LIVE STREAMING PROCESSING METHOD, APPARATUS, DEVICE, AND STORAGE MEDIUM

CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] The present disclosure claims priority to Chinese Patent Application No. 202410813834.8, filed on June 21, 2024 and entitled "LIVE STREAMING PROCESSING METHOD, APPARATUS, DEVICE, AND STORAGE MEDIUM", which is incorporated herein by reference in its entirety.

FIELD

[0002] The present disclosure relates to the field of data processing and, in particular, to a live streaming processing method, an apparatus, a device, and a storage medium.

BACKGROUND

[0003] With the continuous development of network technology, users' requirements for live streaming-related functions become more and more diverse.

SUMMARY

[0004] In order to solve the above technical problems, embodiments of the present disclosure provide a live streaming processing method, an apparatus, a device, and a storage medium.

[0005] In a first aspect, the present disclosure provides a live streaming processing method. The method includes:

displaying a first recommended object page on a first live streaming page, where object information on a recommended object is displayed on the first recommended object page, and the recommended object is in a non-explanation state; and

displaying, in response to an explanation request triggered for the recommended object, first explanation request prompt information for the recommended object on the first recommended object page, where the first explanation request prompt information is used to prompt summary information on explanation requests triggered for the recommended object.

[0006] In an optional implementation, the object information on the recommended object includes an explanation request trigger control, and where displaying, in response to the explanation request triggered for the recommended object, the first explanation request prompt information for the recommended object includes:

displaying, in response to a trigger operation on the explanation request trigger control of the recommended object, the first explanation request prompt information for the recommended object.

[0007] In an optional implementation, displaying, in response to the explanation request triggered for the recommended object, the first explanation request prompt information for the recommended object on the first recommended object page includes:

displaying, in response to the explanation request triggered for the recommended object and a determination that the explanation requests triggered for the recommended object have met a preset condition, the first explanation request prompt information for the recommended object on the first recommended object page, where the preset condition includes that a number of the explanation requests reaches a preset number threshold, and the first explanation request prompt information is used to prompt a total number of the explanation requests triggered for the recommended object.

[0008] In an optional implementation, displaying, in response to the explanation request triggered for the recommended object, the first explanation request prompt information for the recommended object on the first recommended object page includes:

displaying, in response to the explanation request triggered for the recommended object, second explanation request prompt information for the recommended object on the first recommended object page, where the second explanation request prompt information is used to prompt that the explanation request is successfully triggered; and

replacing, in response to a display duration of the second explanation request prompt information reaching a preset duration threshold and a determination that the explanation requests triggered for the recommended object have met a preset condition, a display of the second explanation request prompt information with a display of the first explanation request prompt information, where the preset condition includes that a number of the explanation requests reaches a preset number threshold.

[0009] In an optional implementation, the method further includes:

displaying explanation state prompt information, where the explanation state prompt information is used to prompt that the recommended object enters an explanation state, and the explanation state prompt information is used to trigger a display of the object information on the recommended object.

[0010] In an optional implementation, the method further includes: after displaying the explanation state prompt information,

displaying the first live streaming page, in response to a trigger operation on the explanation state prompt information and a determination that the recommended object is in the explanation state, where the object information on the recommended object in the explanation state is displayed on the first live streaming page.

[0011] In an optional implementation, the method further includes:

in response to determining that the recommended object is not in the explanation state and that the recommended object is in a live streaming display state, displaying the first live streaming page, and displaying an object detail page of the recommended object on the first live streaming page, where object detail information on the recommended object is displayed on the object detail page.

[0012] In an optional implementation, the method further includes:

in response to determining that the recommended object is not in the explanation state, displaying an explanation replay page corresponding to the recommended object, and playing an explanation video of the

recommended object on the explanation replay page.

[0013] In an optional implementation, for the recommended object no explanation replay entrance is displayed on the first live streaming page, and the explanation replay entrance is used to trigger replay of an explanation video.

[0014] In a second aspect, the present disclosure further provides a live streaming processing method. The method includes:

displaying a second recommended object page on a second live streaming page, where object information on a recommended object is displayed on the second recommended object page, and the recommended object is in a non-explanation state; and

displaying explanation request information for the recommended object on the second recommended object page, where the explanation request information is used to represent summary information on explanation requests triggered for the recommended object, and the explanation requests are triggered based on a first live streaming page of the recommended object.

[0015] In an optional implementation, a sorting control is set on the second recommended object page, and the method further includes:

sorting and displaying, in response to a trigger operation on the sorting control, recommended objects on the second recommended object page based on the summary information on the triggered explanation requests.

[0016] In an optional implementation, the summary information on the triggered explanation requests includes a total number of the triggered explanation requests, and sorting and displaying, in response to the trigger operation on the sorting control, the recommended objects on the second recommended object page based on the summary information on the triggered explanation requests includes:

sorting and displaying, in response to the trigger operation on the sorting control, the recommended objects on the second recommended object page in a descending order of the total number of the triggered explanation requests.

[0017] In an optional implementation, the object information on the recommended object includes an explanation control, and the method further includes:

in response to a trigger operation on the explanation control of the recommended object, switching a live streaming state of the recommended object to an explanation state, and sending explanation state prompt information to a user, where the explanation state prompt information is used to prompt that the recommended object enters the explanation state, and the user has triggered an explanation request for the recommended object.

[0018] In a third aspect, the present disclosure provides a live streaming processing apparatus, including:

a first display module, configured to display a first recommended object page on a first live streaming page, where object information on a recommended object is displayed on the first recommended object page, and the recommended object is in a non-explanation state; and

a second display module, configured to display, in response to an explanation request triggered for the recommended object, first explanation request prompt information for the recommended object on the first recommended object page, where the first explanation request prompt information is used to prompt summary information on explanation requests triggered for the recommended object.

