LIVE STREAMING PROCESSING METHOD, APPARATUS, DEVICE AND STORAGE MEDIUM

CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] The present application claims priority to Chinese Patent Application No. 202410628023.0, filed on May 20, 2024, and entitled "LIVE STREAMING PROCESSING METHOD, APPARATUS, DEVICE AND STORAGE MEDIUM", which is hereby incorporated 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 technologies, users' requirements for live streaming-related functions become increasingly diversified.

[0004] Therefore, how to enrich live streaming-related functions to meet users' growing diversified requirements has become an urgent technical issue that needs to be addressed.

SUMMARY

[0005] To solve the above technical issues, embodiments of the present disclosure provide a live streaming processing method, an apparatus, a device, and a storage medium.

[0006] In a first aspect, the present disclosure provides a live streaming processing method, including:

jumping from a live streaming video page to a target page in response to a switching operation for the live streaming video page, displaying a window on the target page, and displaying first information on the window, where a live streaming image corresponding to the live streaming video page is displayed in the window, and the first information includes service information for reflecting an interactive service on the live streaming video page; and

displaying, in response to a preset trigger operation acting on the window, the live streaming video page, and displaying, on the live streaming video page, a display resource corresponding to the first information.

[0007] In an optional implementation, the service information includes resource information for a first live streaming resource and/or object information for a first recommended object on the live streaming video page.

[0008] In an optional implementation, the first recommended object includes a second recommended object in a being-explained state on the live streaming video page.

[0009] In an optional implementation, the object information for the first recommended object includes at

least one of the followings of the first recommended object:

[0010] an object picture, an object name, or a resource attribute value.

[0011] In an optional implementation, the first live streaming resource includes a third live streaming resource in a being-streamed state, the resource information for the first live streaming resource includes state information for the first live streaming resource, and the first live streaming resource is used to trigger an interactive operation for a recommended object on the live streaming video page.

[0012] In an optional implementation, after displaying the first information on the window, the method further includes:

starting a timer in response to the first information being displayed on the window; and

controlling the first information to be hidden from display on the window when the timer reaches a preset duration.

[0013] In an optional implementation, before displaying the first information on the window, the method further includes:

determining whether there is a third live streaming resource in a being-streamed state on the live streaming video page; and

wherein displaying the first information on the window includes:

if it is determined that there is the third live streaming resource in the being-streamed state on the live streaming video page, displaying state information for the third live streaming resource on the window.

[0014] In an optional implementation, the method further includes:

if it is determined that there is no third live streaming resource in the being-streamed state on the live streaming video page, determining whether there is a second recommended object in a being-explained state on the live streaming video page; and

wherein displaying the first information on the window includes:

if it is determined that there is the second recommended object in the being-explained state on the live streaming video page, displaying object information for the second recommended object on the window.

[0015] In an optional implementation, before displaying, in response to the preset trigger operation acting on the window, the live streaming video page, and displaying, on the live streaming video page, the display resource corresponding to the first information, the method further includes:

switching from displaying the first information to displaying second information on the window, where the second information includes resource information for the first live streaming resource and/or object information for the first recommended object on the live streaming video page.

[0016] In an optional implementation, jumping from the live streaming video page to the target page in response to the switching operation for the live streaming video page includes:

jumping from the live streaming video page to the target page in response to an exit operation for the live streaming video page;

or,

jumping from the live streaming video page to the target page in response to a triggering operation for switching from the live streaming video page to the target page.

[0017] In a second aspect, the present disclosure provides a live streaming processing apparatus, including:

a first display module, configured to jump from a live streaming video page to a target page in response to a switching operation for the live streaming video page, display a window on the target page, and display first information on the window, where a live streaming image corresponding to the live streaming video page is displayed in the window, and the first information includes service information for reflecting an interactive service on the live streaming video page; and

a second display module, configured to display, in response to a preset trigger operation acting on the window, the live streaming video page, and display, on the live streaming video page, a display resource corresponding to the first information.

[0018] In a third aspect, the present disclosure provides 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 above method.

[0019] In a fourth 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.

[0020] In a fifth aspect, the present disclosure provides a computer program product, including a computer program/instruction, where the computer program/instruction, when executed by a processor, implements the above method.

BRIEF DESCRIPTION OF THE DRAWINGS

[0021] The drawings here, which are incorporated in this specification and constitute a part thereof, illustrate embodiments consistent with the present disclosure and, together with the description, serve to explain the principles of the present disclosure.

