

PROCESSING METHOD AND APPARATUS FOR RECOMMENDED OBJECT , DEVICE AND STORAGE MEDIUM

CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] This application claims priority to Chinese Patent Application No. 202410339123.1, filed on March 22, 2024 and entitled "RECOMMENDED OBJECT PROCESSING METHOD AND 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 method and apparatus for processing recommended object, a device and a storage medium.

BACKGROUND

[0003] With the continuous development of network technologies, users' demands for functions related to displaying recommended objects become increasingly diverse.

SUMMARY

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

[0005] In a first aspect, the present disclosure provides a method for processing recommended object, and the method includes:

[0006] displaying an object display page, wherein the object display page includes a primary label display area, a secondary label display area, and an object display area, the primary label display area is used for displaying a preset primary label, the secondary label display area is used for displaying a secondary label under the primary label, and the object display area is used for displaying recommended object;

[0007] determining a currently positioned primary label in the primary label display area as a first target primary label in response to a display position adjustment of the recommended object in the object display area; and

[0008] controlling, in response to detecting that a first target recommended object under a first target secondary label corresponding to the first target primary label is displayed at a first target display position in the object display area, the currently positioned primary label in the primary label display area to be switched from the first target primary label to a second target primary label, and displaying a recommended object corresponding to the second target primary label in the object display area;

[0009] wherein the second target primary label is determined based on a display order of primary labels in the primary label display area and a direction of the display position adjustment, and the first target secondary label is determined based on a display order of secondary labels under the first target primary label in the

secondary label display area and the direction of the display position adjustment.

[0010] In an optional implementation, a plurality of primary labels are displayed in the primary label display area, and the method further includes:

[0011] controlling, in response to a preset trigger operation acting on the primary label display area, a display position adjustment of the primary label in the primary label display area based on a direction indicated by the preset trigger operation.

[0012] In an optional implementation, after controlling the currently positioned primary label in the primary label display area to be switched from the first target primary label to the second target primary label, the method further includes:

[0013] controlling a currently positioned secondary label in the secondary label display area to be switched from the first target secondary label to a second target secondary label under the second target primary label; and

[0014] wherein displaying the recommended object corresponding to the second target primary label in the object display area includes:

[0015] displaying a recommended object corresponding to the second target secondary label under the second target primary label in the object display area.

[0016] In an optional implementation, a plurality of secondary labels under the second target primary label are displayed in the secondary label display area, and displaying the recommended object corresponding to the second target primary label in the object display area includes:

[0017] sequentially displaying, in the object display area and based on a display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, recommended objects respectively corresponding to the plurality of secondary labels under the second target primary label.

[0018] In an optional implementation, sequentially displaying, in the object display area and based on the display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, the recommended objects respectively corresponding to the plurality of secondary labels under the second target primary label includes:

[0019] determining a currently positioned secondary label in the secondary label display area as a third target secondary label;

[0020] determining, in response to detecting that a second target recommended object under the third target secondary label is displayed at a second target display position in the object display area, whether the third target secondary label belongs to secondary label to be switched under the second target primary label, wherein the secondary label to be switched is determined based on a display order of the plurality of secondary labels under the second target primary label in the secondary label display area and the direction of the display position

adjustment; and

[0021] controlling, in response to determining that the third target secondary label does not belong to the secondary label to be switched under the second target primary label, the currently positioned secondary label in the secondary label display area to be switched from the third target secondary label to a fourth target secondary label under the second target primary label based on the display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, and displaying a recommended object corresponding to the fourth target secondary label in the object display area, wherein the fourth target secondary label is a secondary label under the second target primary label and adjacent to the third target secondary label.

[0022] In an optional implementation, a target numerical value is displayed at a first preset display position corresponding to a third target primary label in the primary label display area, and the target numerical value is used for representing a number of recommended objects corresponding to the third target primary label in a recommended object set corresponding to a target user.

[0023] In an optional implementation, before displaying the recommended object corresponding to the second target primary label in the object display area, the method further includes:

[0024] displaying an identifier corresponding to the second target primary label at a second preset display position in the object display area, wherein the identifier is used for prompting to display the recommended object corresponding to the second target primary label.