[0019] In a fourth aspect, the present disclosure further provides a live streaming processing apparatus. The apparatus includes:

a third display module, configured to display a second recommended object page on a second live streaming page, where object information on a recommended object is displayed on the second recommended object page, and the recommended object is in a non-explanation state; and

a fourth display module, configured to display explanation request information for the recommended object on the second recommended object page, where the explanation request information is used to represent summary information on explanation requests triggered for the recommended object, and the explanation requests are triggered based on a first live streaming page of the recommended object.

[0020] In a fifth aspect, the present disclosure provides a computer-readable storage medium having instructions stored thereon, and the instructions, when executed by a terminal device, cause the terminal device to implement the above method.

[0021] In a sixth aspect, the present disclosure provides a live streaming processing device, including: a memory, a processor, and a computer program stored on the memory and executable on the processor, where the processor, when executing the computer program, implements the above method.

[0022] In a seventh aspect, the present disclosure provides a computer program product, including a computer program or computer instructions, where the computer program or computer instructions, when executed by a processor, implements the above method.

BRIEF DESCRIPTION OF THE DRAWINGS

[0023] The drawings herein, which are incorporated in and constitute a part of this specification, illustrate embodiments consistent with the present disclosure and, together with the description, serve to explain the principles of the present disclosure.

[0024] In order to more clearly explain the technical solutions in the embodiments of the present disclosure or in the prior art, the drawings required in describing the embodiments or the prior art will be briefly introduced below. Obviously, for those of ordinary skill in the art, they may also acquire other drawings according to such drawings without paying any creative effort.

[0025] Fig. 1 is a flowchart of a live streaming processing method according to some embodiments of the present disclosure;

[0026] Fig. 2 is a schematic diagram of a first live streaming page according to some embodiments of the present disclosure;

[0027] Fig. 3 is a schematic diagram of another first live streaming page according to some embodiments of the present disclosure;

[0028] Fig. 4 is a schematic diagram of an explanation replay page according to some embodiments of the present disclosure;

[0029] Fig. 5 is a schematic diagram of an object detail page according to some embodiments of the present disclosure;

[0030] Fig. 6 is a flowchart of another live streaming processing method according to some embodiments of the present disclosure;

[0031] Fig. 7 is a schematic diagram of a second live streaming page according to some embodiments of the present disclosure;

[0032] Fig. 8 is a schematic structural diagram of a live streaming processing apparatus according to some embodiments of the present disclosure;

[0033] Fig. 9 is a schematic structural diagram of another live streaming processing apparatus according to some embodiments of the present disclosure; and

[0034] Fig. 10 is a schematic structural diagram of a live streaming processing apparatus according to some embodiments of the present disclosure.

DETAILED DESCRIPTION OF EMBODIMENTS

[0035] In order to understand the above objects, features and advantages of the present disclosure more clearly, the solutions of the present disclosure will be further described below. It should be noted that the embodiments of the present disclosure and the features in the embodiments may be combined with each other without conflict.

[0036] Many specific details are set forth in the following description to facilitate a full understanding of the present disclosure, but the present disclosure may also be implemented in other ways different from those described herein. Obviously, the described embodiments are part of the embodiments of the present disclosure, but not all of the embodiments.

[0037] The function of requesting explanation refers to a function that a viewer when watching a live streaming may initiate an explanation request for a recommended object of interest in a live streaming room to a streamer.

[0038] At present, after sending the explanation request, the viewer cannot receive a feedback from the streamer side in a timely manner. In addition, after the streamer finishes explaining the recommended object, the viewer is not notified in a timely manner, which affects the user's experience on live streaming interaction. Therefore, how to enrich live streaming-related functions to meet users' growing diverse requirements has become an urgent technical issue that needs to be solved.

[0039] To this end, embodiments of the present disclosure provide a live streaming processing method. Specifically, a first recommended object page is displayed on a first live streaming page, where object

information on a recommended object is displayed on the first recommended object page, the recommended object is a recommended object in a non-explanation state and for which no explanation replay entrance is displayed, and the explanation replay entrance is used to trigger replay of an explanation video. Then, in response to an explanation request triggered for the recommended object, first explanation request prompt information is displayed for the recommended object on the first recommended object page, where the first explanation request prompt information is used to prompt summary information on explanation requests triggered for the recommended object.

[0040] It may be seen that in the embodiments of the present disclosure, in response to the explanation request triggered for the recommended object, the first explanation request prompt information is supported to be displayed on the first recommended object page to prompt the user of the summary information on the explanation requests triggered for the recommended object, thereby enriching functions related to live streaming processing and improving the user's interaction experience.

[0041] Specifically, an embodiment of the present disclosure provides a live streaming processing method, which is applied to a client on a viewer side. Fig. 1 is a flowchart of the live streaming processing method according to the embodiment of the present disclosure, which specifically includes the following steps.

[0042] S101: a first recommended object page is displayed on a first live streaming page.

[0043] Object information on a recommended object is displayed on the first recommended object page, and the recommended object is in a non-explanation state.

[0044] In the embodiment of the present disclosure, the first live streaming page may be a live streaming page of any type of live streaming room. The first live streaming page is used to display a live video stream of the live streaming room, and the first live streaming page is a live streaming page displayed on a device of a viewer.

[0045] In the embodiment of the present disclosure, the first recommended object page is displayed on the first live streaming page, and the first recommended object page is used to display object information on recommended objects in the live streaming room. The first recommended object page may be a recommended object list page, the recommended objects may be live streaming products in a current live streaming room, and the recommended objects include recommended objects in an explanation state and in a non-explanation state. The recommended object in the explanation state refers to a recommended object that is currently being explained in the live streaming room. The recommended object in the non-explanation state refers to a recommended object for which an explanation has been finished or a recommended object for which an explanation has not started in the current live streaming room.