[0022] In order to more clearly illustrate technical solutions in the embodiments of the present disclosure or in the prior art, the drawings required for describing the embodiments or the prior art will be briefly described below. Apparently, those of ordinary skill in the art may still derive other drawings from these drawings without creative efforts.

[0023] Fig. 1 is a flowchart of a live streaming processing method according to some embodiments of the present disclosure;

[0024] Fig. 2 is a schematic diagram of a target page according to some embodiments of the present

disclosure;

[0025] Fig. 3 is a schematic diagram of another target page according to some embodiments of the present disclosure;

[0026] Fig. 4 is a schematic diagram of another target page according to some embodiments of the present disclosure;

[0027] Fig. 5 is a schematic diagram of page switching according to some embodiments of the present disclosure;

[0028] Fig. 6 is a schematic diagram of a structure of a live streaming processing apparatus according to some embodiments of the present disclosure; and

[0029] Fig. 7 is a schematic diagram of a structure of a live streaming processing device according to some embodiments of the present disclosure.

DETAILED DESCRIPTION OF EMBODIMENTS

[0030] 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.

[0031] Many specific details are set forth in the following description to facilitate a full understanding of the present disclosure. However, 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.

[0032] With the continuous development of network technologies, users' requirements for live streaming-related functions are becoming more and more diversified.

[0033] Therefore, how to enrich live streaming-related functions to meet users' growing diversified requirements has become an urgent technical issue.

[0034] To this end, embodiments of the present disclosure provide a live streaming processing method. Specifically, first, in response to a switching operation for a live streaming video page, the live streaming video page jumps to a target page, a window is displayed on the target page, and first information is displayed on the window. A live streaming image corresponding to the live streaming video page is displayed in the window. The first information includes service information for the live streaming video page, and the service information for the live streaming video page includes service information for reflecting an interactive service on the live streaming video page. Then, in response to a preset trigger operation acting on the window, the live streaming video page is displayed, and a display resource corresponding to the first information is displayed on the live streaming video page.

[0035] It may be seen that the embodiments of the present disclosure support displaying, on the window,

the service information that may reflect the interactive service of the live session that is exited recently, so that the user may timely know, through the window, the live streaming content on the live streaming video page that is exited recently, and then returns to the live session through the window, which enriches the functions related to live streaming processing and improves the user experience.

[0036] Specifically, embodiments of the present disclosure provide a live streaming processing method. Fig. 1 is a flowchart of a live streaming processing method according to embodiments of the present disclosure. The method specifically includes the following steps.

[0037] S101: a live streaming video page jumps to a target page in response to a switching operation for the live streaming video page, and a window is displayed on the target page and first information is displayed on the window.

[0038] A live streaming image corresponding to the live streaming video page is displayed in the window. The first information includes service information for the live streaming video page, and the service information for the live streaming video page includes service information for reflecting an interactive service on the live streaming video page.

[0039] The live streaming processing method provided in the embodiments of the present disclosure may be applied to a client. Specifically, the client may be deployed on a terminal such as a smartphone, a tablet, or a desktop computer.

[0040] In the embodiments of the present disclosure, the live streaming video page may be a live streaming page of any type of live session, which is used to display a live video stream of the live session. When the switching operation for the live streaming video page is triggered, the target page is displayed, and the target page may be any display page with the window displayed thereon.

[0041] The switching operation for the live streaming video page may include at least one of the following:

an exit operation for the live streaming video page; and

a trigger operation for switching from the live streaming video page to the target page.

[0042] Specifically, in response to the exit operation for the live streaming video page, the live streaming video page jumps to the target page. For example, a preset interactive control on the live streaming video page is triggered to exit the current live streaming video page.

[0043] Alternatively, in response to the trigger operation for switching from the live streaming video page to the target page, the live streaming video page jumps to the target page. For example, after the action of switching to the target page is triggered, the live streaming video page is in a background playing state, and the target page is in a foreground playing state.

[0044] In the embodiments of the present disclosure, the window is displayed on the target page, and the window may be displayed at any position on the target page. Specifically, the window may be displayed on the target page in a form of a small window. By displaying the live streaming image corresponding to the live streaming video page in the window in real time, it is convenient for the user to know the live streaming

state on the live streaming video page, and the user may quickly enter the live streaming video page to watch the live streaming by triggering the window.