[0025] In an optional implementation, displaying the object display page includes:

[0026] displaying the object display page on a livestream channel page, wherein a recommended object in a target recommended object set is displayed in the object display area on the object display page, and the target recommended object set includes a recommended object under account information corresponding to the livestream channel page and a recommended object in a target livestream channel corresponding to the livestream channel page.

[0027] In an optional implementation, the preset primary label in the primary label display area includes a livestream label, and the livestream label is used for identifying the recommended object in the target livestream channel corresponding to the livestream channel page;

[0028] and/or

[0029] a preset primary label in the primary label display area include a recommendation label and/or an attribute resource value adjustment label, the recommendation label is used for identifying a recommended object in the target recommended object set whose target data is higher than a preset data value, and the attribute resource value adjustment label is used for identifying a recommended object in the target recommended object set whose adjustment information of an attribute resource value satisfies a preset adjustment amplitude threshold.

[0030] In an optional implementation, after determining the currently positioned primary label in the primary

label display area as the first target primary label in response to the display position adjustment of the recommended object in the object display area, the method further includes:

[0031] determining a currently positioned secondary label in the secondary label display area as a fifth target secondary label;

5 **[0032]** determining, in response to detecting that a third target recommended object under the fifth target secondary label is displayed at a third target display position in the object display area, whether the fifth target secondary label belongs to the secondary label to be switched corresponding to the first target primary label, wherein the third target recommended object is determined based on the direction of the display position adjustment, and the secondary label to be switched is determined based on a display order of a plurality of
10 secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment; and

[0033] switching, in response to determining that the fifth target secondary label does not belong to the secondary label to be switched corresponding to the first target primary label, the currently positioned secondary label in the secondary label display area to a secondary label adjacent to the fifth target secondary label based
15 on the display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, and displaying a recommended object corresponding to the secondary label adjacent to the fifth target secondary label in the object display area.

[0034] In an optional implementation, controlling, in response to detecting that the first target recommended object under the first target secondary label corresponding to the first target primary label is displayed at the first
20 target display position in the object display area, the currently positioned primary label in the primary label display area to be switched from the first target primary label to the second target primary label, and displaying the recommended object corresponding to the second target primary label in the object display area includes:

[0035] switching, in response to determining that the fifth target secondary label belongs to the secondary labels to be switched corresponding to the first target primary label, the currently positioned primary label in the
25 primary label display area to a primary label adjacent to the first target primary label based on the direction of the display position adjustment and the display order of the primary labels in the primary label display area, and displaying a recommended object under a secondary label corresponding to the primary label adjacent to the first target primary label in the object display area.

[0036] In a second aspect, the present disclosure further provides a recommended object processing apparatus,
30 including:

[0037] a first display module, configured to display an object display page, wherein the object display page includes a primary label display area, a secondary label display area, and an object display area, the primary label display area is used for displaying a preset primary label, the secondary label display area is used for displaying a secondary label under the primary label, and the object display area is used for displaying
35 recommended objects;

[0038] a first determination module, configured to determine a currently positioned primary label in the primary label display area as a first target primary label in response to a display position adjustment of a recommended object in the object display area; and

[0039] a first control module, configured to control, in response to detecting that a first target recommended object under a first target secondary label corresponding to the first target primary label is displayed at a first target display position in the object display area, the currently positioned primary label in the primary label display area to be switched from the first target primary label to a second target primary label, and display a recommended object corresponding to the second target primary label in the object display area;

[0040] wherein the second target primary label is determined based on a display order of the primary labels in the primary label display area and a direction of the display position adjustment, and the first target secondary label is determined based on a display order of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment.

[0041] In a third aspect, the present disclosure provides a computer-readable storage medium, wherein the computer-readable storage medium stores instructions, and the instructions, when executed by a terminal device, cause the terminal device to implement the above method.

[0042] In a fourth aspect, the present disclosure provides a recommended object processing device including: 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 above method.

[0043] In a fifth aspect, the present disclosure provides a computer program product, including a computer program/instruction, wherein the computer program/instruction, when executed by a processor, implements the above method.

