the basis of any preceding optional technical solution, optionally, in the case where there are a plurality of pieces of the search feedback information corresponding to the target search object, a display order of the plurality of pieces of the search feedback information is determined based on sorting reference information, and the sorting reference information includes at least one of the following: a relatedness between the target search object and the object search information, object attribute data of the target search object, first interaction data corresponding to the target search object, or second interaction data for an associated object of the target search object.

[0108] The information interaction apparatus provided by the embodiment of the present disclosure may perform the information interaction method provided by any embodiment of the present disclosure, and has corresponding functional modules and beneficial effects for performing the information interaction method.

[0109] It is worth noting that the units and modules included in the preceding apparatus are only divided according to functional logic, but are not limited to the preceding division, as long as the corresponding functions may be implemented. Additionally, the specific names of the functional units are only for the convenience of distinguishing between each other, and are not used to limit the protection scope of the embodiments of the present disclosure.

[0110] Fig. 5 is a schematic diagram of a structure of an electronic device according to an embodiment of the present disclosure. Reference is made to Fig. 5 below, which illustrates a schematic diagram of a structure of an electronic device (such as a terminal device or a server in Fig. 5) 500 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 notebook computer, a digital broadcast receiver, a personal digital assistant (PDA), a tablet computer (PAD), a portable media player (PMP), and a vehicle-mounted terminal (such as a vehicle navigation terminal), and fixed terminals such as a digital TV and a desktop computer. The electronic device shown in Fig. 5 is only an example, and should not impose any limitation on the functions and the range of use of the embodiments of the present disclosure.

[0111] As shown in Fig. 5, the electronic device 500 may include a processor (such as a central processing unit and a graphics processing unit) 501, which may perform various appropriate actions and processing according to a program stored in a read-only memory (ROM) 502 or a program loaded from a memory 508 into a random access memory (RAM) 503. The RAM 503 also stores various programs and data required for the operation of the electronic device 500. The processor 501, the ROM 502, and the RAM 503 are connected to each other through a bus 504. An edit/output (I/O) interface 505 is also connected to the bus 504.

[0112] Usually, the following apparatuses may be connected to the I/O interface 505: an input apparatus 506 including, for example, a touch screen, a touchpad, a keyboard, a mouse, a camera, a microphone, an accelerometer, and a gyroscope; an output apparatus 507 including, for example, a liquid crystal display (LCD), a speaker, and a vibrator; the memory 508 including, for example, a magnetic tape and a hard disk;

and a communication apparatus 509. The communication apparatus 509 may allow the electronic device 500 to perform wireless or wired communication with other devices to exchange data. Although Fig. 5 shows the electronic device 500 having various apparatuses, it should be understood that it is not required to implement or have all the apparatuses shown. More or fewer apparatuses may be implemented or provided alternatively.

[0113] According to the embodiment of the present disclosure, the process described above with reference to the flowchart may be implemented as a computer software program. For example, the embodiment of the present disclosure includes a computer program product, which includes a computer program carried by a non-transitory computer-readable medium, where the computer program contains 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 509, or installed from the memory 508, or installed from the ROM 502. When the computer program is executed by the processor 501, the preceding functions limited in the method of the embodiment of the present disclosure are executed.

[0114] The names of messages or information exchanged between a plurality of apparatuses in the implementations of the present disclosure are for illustrative purposes only, and are not intended to limit the scope of these messages or information.

[0115] The electronic device provided by the embodiment of the present disclosure belongs to the same inventive concept as the information interaction method provided by the preceding embodiment. For the technical details not described in detail in this embodiment, reference may be made to the preceding embodiment, and this embodiment has the same beneficial effects as the preceding embodiment.

[0116] An embodiment of the present disclosure provides a computer storage medium having a computer program stored thereon, where the information interaction method provided by the preceding embodiments is implemented when the program is executed by a processor.

[0117] It should be noted that the preceding 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 electronic, 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 electrically connected portable computer magnetic disk with one or more wires, 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 disc 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 manner 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.