[0045] In the embodiments of the present disclosure, the first information may reflect target live streaming content on the live streaming video page. The first information is displayed in the window displayed on the target page, and is used to convey the target live streaming content of the live streaming video page to the user, so as to prompt the user to enter the live streaming page in time to view the relevant live streaming content.

[0046] The first information in the embodiments of the present disclosure may include the service information for the live streaming video page, which is service information for reflecting the interactive service on the live streaming video page. The interactive service is used to represent a service type triggered by a user interaction operation on the live streaming video page. For example, the service information for an order placing service may include object information for a recommended object for which an order is placed, and the service information for a lucky bag service may include lucky bag service state information.

[0047] In the embodiments of the present disclosure, the service information for the interactive service may include object information for a first recommended object and/or resource information for a first live streaming resource on the live streaming video page.

[0048] In the embodiments of the present disclosure, by displaying the first information in the window on the target page, the user may be informed of the current live streaming content of the live streaming video page. The current live streaming content may be specifically related dynamic information being live streamed on the live streaming video page, specifically may be related object information for the first recommended object on the live streaming video page, and may be related resource information for the first live streaming resource on the live streaming video page.

[0049] In an optional implementation, the first information may include object information for a second recommended object in a being-explained state on the live streaming video page. Specifically, after exiting the live streaming video page, if it is detected that there is a second recommended object in a being-explained state on the live streaming video page, the object information for the second recommended object in the being-explained state on the live streaming video page is displayed on the window of the target page.

[0050] The first recommended object may be specifically a recommended product currently in a being-explained state on the live streaming video page. Specifically, at least one of an object picture, an object name, or a resource attribute value of the second recommended object in the being-explained state may be displayed on the window. The resource attribute value may be information such as a product price.

[0051] Fig. 2 is a schematic diagram of a target page according to embodiments of the present disclosure. A window is displayed on the target page. A live streaming image on the live streaming video page is displayed in the window, and first information is displayed on the live streaming image. The first information includes object information for a second recommended object in a being-explained state on the live streaming video page, and specifically includes an object picture 201 and an object name 202 of the recommended

object.

[0052] On the basis of the above embodiments, in order to further prompt the user to enter the live session in time, in the embodiments of the present disclosure, the object information, displayed on the window, of the second recommended object in the being-explained state on the live streaming video page further includes a resource attribute value of the second recommended object in the being-explained state.

[0053] Specifically, the object picture and the resource attribute value of the second recommended object in the being-explained state may be displayed on the window, the object name and the resource attribute value of the second recommended object in the being-explained state may be displayed on the window, or the object picture, the object name, and the resource attribute value of the second recommended object in the being-explained state may be displayed on the window. The resource attribute value may be specifically a price of the second recommended object in the being-explained state.

[0054] In the target page shown in Fig. 2, the object information, displayed on the window of the target page, of the second recommended object in the being-explained state on the current live streaming video page further includes a resource attribute value 203 of the recommended object.

[0055] In addition, if the first information includes the object information for the second recommended object in the being-explained state on the live streaming video page, an object information card may be displayed on the window, and the object information for the recommended object may be displayed on the object information card, as shown by 204 on the target page in Fig. 2.

[0056] In another optional implementation, the first information may further include state information for a third live streaming resource in a being-streamed state on the live streaming video page. Specifically, after exiting the live streaming video page, if it is detected that there is a third live streaming resource in a being-streamed state on the live streaming video page, the state information for the live streaming resource on the live streaming video page is displayed on the window.

[0057] The live streaming resource may include a live streaming activity on the live streaming video page. By way of example, the live streaming resource may include live streaming activities such as a lucky bag, a red envelope, and limited time and quantity. The displaying, on the window, the state information for the third live streaming resource in the being-streamed state may include displaying lifecycle state information for the live streaming resource object, which may specifically include "lucky bag being distributed", "lucky bag being drawn", "red envelope being distributed", and so on.

[0058] Fig. 3 is a schematic diagram of another target page according to embodiments of the present disclosure. A window is displayed on the target page, and state information 301 of a third live streaming resource in a being-streamed state on a live streaming video page is displayed on the window.

[0059] In addition, when displaying the state information for the third live streaming resource in the being-streamed state, identification information for the live streaming resource may also be displayed, so that the user may know information such as a type to which the live streaming resource belongs. The first information for the target page shown in Fig. 3 includes an identification 302 of the live streaming resource.