[0046] The recommended object in the non-explanation state in the embodiment of the present disclosure refers to a recommended object in the non-explanation state and for which no explanation replay entrance is displayed in the current live streaming room, that is, the recommended object is in the non-explained state in the current live streaming room. The explanation replay entrance is used to trigger replay of an explanation video for a recommended object for which an explanation has been finished.

[0047] The object information on the recommended object displayed on the first recommended object page

may include at least one of: picture information, name information, resource attribute value, and explanation state information on the recommended object. The resource attribute value is used to represent a price of the recommended object during a period of live streaming, and the explanation state information is used to represent an explanation situation of the recommended object in the current live streaming room.

[0048] Fig. 2 is a schematic diagram of a first live streaming page according to an embodiment of the present disclosure. A first recommended object page 201 is displayed on the first live streaming page, and object information on recommended objects is displayed on the first recommended object page. The object information includes picture information, resource attribute value information, and object name information on a recommended object 202 in the non-explanation state.

[0049] S102: in response to an explanation request triggered for the recommended object in the non-explanation state, first explanation request prompt information is displayed for the recommended object in the non-explanation state on the first recommended object page.

[0050] The first explanation request prompt information is used to prompt summary information on explanation requests triggered for the recommended object in the non-explanation state.

[0051] In the embodiment of the present disclosure, the summary information may include statistical data in various dimensions in a current live streaming room. Specifically, the summary information may be a total number of the viewers in the current live streaming room who trigger the explanation request for the recommended object in the non-explanation state.

[0052] In the embodiment of the present disclosure, the first explanation request prompt information may include quantity information on the viewers who trigger the explanation request for the recommended object in the non-explanation state. Specifically, for example, the first explanation request prompt information may display the quantity information on the viewers who trigger the explanation request for the recommended object in the non-explanation state, or the first explanation request prompt information may include avatar information on the viewers who trigger the explanation request for the recommended object in the non-explanation state. The first explanation request prompt information may be displayed in any display area on the first recommended object page. Specifically, the first explanation request prompt information may be displayed in a display area of the recommended object in the non-explanation state on the first recommended object page. For example, the first explanation request prompt information may be displayed in a display area of the picture information on the recommended object in the non-explanation state.

[0053] In the embodiment of the present disclosure, the explanation request triggered for the recommended object in the non-explanation state may include operations such as a single-click, a double-click, and a long press on the recommended object, and may also include a trigger operation on the explanation request trigger control of the recommended object.

[0054] In an optional implementation, the object information on the recommended object in the non-explanation state is displayed on the first recommended object page, and the object information on the recommended object includes the explanation request trigger control. When the trigger operation on the

explanation request trigger control of the recommended object is received, the first explanation request prompt information is displayed for the recommended object on the first recommended object page. The explanation request trigger control is used to trigger the explanation request for the recommended object. The explanation request trigger control may be displayed in any display area on the first recommended object page. Specifically, the explanation request trigger control may be displayed in the display area of the recommended object on the first recommended object page, for example, the explanation request trigger control is displayed in the display area of the picture information on the recommended object.

[0055] On the first live streaming page as shown in Fig. 2, the explanation request trigger control 203 is displayed in the display area of the picture information on the recommended object 202, and when the explanation request trigger control 203 is triggered, the first explanation request prompt information 204 is displayed for the recommended object 202 on the first recommended object page.

[0056] In an optional implementation, since the first explanation request prompt information is used to prompt the summary information on the explanation requests triggered for the recommended object in the non-explanation state, in order to collect information in various dimensions of the explanation requests triggered for the recommended object, in the embodiment of the present disclosure, in response to receiving the explanation request triggered for the recommended object, it is necessary to determine whether the explanation requests triggered for the recommended object have met a preset condition. If it is determined that the explanation requests triggered for the recommended object have met the preset condition, the first explanation request prompt information is displayed for the recommended object on the first recommended object page.

[0057] The preset condition may include that a number of explanation requests reaches a preset number threshold, and the preset condition is used to determine whether the first explanation request prompt information is displayed. That is, in response to receiving the explanation request triggered for the recommended object in the non-explanation state, it is determined whether the number of the explanation requests triggered for the recommended object reaches the preset number threshold. If the preset number threshold is met, the first explanation request prompt information is displayed for the recommended object on the first recommended object page; otherwise, the first explanation request prompt information is not displayed. In this case, the first explanation request prompt information is used to prompt a total number of the explanation requests triggered for the recommended object.

[0058] Whether the explanation requests triggered for the recommended object in the non-explanation state have met the preset condition may be determined specifically by a server. In an optional implementation, in response to receiving the explanation request triggered for the recommended object, the explanation request triggered for the recommended object is sent to the server. After receiving the explanation request triggered for the recommended object, the server starts counting, and determines whether a current number of the explanation requests triggered for the recommended object reaches the preset number threshold. When it is determined that the number of the explanation requests triggered for the recommended object reaches the preset number threshold, the server sends the number of the explanation requests triggered for the recommended object to the client on the viewer side. When receiving the number of the explanation requests triggered for the recommended

object, the client on the viewer side displays the first explanation request prompt information on the first recommended object page of the client on the viewer side based on the number of the explanation requests triggered for the recommended object.

[0059] In another optional implementation, in order to prompt the viewer that the explanation request for the recommended object in the non-explanation state is successfully triggered, in the embodiment of the present disclosure, after receiving the explanation request triggered for the recommended object, the second explanation request prompt information may be firstly displayed for the recommended object on the first recommended object page, and a display duration of the second explanation request prompt information is timed. Then, it is determined whether the display duration of the second explanation request prompt information reaches a preset duration threshold, and if it is determined that the display duration of the second explanation request prompt information meets the preset duration threshold, it is determined whether the explanation requests triggered for the recommended object meet the preset condition, and when the preset condition is met, a display of the second explanation request prompt information is replaced with a display of the first explanation request prompt information.