[0118] In some implementations, clients and servers may communicate using any currently known or future developed network protocol, such as the hypertext transfer protocol (HTTP), and may be interconnected with any form or medium of digital data communication (for example, a communication network). Examples of the communication network include a local area network ("LAN"), a wide area network ("WAN"), an internet (for example, the Internet), a peer-to-peer network (for example, an ad hoc network), and any network currently known or to be developed in the future.

[0119] The preceding computer-readable medium may be contained in the electronic device, or may exist alone without being assembled into the electronic device.

[0120] The preceding computer-readable medium carries one or more programs which, when executed by the electronic device, cause the electronic device to perform the following operations: acquiring, in response to an object search request, object search information corresponding to the object search request, and displaying a livestream interface entrance of at least one livestream interface associated with the object search information, where a livestream display object associated with the livestream interface includes a target search object associated with the object search information; displaying, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance; that is triggered and receiving, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, displaying an object display page in the livestream page, and displaying, in the object display page, search feedback information corresponding to the target search object.

[0121] 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 preceding programming languages include but are not limited to object-oriented programming languages such as Java, Smalltalk, and C++, and include conventional procedural programming languages such as "C" language or similar programming languages. The program code may be executed entirely on a user computer, partly on the user computer, as a stand-alone software package, partly on the user computer and partly on a remote computer, or entirely on the remote computer or a server. In the case involving the remote computer, the remote computer may be connected to the user computer 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 using an Internet service provider).

[0122] The flowcharts and block diagrams in the drawings illustrate the possibly implemented architectures, functions, and operations of the system, the method, and the computer program product according to various embodiments of the present disclosure. In this regard, each block in the flowchart or block diagram may represent a module, program segment, or part of code, which contains one or more executable instructions for implementing the specified logical functions. It should also be noted that, in some alternative implementations, the functions marked in the block may also occur in an order different from that marked in the drawings. For example, two blocks shown in succession may actually be executed substantially in parallel, or they may sometimes be executed in the reverse order, depending on the functions involved. It should also be noted that each block in the block diagram and/or the flowchart, and a combination of the blocks in the block diagram and/or the flowchart may be implemented in a special purpose hardware-based system that executes specified functions or operations, or may be implemented in a combination of special purpose hardware and computer instructions.

[0123] The involved units described in the embodiments of the present disclosure may be implemented in a software manner, and may also be implemented in a hardware manner. The name of the unit does not constitute a limitation on the unit itself under certain circumstances, for example, the object search request module may also be described as "a module for displaying a livestream interface entrance associated with object search information".

[0124] The functions described above in the present disclosure may be performed at least partially by one or more hardware logic components. For example, without limitation, exemplary types of hardware logic components that may be used include: a field programmable gate array (FPGA), an application specific integrated circuit (ASIC), an application specific standard product (ASSP), a system on chip (SOC), a complex programmable logical device (CPLD), etc.

[0125] In the context of the present disclosure, a machine-readable medium may be a tangible medium that may contain or store programs 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 thereof. More specific examples of the machine-readable storage medium may include an electrical connection based on one or more lines, 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 disc read-only memory (CD-ROM), an optical storage device, a magnetic storage device, or any suitable combination thereof.

[0126] According to one or more embodiments of the present disclosure, Example 1 provides an information interaction method, including: acquiring, in response to an object search request, object search information corresponding to the object search request and displaying a livestream interface entrance of at least one livestream interface associated with the object search information, where a livestream display

object associated with the livestream interface includes a target search object associated with the object search information; displaying, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered; and receiving, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, displaying an object display page in the livestream page, and displaying, in the object display page, search feedback information corresponding to the target search object.

[0127] According to one or more embodiments of the present disclosure, Example 2 provides the method of Example 1, and the method also includes: optionally, the object display page includes a livestream object list, and the livestream object list is configured to display an object access entrance of the livestream display object; and the displaying in the object display page the search feedback information corresponding to the target search object includes: displaying the search feedback information corresponding to the target search object at a target position in the livestream object list of the object display page.

[0128] According to one or more embodiments of the present disclosure, Example 3 provides the method of Example 2, and the method also includes: optionally, the search feedback information includes an object access entrance; and the displaying the search feedback information corresponding to the target search object at a target position in the livestream object list of the object display page includes: adjusting an object access entrance corresponding to the target search object in the livestream object list of the object display page, to a preset position in the livestream object list for display; or generating a search object list based on object access entrances of a plurality of target search objects and inserting the search object list into the target position in the livestream object list for display.