[0060] By displaying the state information for the live streaming resource on the window, the user may enter the live streaming video page and trigger an interactive operation for the live streaming resource, so as to use the live streaming resource to complete an interactive operation for the recommended object. Specifically, for example, a live streaming product on the live streaming video page is acquired by participating in a lucky bag lottery.

[0061] In another optional implementation, the first information may further include update information for a first recommended object on the live streaming video page. Specifically, after exiting the live streaming video page, if it is detected that the first recommended object on the live streaming video page is updated, the update information for the first recommended object is displayed on the window of the target page. The update information for the first recommended object on the live streaming video page may include new inventory information for a live streaming object in a sold-out state on the live streaming video page, for example, restocking of a sold-out live streaming product, and may also include resource attribute value display state information for a second recommended object in a being-explained state on the live streaming video page, for example, offering of a price for a product being explained.

[0062] In practical applications, if at least two of the following situations are detected: there is a second recommended object in a being-explained state on the live streaming video page, there is a third live streaming resource in a being-streamed state on the live streaming video page, or a live streaming object is updated on the live streaming video page, the first information corresponding to each of the above situations may be simultaneously displayed on the window of the target page.

[0063] For example, at least two of the following information is simultaneously displayed on the window: object information for the second recommended object in the being-explained state on the live streaming video page, state information for the third live streaming resource in the being-streamed state on the live streaming video page, and update state information for the recommended object on the live streaming video page.

[0064] That is, after exiting the live streaming page, if there are at least two of the following: a second recommended object in a being-explained state on the live streaming video page, a third live streaming resource in a being-streamed state on the live streaming video page, or an updated recommended object, they are simultaneously displayed on the window of the target page.

[0065] Fig. 4 is a schematic diagram of a target page according to embodiments of the present disclosure. A window is displayed on the target page, and first information is displayed on the window. The first information includes object information 401 for a first recommended object and state information 402 for a third live streaming resource in a being-streamed state.

[0066] On the basis of the above embodiments, in order to reduce the influence of the first information on the occlusion of the live streaming image in the window, the embodiments of the present disclosure may set a display priority.

[0067] In a preferred implementation, the display priority of the third live streaming resource in the being-

streamed state may be set to be higher than the display priority of the second recommended object in the being-explained state. Specifically, when the switching operation for the live streaming video page is received, it is first detected whether there is a third live streaming resource in a being-streamed state on the live streaming video page. If it is detected that there is a third live streaming resource in the being-streamed state on the live streaming video page, the state information for the third live streaming resource in the being-streamed state is displayed on the window on the target page.

[0068] If it is detected that there is no third live streaming resource in the being-streamed state on the live streaming video page, it is detected whether there is a second recommended object in the being-explained state on the live streaming video page. When it is detected that there is the second recommended object in the being-explained state on the live streaming video page, the object information for the second recommended object in the being-explained state on the live streaming video page is displayed in the window of the target page.

[0069] In practical applications, in order to reduce the influence of the first information on the occlusion of the live streaming image displayed in the window, a display duration may also be set for the first information.

[0070] Specifically, when the first information starts to be displayed on the window of the target page, a timer is started, and when it is determined that the timer reaches a preset duration, the first information is controlled to be hidden from display on the window.

[0071] S102: the live streaming video page is displayed in response to a preset trigger operation acting on the window, and a display resource corresponding to the first information is displayed on the live streaming video page.

[0072] In the embodiments of the present disclosure, the window on the target page is used to enter the live streaming video page, and by triggering the window, the interaction path may be simplified and the live streaming video page may be quickly displayed.

[0073] In the embodiments of the present disclosure, the display resource corresponding to the first information refers to a display resource of the recommended object or the live streaming resource corresponding to the first information, which is used to display the recommended object or the live streaming resource on the live streaming video page.

[0074] In an optional implementation, if it is detected that the first information includes the object information for the second recommended object in the being-explained state on the live streaming video page, the display resource corresponding to the first information may include an object display card of the second recommended object in the being-explained state on the live streaming video page. Specifically, when the preset trigger operation on the window is received, the live streaming video page is displayed, and the object information card of the second recommended object in the being-explained state is displayed on the live streaming video page.