[0060] The preset duration threshold is set for the second explanation request prompt information in advance, and is used to determine when to determine whether the explanation requests triggered for the recommended object in the non-explanation state meet the preset condition. The preset duration threshold is, for example, 3s. The second explanation request prompt information is used to prompt that the explanation request for the recommended object is successfully triggered, and the second explanation request prompt information is, for example, "explanation has been requested".

[0061] Fig. 3 is a schematic diagram of another first live streaming page according to an embodiment of the present disclosure. When the explanation request triggered for the recommended object in the non-explanation state is received, the second explanation request prompt information 301 is displayed for the recommended object on the first recommended object page. Then, in response to determining that the display duration of the second explanation request prompt information reaches the preset duration threshold, it is determined whether the explanation requests triggered for the recommended object meet the preset condition, and if it is determined that the explanation requests triggered for the recommended object meet the preset condition, a display of the second explanation request prompt information is replaced with a display of the first explanation request prompt information 302.

[0062] In another optional implementation, when the second explanation request prompt information is displayed for the recommended object in the non-explanation state on the first recommended object page, the display duration of the second explanation request prompt information is timed, and it is determined whether the display duration of the second explanation request prompt information reaches the preset duration threshold. If it is determined that the display duration of the second explanation request prompt information does not meet the preset duration threshold, the second explanation request prompt information is displayed continuously on the first recommended object page until the display duration of the second explanation request prompt information meets the preset duration threshold.

[0063] On the basis of the above embodiments, in order to display the summary information on the explanation requests triggered for the recommended object in the non-explanation state to the viewer in real time, the embodiment of the present disclosure further supports updating and displaying the first explanation request prompt information in real time.

[0064] In an optional implementation, on the basis of displaying the first explanation request prompt information on the first recommended object page, a server calculates a number of the explanation requests triggered for the recommended object in the non-explanation state in real time, and then sends the number to the client on the viewer side, and the client on the viewer side updates and displays the first explanation request prompt information in real time.

[0065] In another optional implementation, the server calculates the number of the explanation requests triggered for the recommended object in the non-explanation state in real time, and sends the number of the explanation requests triggered for the recommended object to the client on the viewer side periodically. When receiving the number of the explanation requests triggered for the recommended object, the client on the viewer side updates and displays the first explanation request prompt information.

[0066] In the live streaming processing method provided by the embodiment of the present disclosure, specifically, firstly, the first recommended object page is displayed on the first live streaming page, where the object information on the recommended object is displayed on the first recommended object page, and the recommended object is in the non-explanation state. Then, in response to the explanation request triggered for the recommended object, the first explanation request prompt information is displayed for the recommended object on the first recommended object page, where the first explanation request prompt information is used to prompt the summary information on the explanation requests triggered for the recommended object.

[0067] It may be seen that in the embodiment of the present disclosure, in response to receiving the explanation request triggered for the recommended object in the non-explanation state, the user is enabled to learn, through the first explanation request prompt information displayed on the first recommended object page, the summary information on the explanation requests triggered for the recommended object, thereby enriching the functions related to live streaming processing and improving the user's interaction experience.

[0068] In practical applications, after the first explanation request prompt information is displayed on the first recommended object page, if a client on a streamer side triggers an explanation state for the recommended object in the non-explanation state, a server searches for a user who triggers the explanation request for the recommended object based on the recommended object, and sends a message prompting that the recommended object enters the explanation state to a client of the user, and displays explanation state prompt information on a current device of the user, where the explanation state prompt information is used to prompt the user that the recommended object enters the explanation state.

[0069] In an optional implementation, in order to avoid disturbing the user and affecting the user's browsing experience, when the client of the user receives the message prompting that the recommended object in the non-explanation state enters the explanation state, if it is detected that the user is currently in the live streaming room

corresponding to the first live streaming page, the explanation state prompt information is not displayed.

[0070] In another optional implementation, when the client of the user receives the message prompting that the recommended object in the non-explanation state enters the explanation state, if it is detected that the user is currently not in the live streaming room corresponding to the first live streaming page, the explanation state prompt information is displayed on the current device of the user.

[0071] In addition, the explanation state prompt information may include name information and picture information on the recommended object, specifically, for example, "the XX product you subscribed to is now on explanation". In practical applications, in order to facilitate the user to timely access the first live streaming page to view the recommended object when receiving the explanation state prompt information, the embodiment of the present disclosure further supports a trigger operation on the explanation state prompt information, that is, the explanation state prompt information is used to trigger display of the object information on the recommended object.

[0072] In an optional implementation, when the trigger operation on the explanation state prompt information is received, it is detected whether the recommended object is currently explained in the live streaming room corresponding to the first live streaming page, that is, whether the recommended object is in the explanation state is determined. If it is determined that the recommended object is in the explanation state in the live streaming room corresponding to the first live streaming page, the first live streaming page is displayed. In this case, the object information on the recommended object in the explanation state is displayed on the first live streaming page.

[0073] In another optional implementation, in order to facilitate the user to view the recommended object, when the trigger operation on the explanation state prompt information is received, if it is determined that the recommended object is not in the explanation state in the live streaming room corresponding to the first live streaming page, that is, the explanation for the recommended object in the current live streaming room has been finished, the explanation replay page corresponding to the recommended object may be directly displayed, and the explanation video of the recommended object is played on the explanation replay page, and the object explanation card of the recommended object is displayed.

[0074] The explanation replay page is used to replay the explanation video of the recommended object for which an explanation has been finished in the first live streaming page. The explanation replay page includes the object explanation card of the recommended object and the explanation progress information on the recommended object, such as progress bar information, and also includes a variable-speed control, etc., and the object information on the recommended object is displayed on the object explanation card. In addition, a return to live streaming control is also displayed on the explanation replay page, and when the return to live streaming control is triggered, the explanation replay page jumps to the first live streaming page.

[0075] Fig. 4 is a schematic diagram of an explanation replay page according to an embodiment of the present disclosure. When the explanation state prompt information is triggered, the explanation replay page is jumped to from the current page, and the explanation video of the recommended object, the object explanation card of

the recommended object, the return to live streaming control, etc. are displayed on the explanation replay page.