[0044] An embodiment of the present disclosure provides a method for processing recommended object method. Specifically, an object display page is displayed, wherein the object display page includes a primary label display area, a secondary label display area, and an object display area, the primary label display area is used for displaying a preset primary label, the secondary label display area is used for displaying a secondary label under the primary label, and the object display area is used for displaying the recommended object; a currently positioned primary label in the primary label display area is determined as a first target primary label in response to a display position adjustment of the recommended object in the object display area; and controlling, in response to detecting that a first target recommended object under a first target secondary label corresponding to the first target primary label is displayed at a first target display position in the object display area, the currently positioned primary label in the primary label display area is controlled to be switched from the first target primary label to a second target primary label, and a recommended object corresponding to the second target primary label is displayed in the object display area. The second target primary label is determined based on a display order of the primary labels in the primary label display area and a direction of the display position adjustment, and the first target secondary label is determined based on a display order of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment.

[0045] The embodiment of the present disclosure supports that: when the display position of the recommended object in the object display area is adjusted, in response to detecting that the first target recommended object is displayed at the first target display position in the object display area, the first target primary label corresponding to the first target recommended object is controlled to be switched to the second target primary label, and the recommended object corresponding to the second target primary label is displayed in the object display area.

BRIEF DESCRIPTION OF THE DRAWINGS

[0046] 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.

[0047] In order to more clearly illustrate the technical solutions in the embodiments of the present disclosure or in the prior art, the drawings required to be used in the description of the embodiments or the prior art will be briefly introduced below. Obviously, for those of ordinary skills in the art, they may also acquire other drawings according to such drawings without paying any creative efforts.

[0048] Fig. 1 is a flowchart of a method for processing a recommended object provided by an embodiment of the present disclosure;

[0049] Fig. 2 is a schematic diagram of an object display page provided by an embodiment of the present disclosure;

[0050] Fig. 3 is a schematic diagram of another object display page provided by an embodiment of the present disclosure;

[0051] Fig. 4 is a flowchart of another method for processing a recommended object provided by an embodiment of the present disclosure;

[0052] Fig. 5 is a schematic diagram of a livestream channel page provided by an embodiment of the present disclosure;

[0053] Fig. 6 is a schematic structural diagram of an apparatus for processing a recommended object provided by an embodiment of the present disclosure; and

[0054] Fig. 7 is a schematic structural diagram of a device for processing recommended object provided by an embodiment of the present disclosure.

DETAILED DESCRIPTION OF EMBODIMENTS

[0055] 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.

[0056] 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 embodiments in the specification are part of the embodiments of the present disclosure, but not all of the embodiments.

[0057] With the continuous development of network technologies, users' requirements for functions related to an object list become more and more diverse. Specifically, an object display list is used for displaying recommended objects.

[0058] Therefore, how to enrich interaction functions related to the object list to satisfy users' growing diverse requirements has become an urgent technical issue that needs to be solved.

[0059] To this end, an embodiment of the present disclosure provides a method for processing a recommended object. Specifically, an object display page is displayed, wherein the object display page includes a primary label display area, a secondary label display area, and an object display area, the primary label display area is used for displaying a preset primary label, the secondary label display area is used for displaying a secondary label under the primary label, and the object display area is used for displaying the recommended object; a currently positioned primary label in the primary label display area is determined as a first target primary label in response to a display position adjustment of a recommended object in the object display area; and in response to detecting that a first target recommended object under a first target secondary label corresponding to the first target primary label is displayed at a first target display position in the object display area, the currently positioned primary label in the primary label display area is controlled to be switched from the first target primary label to a second target primary label, and a recommended object corresponding to the second target primary label is displayed in the object display area. The second target primary label is determined based on a display order of primary labels in the primary label display area and a direction of the display position adjustment, and the first target secondary label is determined based on a display order of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment.

[0060] The embodiment of the present disclosure supports that: when the display position of the recommended object in the object display area is adjusted, in response to detecting that the first target recommended object is displayed at the first target display position in the object display area, the first target primary label corresponding to the first target recommended object is controlled to be switched to the second target primary label, and the recommended object corresponding to the second target primary label is displayed in the object display area. In this manner, interaction manners related to the object display list are enriched, thereby improving the user experience.