[0075] In an optional implementation, the action of displaying, on the live streaming video page, the object

information card of the second recommended object in the being-explained state may include displaying a product explanation card of the second recommended object in the being-explained state on the live streaming video page, or an object detail page of the second recommended object in the being-explained state may be displayed on the live streaming video page, where the object detail page is used to display object detail information for the recommended object currently in the being-explained state.

[0076] In another optional implementation, if it is detected that the first information includes the state information for the third live streaming resource in the being-streamed state on the live streaming video page, the display resource corresponding to the first information may include a display animation of the third live streaming resource in the being-streamed state on the live streaming video page. Specifically, when the preset trigger operation on the window is received, the live streaming video page is displayed, and the display animation of the third live streaming resource in the being-streamed state is displayed on the live streaming video page.

[0077] In an optional implementation, the action of displaying, on the live streaming video page, the third live streaming resource in the being-streamed state may include displaying, on the live streaming video page, the third live streaming resource in the being-streamed state in a form of a dynamic effect to increase the attention to the live streaming resource. Specifically, for example, the third live streaming resource in the being-streamed state is dynamically displayed on the live streaming video page. The live streaming resource is first amplified and displayed at the center of the live streaming video page, and then moves to a certain position and gradually shrinks to the original size.

[0078] In another optional implementation, if the first information includes the update information for the recommended object on the live streaming video page, the first information may include the update information for the recommended object on the live streaming video page. Specifically, when the preset trigger operation on the window is received, the live streaming video page is displayed, and the live streaming object with the update information and the update information are displayed on the live streaming video page.

[0079] In an optional implementation, the action of displaying, on the live streaming video page, the live streaming object with the update information and the update information may include displaying a live streaming object list on the live streaming video page and locating to a display position of the live streaming object.

[0080] Fig. 5 is a schematic diagram of page switching according to embodiments of the present disclosure. After an exit operation for a live streaming video page is received, the live streaming video page jumps to a target page, a window is displayed on the target page, and a live streaming image of the live streaming video page and service information for reflecting an interactive page on the live streaming video page are displayed in the window. When a click operation acting on the window on the target page is received, the target page jumps to display the live streaming video page, and a display resource corresponding to first information, such as an object information card, is displayed on the live streaming video page.

[0081] In the live streaming processing method provided in the embodiments of the present disclosure,

specifically, in response to a switching operation for the live streaming video page, the live streaming video page jumps to the target page, the window is displayed on the target page, and the first information is displayed on the window. The live streaming image corresponding to the live streaming video page is displayed in the window. The first information includes the service information for the live streaming video page, and the service information for the live streaming video page includes service information for reflecting an interactive service on the live streaming video page. In response to a preset trigger operation acting on the window, the live streaming video page is displayed, and the display resource corresponding to the first information is displayed on the live streaming video page.

[0082] It may be seen that the embodiments of the present disclosure support displaying, on the window, the service information that may reflect the interactive service of the live session that is exited recently, so that the user may timely know the live streaming content on the live streaming video page that is exited recently through the window, and then returns to the live session through the window, which enriches the functions related to live streaming processing and improves the user experience.

[0083] In practical applications, before the preset trigger operation on the window is received to display the live streaming video page and display the display resource corresponding to the first information on the live streaming video page, the target live streaming content of the live streaming video page may change. To this end, in the embodiments of the present disclosure, if it is detected that the target live streaming content on the live streaming video page changes, the first information on the window of the target page will change accordingly.

[0084] Specifically, in a process of displaying the first information on the window of the target page, if a switching message of the target live streaming content of the live streaming video page is received, the display of the first information on the window is switched to a display of second information. The second information is used to reflect the switched target live streaming content of the live streaming video page, that is, by switching to display the second information on the window, it is convenient for the user to perceive the change in the live streaming content of the live streaming page.

[0085] In practical applications, a display dynamic effect may also be set for the first information. Specifically, when the first information is displayed on the window of the target page, the display of the first information is controlled to be on the window according to the display dynamic effect. The display dynamic effect is, for example, displaying the first information in a progressive form. In addition, the window may also fade out in a progressive form.

[0086] The live streaming processing method provided in the embodiments of the present disclosure supports displaying, on the window, the first information that may reflect the target live streaming content of the live streaming page that is exited recently, so that the user may timely know the live streaming content on the live streaming page that is exited recently through the window, and then returns to the live streaming page through the window, which enriches the functions related to live streaming processing and improves the user experience.