[0076] In practical applications, in the process of playing the explanation video of the recommended object on the explanation replay page, the explanation replay page also supports playing explanation videos of other recommended objects. The recommended objects are recommended objects for which explanations have been finished on the first live streaming page.

[0077] Specifically, when a trigger operation for switching the recommended object on the explanation replay page is received, the current recommended object is switched to a next recommended object, and the explanation video of the recommended object is replayed.

[0078] On the basis of determining the explanation state for the recommended object on the first live streaming page, the embodiment of the present disclosure may further determine a live streaming state of the live streaming room corresponding to the first live streaming page. In an optional implementation, when the trigger operation on the explanation state prompt information is received, in response to determining that the recommended object is not in the explanation state in the live streaming room corresponding to the first live streaming page, it is determined whether the live streaming room corresponding to the first live streaming page is in a live streaming state, and in response to determining that the live streaming room corresponding to the first live streaming page is in a non-live streaming state, the explanation replay page corresponding to the recommended object may be displayed, and the explanation video of the recommended object is played on the explanation replay page, and the object explanation card of the recommended object is displayed. The live streaming room corresponding to the first live streaming page being in the non-live streaming state represents that the live streaming has ended.

[0079] In another optional implementation, in order to facilitate the user to browse the object detail information on the recommended object in a timely manner, in the embodiment of the present disclosure, when the trigger operation on the explanation state prompt information is received, in response to determining that the recommended object is not in the explanation state in the live streaming room corresponding to the first live streaming page, it is determined whether the current recommended object is in a live streaming display state, that is, whether the live streaming room corresponding to the first live streaming page is in the live streaming state is determined, and in response to determining that the live streaming room corresponding to the first live streaming page is currently in the live streaming state, the first live streaming page is displayed, and the object detail page of the recommended object is displayed on the first live streaming page.

[0080] The object detail information on the recommended object is displayed on the object detail page. The object detail information on the recommended object may include picture information, name information, resource attribute value information, store information, etc. on the recommended object.

[0081] Fig. 5 is a schematic diagram of an object detail page according to an embodiment of the present disclosure. When the explanation state prompt information is triggered, the current page jumps to the first recommended object page, and the object detail page of the recommended object is displayed on the recommended object page, and the object detail information on the recommended object is displayed on the

object detail page.

[0082] In another optional implementation, when the trigger operation on the explanation state prompt information is received, in response to determining that the recommended object is not in the explanation state in the live streaming room corresponding to the first live streaming page, and also determining that the live streaming in the live streaming room corresponding to the first live streaming page has ended, the object detail page of the recommended object is directly displayed.

[0083] Accessing the first recommended object page and displaying the object detail page of the recommended object by triggering the explanation state prompt information may facilitate the user to browse the object detail information on the recommended object in a timely manner.

[0084] In practical applications, when the explanation state prompt information is displayed on the device of the user, if the trigger operation by the user on the explanation state prompt information is not received for a long time, in the embodiment of the present disclosure, the explanation state prompt information may be hidden, and the explanation state prompt information is lowered to a message page and displayed in the form of an in-app message.

[0085] In an optional implementation, if the trigger operation on the explanation state prompt information is not received within preset duration, the explanation state prompt information is hidden, and the explanation state prompt information is lowered to the message page and displayed in the form of the in-app message. The preset duration is used to hide the explanation state prompt information and to lower the explanation state prompt information.

[0086] The embodiment of the present disclosure supports that in response to receiving the explanation request triggered for the recommended object, the user is enabled to learn, through the first explanation request prompt information displayed on the first recommended object page, the summary information on the explanation requests triggered for the recommended object, thereby enriching the functions related to live streaming processing and improving the user experience.

[0087] On the basis of the content of the above embodiments, an embodiment of the present disclosure further provides another live streaming processing method, which is applied to a client on a streamer side. Fig. 6 is a flowchart of the another live streaming processing method according to the embodiment of the present disclosure, which specifically includes the following steps.

[0088] S601: a second recommended object page is displayed on a second live streaming page.

[0089] Object information on a recommended object is displayed on the second recommended object page, and the recommended object is in a non-explanation state and for which no explanation replay entrance is displayed.

[0090] In the embodiment of the present disclosure, the second live streaming page is a live streaming room page of a streamer client.

[0091] In the embodiment of the present disclosure, the second recommended object page is displayed on the

second live streaming page, and the second recommended object page is used to display object information on recommended objects in the live streaming room. For example, the second recommended object page is a recommended object list page, where the recommended objects may be live streaming products in a current live streaming room, and the recommended objects include recommended objects in an explanation state and in a non-explanation state. The recommended object in the explanation state refers to a recommended object that is currently being explained in the live streaming room. The recommended object in the non-explanation state refers to a recommended object for which an explanation has been finished or a recommended object for which an explanation has not started in the current live streaming room.

[0092] The recommended object in the embodiment of the present disclosure refers to a recommended object in a non-explanation state and for which no explanation replay entrance is displayed in the current live streaming room, that is, the recommended object is in a non-explained state in the current live streaming room. The explanation replay entrance is used to trigger replay of an explanation video for a recommended object for which an explanation has been finished.

[0093] The object information on the recommended object displayed on the second recommended object page may include at least one of picture information, name information, a resource attribute value, and explanation state information on the recommended object. The resource attribute value is used to represent a price of the recommended object during a period of live streaming, and the explanation state information is used to represent an explanation situation of the recommended object in the current live streaming room.

[0094] In practical applications, the object information on the recommended object displayed on the second recommended object page may further include an explanation control, and the explanation control is used to switch a live streaming state. Specifically, when a trigger operation on the explanation control of the recommended object is received, the live streaming state of the recommended object is switched from a non-explained state to an explanation state.