[0129] According to one or more embodiments of the present disclosure, Example 4 provides the method of Example 3, and the method also includes: optionally, an arrangement direction of target object identifiers of the plurality of target search objects in the search object list is perpendicular to an arrangement direction of the object access entrance of the livestream display object in the livestream object list.

[0130] According to one or more embodiments of the present disclosure, Example 5 provides the method of Example 1, and the method also includes: optionally, the search feedback information includes a search feedback identifier; and the displaying in the object display page the search feedback information corresponding to the target search object includes: displaying a search feedback identifier corresponding to the target search object in the object display page and displaying a search object list in response to an identifier trigger operation for the search feedback identifier, where the search object list includes object access entrances corresponding to a plurality of target search objects.

[0131] According to one or more embodiments of the present disclosure, Example 6 provides the method of Example 5, and the method also includes: optionally, the object display page includes a livestream object list, and the livestream object list is configured to display an object access entrance of the livestream display object; and the displaying the search feedback identifier corresponding to the target search object in the

object display page includes: displaying, in the object display page, the livestream object list, a livestream list identifier corresponding to the livestream object list, and the search feedback identifier corresponding to the target search object.

[0132] According to one or more embodiments of the present disclosure, Example 7 provides the method of Example 6, and the method also includes: optionally, the displaying the search object list includes: switching the livestream object list displayed in the object display page to the search object list.

[0133] According to one or more embodiments of the present disclosure, Example 8 provides the method of Example 5, and the method also includes: optionally, the displaying the search feedback identifier corresponding to the target search object in the object display page includes: highlighting the search feedback identifier corresponding to the target search object in the object display page in response to an initial display of the object display page.

[0134] According to one or more embodiments of the present disclosure, Example 9 provides the method of Example 1, and the method also includes: optionally, after the displaying the livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered, the method also includes: displaying, in response to the count of the target search object not reaching the preset count, the search feedback information for the target search object in the livestream page.

[0135] According to one or more embodiments of the present disclosure, Example 10 provides the method of Example 1, and the method also includes: optionally, in the case where there are a plurality of pieces of the search feedback information corresponding to the target search object, a display order of the plurality of pieces of the search feedback information is determined based on sorting reference information, and the sorting reference information includes at least one of the following: a relatedness between the target search object and the object search information, object attribute data of the target search object, first interaction data corresponding to the target search object, or second interaction data for an associated object of the target search object.

[0136] According to one or more embodiments of the present disclosure, Example 11 provides an information interaction apparatus, including: an object search request module, an object search request module, configured to, in response to an object search request, acquire object search information corresponding to the object search request and display a livestream interface entrance of at least one livestream interface associated with the object search information, where a livestream display object associated with the livestream interface includes a target search object associated with the object search information; a livestream page display module, configured to display, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered; and a search result feedback module, configured to receive, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, display an object display page in the

livestream page, and display, in the object display page, search feedback information corresponding to the target search object.

[0137] The preceding description only illustrates the embodiments of the present disclosure and the technical principles employed. Those skilled in the art should understand that the scope of disclosure involved in the present disclosure is not limited to the technical solutions formed by the specific combination of the preceding technical features, and should also cover, without departing from the preceding disclosed concept, other technical solutions formed by any combination of the preceding technical features or their equivalent features. For example, a technical solution formed by a replacement of the preceding features with technical features with similar functions disclosed in the present disclosure (but not limited thereto) also falls within the scope of the present disclosure.

[0138] Additionally, although operations are depicted in a particular order, it should not be understood that these operations are required to be performed in a specific order as illustrated or in a sequential order. Under certain circumstances, multitasking and parallel processing may be advantageous. Likewise, although the preceding discussion includes several specific implementation details, these should not be interpreted as limitations on the scope of the present disclosure. Certain features that are 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 a plurality of embodiments individually or in any suitable sub-combination.

[0139] Although the present disclosure has been described in a language specific to structural features and/or logical actions of the method, 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 only exemplary forms of implementing the claims.