[0087] Based on the above method embodiments, the present disclosure further provides a live streaming processing apparatus. Fig. 6 is a schematic diagram of a structure of a live streaming processing apparatus according to embodiments of the present disclosure. The apparatus includes:

a first display module 601, configured to jump from a live streaming video page to a target page in response to a switching operation for the live streaming video page, display a window on the target page, and display first information on the window, where a live streaming image corresponding to the live streaming video page is displayed in the window, and the first information includes service information for reflecting an interactive service on the live streaming video page; and

a second display module 602, configured to display, in response to a preset trigger operation acting on the window, the live streaming video page, and display, on the live streaming video page, a display resource corresponding to the first information.

[0088] In an optional implementation, the service information includes resource information for a first live streaming resource and/or object information for a first recommended object on the live streaming video page.

[0089] In an optional implementation, the first recommended object includes a second recommended object in a being-explained state on the live streaming video page.

[0090] In an optional implementation, the object information for the first recommended object includes at least one of the followings of the first recommended object:

an object picture, an object name, or a resource attribute value.

[0091] In an optional implementation, the first live streaming resource includes a third live streaming resource in a being-streamed state, the resource information for the first live streaming resource includes state information for the first live streaming resource, and the first live streaming resource is used to trigger an interactive operation for a recommended object on the live streaming video page.

[0092] In an optional implementation, the apparatus further includes:

a timing module, configured to start a timer in response to the first information being displayed on the window; and

a control module, configured to control the first information to be hidden from display on the window when the timer reaches a preset duration.

[0093] In an optional implementation, the apparatus further includes:

a first determination module, configured to determine whether there is a third live streaming resource in a being-streamed state on the live streaming video page; and

accordingly, the first display module is further configured to:

if it is determined that there is the third live streaming resource in the being-streamed state on the live streaming video page, display state information for the live streaming resource on the window.

[0094] In an optional implementation, the apparatus further includes:

a second determination module, configured to determine whether there is a second recommended object in a being-explained state on the live streaming video page if it is determined that there is no third live streaming resource in the being-streamed state on the live streaming video page; and

accordingly, the first display module is further configured to:

if it is determined that there is the second recommended object in the being-explained state on the live streaming video page, display object information for the recommended object on the window.

[0095] In an optional implementation, the apparatus further includes:

a switching module, configured to switch from displaying the first information to displaying second information on the window, where the second information includes resource information for the first live streaming resource and/or object information for the first recommended object on the live streaming video page.

[0096] In an optional implementation, the first display module includes:

a first jump sub-module, configured to jump from the live streaming video page to the target page in response to an exit operation for the live streaming video page;

or,

a second jump sub-module, configured to jump from the live streaming video page to the target page in response to a trigger operation for switching from the live streaming video page to the target page.

[0097] In the live streaming processing apparatus provided in the embodiments of the present disclosure, first, in response to a switching operation for a live streaming video page, the live streaming video page jumps to a target page, a window is displayed on the target page, and first information is displayed on the window. A live streaming image corresponding to the live streaming video page is displayed in the window. The first information includes service information for the live streaming video page, and the service information for the live streaming video page includes service information for reflecting an interactive service on the live streaming video page. Then, in response to a preset trigger operation acting on the window, the live streaming video page is displayed, and a display resource corresponding to the first information is displayed on the live streaming video page.

[0098] It can be seen that the embodiments of the present disclosure support displaying, in the window, the service information that may reflect the interactive service of the live session that is exited recently, so that the user may timely know the live streaming content on the live streaming video page that is exited recently through the window, and then returns to the live session through the window, which enriches the functions related to live streaming processing and improves the user experience.

[0099] 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 embodiments of the present disclosure.

[00100] Embodiments of the present disclosure further provide a computer program product, including a computer program/instruction, where the computer program/instruction, when executed by a processor, implements the live streaming processing method according to embodiments of the present disclosure.

[00101] In addition, embodiments of the present disclosure further provide a live streaming processing device, which, as shown in Fig. 7, may include:

a processor 701, a memory 702, an input apparatus 703, and an output apparatus 704. The number of the processor 701 in the live streaming processing device may be one or more, and one processor is used as an example in Fig. 7. In some embodiments of the present disclosure, the processor 701, the memory 702, the input apparatus 703, and the output apparatus 704 may be connected through a bus or in other ways. In Fig. 7, connection through a bus is used as an example.