[0095] In this case, the client on the streamer side sends a request to the server to search for the user, and the server searches for the user when receiving the request to search for the user, and sends the explanation state prompt information to the user. The explanation state prompt information is used to prompt that the recommended object in the non-explanation state enters the explanation state, and the user may has triggered an explanation request for the recommended object.

[0096] S602: explanation request information is displayed for the recommended object in the non-explanation state on the second recommended object page.

[0097] The explanation request information is used to represent summary information on explanation requests triggered for the recommended object in the non-explanation state, and the explanation requests are triggered based on a first live streaming page of the recommended object.

[0098] In the implementation of the present disclosure, the explanation request information may include a total number of the explanation requests triggered for the recommended object in the non-explanation state, for example, a total number of users who request the explanation.

[0099] Fig. 7 is a schematic diagram of a second live streaming page according to an embodiment of the present disclosure. The second recommended object page is displayed on the second live streaming page, and the explanation request information 701 is displayed on the second recommended object page, which is used to represent the summary information on the explanation requests triggered for the recommended object.

[00100] On the basis of the above embodiments, in order to facilitate the streamer to view the recommended object in the non-explanation state, in the implementation of the present disclosure, a sorting control may be additionally set on the second recommended object page based on the recommended object. The sorting control is used to sort each of the recommended objects.

[00101] Specifically, when a trigger operation on the sorting control on the second recommended object page is received, sorting processing is performed on the respective recommended objects on the second recommended object page based on the summary information on the triggered explanation requests.

[00102] A process of performing the sorting processing on the respective recommended objects on the second recommended object page based on the summary information on the triggered explanation requests may include sorting and displaying, according to the summary information on the triggered explanation requests, the respective recommended objects in an order from high to low or in an order from low to high.

[00103] In an optional implementation, in order to further prompt the streamer, in the embodiment of the present disclosure, the respective recommended objects may be sorted in the order from high to low. Specifically, when the trigger operation on the sorting control on the second recommended object page is received, the respective recommended objects on the second recommended object page are sorted and displayed in the descending order of the total number of the triggered explanation requests. In this case, only the recommended objects for which the explanation requests have been triggered are displayed on the second recommended object page, and the respective recommended objects are sorted and displayed in the descending order of the total number of the triggered explanation requests.

[00104] In the second live streaming page as shown in Fig. 7, the sorting control 702 is displayed on the second recommended object page, and when the sorting control 702 is triggered, the respective recommended objects are sorted and displayed on the second recommended object page in the descending order of the total number of the triggered explanations.

[00105] In addition, when the trigger operation on the sorting control is received, if it is detected that the recommended object currently in the explanation state also has an explanation request before the explanation, the total number of the explanation requests for the recommended object in the explanation state is also displayed for the recommended object.

[00106] In the second live streaming page as shown in Fig. 7, the recommended object 703 displayed on the second recommended object page is currently in the explanation state, and when the sorting control 702 is triggered, the recommended objects for which the explanation requests have been triggered, including the recommended object 703, are sorted and displayed on the second recommended object page in the descending order of the total number of the triggered explanations.

[00107] In the embodiment of the present disclosure, the explanation request prompt information is displayed on the second recommended object page to prompt the streamer of the summary information on the explanation requests triggered for the recommended object, thereby enriching the functions related to live streaming processing and improving the interaction experience of the viewer.

[00108] Based on the above method embodiments, the present disclosure further provides a live streaming processing apparatus. Fig. 8 is a schematic structural diagram of a live streaming processing apparatus according to an embodiment of the present disclosure. The apparatus includes:

a first display module 801, configured to display a first recommended object page on a first live streaming page, where object information on a recommended object is displayed on the first recommended object page, and the recommended object is in a non-explanation state; and

a second display module 802, configured to display, in response to an explanation request triggered for the recommended object, first explanation request prompt information for the recommended object on the first recommended object page, where the first explanation request prompt information is used to prompt summary information on explanation requests triggered for the recommended object.

[00109] In an optional implementation, the object information on the recommended object includes an explanation request trigger control, and the second display module is further configured to:

in response to a trigger operation on the explanation request trigger control of the recommended object, display the first explanation request prompt information for the recommended object.

[00110] In an optional implementation, the second display module is further configured to:

display, in response to the explanation request triggered for the recommended object and a determination that the explanation requests triggered for the recommended object have met a preset condition, the first explanation request prompt information for the recommended object on the first recommended object page, where the preset condition includes that a number of the explanation requests reaches a preset number threshold, and the first explanation request prompt information is used to prompt a total number of the explanation requests triggered for the recommended object.

[00111] In an optional implementation, the second display module includes:

a first display sub-module, configured to display, in response to the explanation request triggered for the recommended object, second explanation request prompt information for the recommended object on the first recommended object page, where the second explanation request prompt information is used to prompt that the explanation request is successfully triggered; and

an update display sub-module, configured to replace, in response to a display duration of the second explanation request prompt information reaching a preset duration threshold and a determination that the explanation requests triggered for the recommended object have met a preset condition, a display of the second explanation request prompt information with a display of the first explanation request prompt information, where the preset condition includes that a number of the explanation requests reaches a preset number threshold.

[00112] In an optional implementation, the apparatus further includes:

a fifth display module, configured to display explanation state prompt information, where the explanation state prompt information is used to prompt that the recommended object enters an explanation state, and the explanation state prompt information is used to trigger a display of the object information on the recommended object.

[00113] In an optional implementation, the apparatus further includes:

a sixth display module, configured to display the first live streaming page, in response to a trigger operation on the explanation state prompt information and a determination that the recommended object is in the explanation state, where the object information on the recommended object in the explanation state is displayed on the first live streaming page.

[00114] In an optional implementation, the apparatus further includes:

a seventh display module, configured to, in response to determining that the recommended object is not in the explanation state, and that the recommended object is in a live streaming display state, display the first live streaming page, and display an object detail page of the recommended object on the first live streaming page, where object detail information on the recommended object is displayed on the object detail page.