CLAIMS

1. An information interaction method, comprising:

acquiring, in response to an object search request, object search information corresponding to the object search request, and displaying a livestream interface entrance of at least one livestream interface associated with the object search information, wherein a livestream display object associated with the livestream interface comprises a target search object associated with the object search information;

displaying, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered; and

receiving, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, displaying an object display page in the livestream page, and displaying, in the object display page, search feedback information corresponding to the target search object.

2. The information interaction method of claim 1, wherein the object display page comprises a livestream object list, and the livestream object list is configured to display an object access entrance of the livestream display object; and the displaying, in the object display page, search feedback information corresponding to the target search object, comprises:

displaying the search feedback information corresponding to the target search object at a target position in the livestream object list of the object display page.

3. The information interaction method of claim 2, wherein the search feedback information comprises an object access entrance; and the displaying the search feedback information corresponding to the target search object at a target position in the livestream object list of the object display page, comprises:

adjusting an object access entrance corresponding to the target search object in the livestream object list of the object display page, to a preset position in the livestream object list for display; or

generating a search object list based on object access entrances of a plurality of target search objects, and inserting the search object list into the target position in the livestream object list for display.

4. The information interaction method of claim 3, wherein an arrangement direction of target object identifiers of the plurality of target search objects in the search object list is perpendicular to an arrangement direction of the object access entrance of the livestream display object in the livestream object list.

5. The information interaction method of any one of claims 1 to 3, wherein the search feedback information comprises a search feedback identifier; and the displaying, in the object display page, search feedback information corresponding to the target search object, comprises:

displaying a search feedback identifier corresponding to the target search object in the object display page;
and

displaying a search object list in response to an identifier trigger operation for the search feedback identifier, wherein the search object list comprises object access entrances corresponding to a plurality of target search objects.

6. The information interaction method of claim 5, wherein the object display page comprises a livestream object list, and the livestream object list is configured to display an object access entrance of the livestream display object; and the displaying a search feedback identifier corresponding to the target search object in the object display page, comprises:

displaying, in the object display page, the livestream object list, a livestream list identifier corresponding to the livestream object list, and the search feedback identifier corresponding to the target search object.

7. The information interaction method of claim 6, wherein the displaying a search object list, comprises:
switching the livestream object list displayed in the object display page to the search object list.

8. The information interaction method of any one of claims 5 to 7, wherein the displaying a search feedback identifier corresponding to the target search object in the object display page, comprises:

highlighting the search feedback identifier corresponding to the target search object in the object display page in response to an initial display of the object display page.

9. The information interaction method of any one of claims 1 to 8, wherein after the displaying a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered, the method further comprises:

displaying, in response to the count of the target search object not reaching the preset count, the search feedback information for the target search object in the livestream page.

10. The information interaction method of any one of claims 1 to 9, wherein in response to a plurality of pieces of the search feedback information corresponding to the target search object being present, a display order of the plurality of pieces of the search feedback information is determined based on sorting reference information, and the sorting reference information comprises at least one of a relatedness between the target search object and the object search information, object attribute data of the target search object, first interaction data corresponding to the target search object, or second interaction data for an associated object of the target search object.

11. An information interaction apparatus, comprising:

an object search request module, configured to acquire, in response to an object search request, object search information corresponding to the object search request, and display a livestream interface entrance of at least one livestream interface associated with the object search information, wherein a livestream display object associated with the livestream interface comprises a target search object associated with the object search information;

a livestream page display module, configured to display, in response to an entrance trigger operation for the livestream interface entrance, a livestream page of the livestream interface corresponding to the livestream interface entrance that is triggered; and

a search result feedback module, configured to receive, in response to a count of the target search object associated with the livestream interface reaching a preset count, an object display request through the livestream page, display an object display page in the livestream page, and display, in the object display page, search feedback information corresponding to the target search object.

12. An electronic device, comprising:

one or more processors; and

a memory storing 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 information interaction method of any one of claims 1 to 10.

13. A storage medium comprising computer-executable instructions which, when executed by a computer processor, are configured to perform the information interaction method of any one of claims 1 to 10.

14. A computer program product comprising a computer program which, when executed by a processor, implements the information interaction method of any one of claims 1 to 10.