[00102] The memory 702 may be used to store software programs and modules. The processor 701 executes various functional applications and data processing of the live streaming processing device by running the software programs and modules stored in the memory 702. The memory 702 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, and the like. In addition, the memory 702 may include a high-speed random access memory or a non-volatile memory, such as at least one magnetic disk storage device, a flash memory device, or other volatile solid-state storage devices. The input apparatus 703 may be used to receive input digital or character information, and to generate a signal input related to user settings and function control of the live streaming processing device.

[00103] Specifically, in the present embodiment, the processor 701 will load an executable file corresponding to a process of one or more application programs into the memory 702 according to the following instructions, and the processor 701 will run the application programs stored in the memory 702 to implement the various functions of the above live streaming processing device.

[00104] 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", "including" 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 a phrase "including a" does not exclude that there are other same elements in the process, method, object or device including the element.

[00105] The above descriptions are only specific implementations 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 the 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:

jumping from a live streaming video page to a target page in response to a switching operation for the live streaming video page, displaying a window on the target page, and displaying first information on the window, wherein a live streaming image corresponding to the live streaming video page is displayed in the window, and the first information comprises service information for reflecting an interactive service on the live streaming video page; and

displaying, in response to a preset trigger operation acting on the window, the live streaming video page, and displaying, on the live streaming video page, a display resource corresponding to the first information.

2. The method of claim 1, wherein the service information comprises resource information for a first live streaming resource and/or object information for a first recommended object on the live streaming video page.

3. The method of claim 2, wherein the first recommended object comprises a second recommended object in a being-explained state on the live streaming video page.

4. The method of claim 2 or 3, wherein the object information for the first recommended object comprises at least one of the followings of the first recommended object:

an object picture, an object name, or a resource attribute value.

5. The method of claim 1, wherein the first live streaming resource comprises a third live streaming resource in a being-streamed state, the resource information for the first live streaming resource comprises state information for the first live streaming resource, and the first live streaming resource is used to trigger an interactive operation for a recommended object on the live streaming video page.

6. The method of claim 1, wherein the method further comprises: after displaying the first information on the window,

starting a timer in response to the first information being displayed on the window; and

controlling the first information to be hidden from display on the window in response to the timer reaching a preset duration.

7. The method of claim 1, wherein the method further comprises: before displaying the first information on the window,

determining whether there is a third live streaming resource in a being-streamed state on the live streaming video page; and

wherein displaying the first information on the window comprises:

in response to a determination that there is the third live streaming resource in the being-streamed state on the live streaming video page, displaying state information for the third live streaming resource on the window.

8. The method of claim 7, further comprising:

determining whether there is a second recommended object in a being-explained state on the live streaming video page in response to a determination that there is no third live streaming resource in the being-streamed state on the live streaming video page; and

wherein displaying the first information on the window comprises:

in response to a determination that there is the second recommended object in the being-explained state on the live streaming video page, displaying object information for the second recommended object on the window.

9. The method of claim 1, wherein the method further comprises: before displaying, in response to the preset trigger operation acting on the window, the live streaming video page, and displaying, on the live streaming video page, the display resource corresponding to the first information,

switching from displaying the first information to displaying second information on the window, wherein the second information comprises resource information for the first live streaming resource and/or object information for the first recommended object on the live streaming video page.

10. The method of claim 1, wherein jumping from the live streaming video page to the target page in response to the switching operation for the live streaming video page comprises:

jumping from the live streaming video page to the target page in response to an exit operation for the live streaming video page; or

jumping from the live streaming video page to the target page in response to a trigger operation for switching from the live streaming video page to the target page.

11. A live streaming processing apparatus, comprising:

a first display module, configured to jump from a live streaming video page to a target page in response to a switching operation for the live streaming video page, display a window on the target page, and display first information on the window, wherein a live streaming image corresponding to the live streaming video page is displayed in the window, and the first information comprises service information for reflecting an interactive service on the live streaming video page; and

a second display module, configured to display, in response to a preset trigger operation acting on the window, the live streaming video page, and display, on the live streaming video page, a display resource corresponding to the first information.

12. A computer-readable storage medium, wherein 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 method of any of claims 1 to 10.

13. 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 processor, when executing the computer program, implements the method of any of claims 1 to 10.

14. A computer program product, wherein the computer program product comprises a computer program/instruction, and the computer program/instruction, when executed by a processor, implements the method of any of claims 1 to 10.