[00115] In an optional implementation, the apparatus further includes:

an eighth display module, configured to, in response to determining that the recommended object is not in the explanation state, display an explanation replay page corresponding to the recommended object, and play an explanation video of the recommended object on the explanation replay page.

[00116] In an optional implementation, for the recommended object no explanation replay entrance is displayed on the first live streaming page, and the explanation replay entrance is used to trigger replay of an explanation video.

[00117] Corresponding to the above method embodiments, the present disclosure further provides another live streaming processing apparatus. Fig. 9 is a schematic structural diagram of another live streaming processing apparatus according to an embodiment of the present disclosure. The apparatus includes:

a third display module 901, configured to display a second recommended object page on a second live streaming page, where object information on a recommended object is displayed on the second recommended object page, and the recommended object is in a non-explanation state; and

a fourth display module 902, configured to display explanation request information for the recommended object on the second recommended object page, where the explanation request information is used to represent summary information on explanation requests triggered for the recommended object, and the explanation requests are triggered based on a first live streaming page of the recommended object.

[00118] In an optional implementation, a sorting control is set on the second recommended object page, and the apparatus further includes:

a sorting display module, configured to sort and display, in response to a trigger operation on the sorting control, recommended objects on the second recommended object page based on the summary information on the triggered explanation requests.

[00119] In an optional implementation, the summary information on the triggered explanation requests includes a total number of the triggered explanation requests, and the sorting display module is further configured to:

sort and display, in response to the trigger operation on the sorting control, the recommended objects on the second recommended object page in a descending order of the total number of the triggered explanation requests.

[00120] In an optional implementation, the object information on the recommended object includes an explanation control, and the apparatus further includes:

a switching sending module, configured to, in response to a trigger operation on the explanation control of the recommended object, switch a live streaming state of the recommended object to an explanation state, and send explanation state prompt information to a user, where the explanation state prompt information is used to prompt that the recommended object enters the explanation state, and the user has triggered an explanation request for the recommended object.

[00121] In the live streaming processing apparatus provided by the embodiment of the present disclosure, firstly, the first recommended object page is displayed on the first live streaming page, where the object information on the recommended object is displayed on the first recommended object page, and the recommended object is a recommended object that is in the non-explanation state and for which no explanation replay entrance is displayed, where the explanation replay entrance is used to trigger replay of an explanation video; then, in response to the explanation request triggered for the recommended object, the first explanation request prompt information is displayed for the recommended object on the first recommended object page, where the first explanation request prompt information is used to prompt the summary information on the explanation requests triggered for the recommended object.

[00122] It may be seen that the embodiment of the present disclosure supports that when the explanation request triggered for the recommended object is received, the user may be prompted of the summary information on the explanation requests triggered for the recommended object through the first explanation request prompt information displayed on the first recommended object page, thereby enriching the functions related to live streaming processing and improving the user experience.

[00123] In addition to the above methods and apparatuses, embodiments of the present disclosure further provide a computer-readable storage medium, where instructions are stored in the computer-readable storage medium, and the instructions, when executed by a terminal device, cause the terminal device to implement the live streaming processing method according to the embodiments of the present disclosure.

[00124] An embodiment of the present disclosure further provides a computer program product, which includes a computer program/instruction, where the computer program/instruction, when executed by a

processor, implements the live streaming processing method according to the embodiments of the present disclosure.

[00125] In addition, an embodiment of the present disclosure further provides a live streaming processing device, which, as shown in Fig. 10, may include:

a processor 1001, a memory 1002, an input apparatus 1003, and an output apparatus 1004. The number of processors 1001 in the live streaming processing device may be one or more, and one processor is taken as an example in Fig. 10. In some embodiments of the present disclosure, the processor 1001, the memory 1002, the input apparatus 1003, and the output apparatus 1004 may be connected through a bus or in other ways. For example, connection through a bus is used as an example in Fig. 10.

[00126] The memory 1002 may be used to store software programs and modules, and the processor 1001 executes various functional applications and data processing of the live streaming processing device by running the software programs and modules stored in the memory 1002. The memory 1002 may mainly include a program storage area and a data storage area, where the program storage area may store an operating system, an application program required by at least one function, etc. In addition, the memory 1002 may include high-speed random-access memory or non-volatile memory, such as at least one magnetic disk storage device, flash memory device, or other volatile solid-state storage devices. The input apparatus 1003 may be used to receive input digital or character information, and to generate signal input related to user settings and function control of the live streaming processing device.

[00127] Specifically, in the present embodiment, the processor 1001 will load an executable file corresponding to a process of one or more application programs into the memory 1002 according to the following instructions, and the processor 1001 runs the application programs stored in the memory 1002, thereby implementing various functions of the above live streaming processing device.

[00128] It should be noted that in this paper, relational terms such as "first" and "second" are only used to distinguish one entity or operation from another entity or operation, and do not necessarily require or imply any actual relationship or order between these entities or operations. Moreover, terms "include", "include" or any other variation thereof are intended to cover non-exclusive inclusion, so that a process, method, object or device including a series of elements includes not only those elements, but also other elements not explicitly listed or elements inherent to such process, method, object or device. Without further restrictions, an element defined by the phrase "including a" does not exclude that there are other identical elements in the process, method, object or device including the element.

[00129] The above descriptions are only specific embodiments of the present disclosure, so that those skilled in the art may understand or implement the present disclosure. Various modifications to these embodiments will be obvious to those skilled in the art, and general principles defined herein may be implemented in other embodiments without departing from the spirit or scope of the present disclosure. Therefore, the present disclosure will not be limited to these embodiments described herein, but rather to the widest scope consistent with the principles and novel features disclosed herein.

Claims:

1. A live streaming processing method, comprising:

displaying a first recommended object page on a first live streaming page, wherein object information on a recommended object is displayed on the first recommended object page, and the recommended object is in a non-explanation state; and

displaying, in response to an explanation request triggered for the recommended object, first explanation request prompt information for the recommended object on the first recommended object page, wherein the first explanation request prompt information is used to prompt summary information on explanation requests triggered for the recommended object.

2. The method of claim 1, wherein the object information on the recommended object comprises an explanation request trigger control, and wherein displaying, in response to the explanation request triggered for the recommended object, the first explanation request prompt information for the recommended object on the first recommended object page comprises:

displaying, in response to a trigger operation on the explanation request trigger control of the recommended object, the first explanation request prompt information for the recommended object.

3. The method of claim 1, wherein displaying, in response to the explanation request triggered for the recommended object, the first explanation request prompt information for the recommended object on the first recommended object page comprises:

displaying, in response to the explanation request triggered for the recommended object and a determination that the explanation requests triggered for the recommended object have met a preset condition, the first explanation request prompt information for the recommended object on the first recommended object page, wherein the preset condition comprises that a number of the explanation requests reaches a preset number threshold, and the first explanation request prompt information is used to prompt a total number of the explanation requests triggered for the recommended object.

4. The method of claim 1, wherein displaying, in response to the explanation request triggered for the recommended object, the first explanation request prompt information for the recommended object on the first recommended object page comprises:

displaying, in response to the explanation request triggered for the recommended object, second explanation request prompt information for the recommended object on the first recommended object page, wherein the second explanation request prompt information is used to prompt that the explanation request is successfully triggered; and

replacing, in response to a display duration of the second explanation request prompt information reaching a preset duration threshold and a determination that the explanation requests triggered for the recommended object have met a preset condition, a display of the second explanation request prompt information with a display of the first explanation request prompt information, wherein the preset condition comprises that

a number of the explanation requests reaches a preset number threshold.

5. The method of claim 1, further comprising:

displaying explanation state prompt information, wherein the explanation state prompt information is used to prompt that the recommended object enters an explanation state, and the explanation state prompt information is used to trigger a display of the object information on the recommended object.

6. The method of claim 5, further comprising: after displaying the explanation state prompt information,

displaying the first live streaming page, in response to a trigger operation on the explanation state prompt information and a determination that the recommended object is in the explanation state, wherein the object information on the recommended object in the explanation state is displayed on the first live streaming page.

7. The method of claim 6, further comprising:

in response to determining that the recommended object is not in the explanation state and that the recommended object is in a live streaming display state, displaying the first live streaming page, and displaying an object detail page of the recommended object on the first live streaming page, wherein object detail information on the recommended object is displayed on the object detail page.

8. The method of claim 6, further comprising:

in response to determining that the recommended object is not in the explanation state, displaying an explanation replay page corresponding to the recommended object, and playing an explanation video of the recommended object on the explanation replay page.

9. The method of claim 1, wherein for the recommended object no explanation replay entrance is displayed on the first live streaming page, and wherein the explanation replay entrance is used to trigger replay of an explanation video.

10. A live streaming processing method, comprising:

displaying a second recommended object page on a second live streaming page, wherein object information on a recommended object is displayed on the second recommended object page, and the recommended object is in a non-explanation state; and

displaying explanation request information for the recommended object on the second recommended object page, wherein the explanation request information is used to represent summary information on explanation requests triggered for the recommended object, and the explanation requests are triggered based on a first live streaming page of the recommended object.

11. The method of claim 10, wherein a sorting control is set on the second recommended object page, and wherein the method further comprises:

sorting and displaying, in response to a trigger operation on the sorting control, recommended objects on the second recommended object page based on the summary information on the triggered explanation requests.

12. The method of claim 11, wherein the summary information on the triggered explanation requests comprises a total number of the triggered explanation requests, and wherein sorting and displaying, in response to the trigger operation on the sorting control, the recommended objects on the second recommended object page based on the summary information on the triggered explanation requests comprises:

sorting and displaying, in response to the trigger operation on the sorting control, the recommended objects on the second recommended object page in a descending order of the total number of the triggered explanation requests.

13. The method of claim 10, wherein the object information on the recommended object comprises an explanation control, and wherein the method further comprises:

in response to a trigger operation on the explanation control of the recommended object, switching a live streaming state of the recommended object to an explanation state, and sending explanation state prompt information to a user, wherein the explanation state prompt information is used to prompt that the recommended object enters the explanation state, and the user has triggered an explanation request for the recommended object.

14. A live streaming processing apparatus, comprising:

a first display module, configured to display a first recommended object page on a first live streaming page, wherein object information on a recommended object is displayed on the first recommended object page, and the recommended object is in a non-explanation state; and

a second display module, configured to display, in response to an explanation request triggered for the recommended object, first explanation request prompt information for the recommended object on the first recommended object page, wherein the first explanation request prompt information is used to prompt summary information on explanation requests triggered for the recommended object.

15. A live streaming processing apparatus, comprising:

a third display module, configured to display a second recommended object page on a second live streaming page, wherein object information on a recommended object is displayed on the second recommended object page, and the recommended object is in a non-explanation state; and

a fourth display module, configured to display explanation request information for the recommended object on the second recommended object page, wherein the explanation request information is used to represent summary information on explanation requests triggered for the recommended object, and the explanation requests are triggered based on a first live streaming page of the recommended object.

16. A computer-readable storage medium having instructions stored thereon, and wherein the instructions, when executed by a terminal device, cause the terminal device to implement the method of any of claims 1 to

13.

17. A live streaming processing device, comprising: a memory, a processor, and a computer program stored on the memory and executable on the processor, wherein the computer program, when executed by the processor, causes the live streaming processing device to implement the method of any of claims 1 to 13.

18. A computer program product, comprising a computer program or computer instructions, wherein the computer program or the computer instructions, when executed by a processor, implements the method of any of claims 1 to 13.