[0061] Specifically, an embodiment of the present disclosure provides a recommended object processing method. Fig. 1 is a flowchart of a method for processing a recommended object provided by an embodiment of the present disclosure. The method specifically includes the following steps.

[0062] S101: an object display page is displayed.

[0063] The object display page includes a primary label display area, a secondary label display area, and an

object display area, the primary label display area is used for displaying a preset primary label, the secondary label display area is used for displaying a secondary label under the primary label, and the object display area is used for displaying the recommendation object.

[0064] The method for processing a recommended object provided by the embodiments of the present disclosure may be applied to a client, and specifically, the client may be deployed on a terminal such as a smart phone, a tablet computer, or a desktop computer.

[0065] In the embodiments of the present disclosure, the object display page may be any display page, and specifically may be a page displayed by triggering a shopping cart control on a livestream channel page, and the object display page is provided with a primary label display area, a secondary label display area, and an object display area.

[0066] The recommended objects are displayed in the object display area, and specifically, information related to the recommended objects may be displayed, such as image information, text description information, etc. of the recommendation objects. The recommended objects may include recommended objects under account information corresponding to the object display page, and the recommended objects may be displayed in the object display area in the form of a list, the list has a sliding function.

[0067] In the embodiment of the present disclosure, the preset primary labels displayed in the primary label display area have a correspondence with the recommended objects, and the primary labels are used for grouping the recommended objects. One or more secondary labels under the primary label may be displayed in the secondary label display area, and the secondary labels are used for further grouping the recommended objects corresponding to the primary label. Specifically, for example, the secondary classification labels corresponding to the primary label "recommend" may include "vegetables" and "fruits", wherein the recommended objects corresponding to the primary label "recommend" include "Chinese cabbage", "broccoli" and "apple", then the recommended objects corresponding to the secondary label "vegetables" may be "Chinese cabbage" and "broccoli", and the recommended object corresponding to the secondary label "fruits" may be "apple".

[0068] Fig. 2 is a schematic diagram of an object display page provided by an embodiment of the present disclosure. A primary label display area 201, a secondary label display area 202, and an object display area 203 are displayed on the object display page. The recommended objects currently displayed in the object display area are recommended objects corresponding to the primary label "recommend" 204, including a recommended object 205. At this time, the recommended object 205 is a recommended object corresponding to the secondary label "vegetables" 206 under the primary label "recommend" 204.

[0069] In practical applications, if a plurality of primary labels are displayed in the primary label display area, in order to support browsing the plurality of primary labels in the primary label display area, the embodiment of the present disclosure further sets a preset trigger operation for the primary label display area to control an display position adjustment of the displayed primary labels.

[0070] Specifically, when the preset trigger operation acted on the primary label display area is received, the

display position adjustment of the primary label in the primary label display area is controlled based on the direction indicated by the preset trigger operation, that is, the primary label is scroll-displayed in the primary label display area. The preset trigger operation for the primary label display area may include a slide operation for the primary label display area, and specifically, the slide operation may be triggered for any primary label currently displayed in the primary label display area.

[0071] The slide operation is triggered for the primary labels, and the display position of the primary labels is controlled based on the sliding direction. The direction of the display position adjustment of the primary labels may be consistent with the sliding direction. Specifically, if the sliding direction is upward sliding, the display position of the primary labels is controlled to be adjusted upward, otherwise, the display position of the primary labels is controlled to be adjusted downward.

[0072] In the object display page shown in Fig. 2, when the slide operation for the primary label display area 201 is received, the display position adjustment of the primary label in the primary label display area is controlled based on the sliding direction.

[0073] S102: a currently positioned primary label in the primary label display area is determined as a first target primary label in response to a display position adjustment of the recommended object in the object display area.

[0074] In the embodiment of the present disclosure, the display position adjustment of the recommended object in the object display area means that the recommended object is scroll-displayed in the object display area. Specifically, if the recommended object is scroll-displayed upward in the object display area, the display position of the recommended object in the object display area is adjusted upward; if the recommended object is scroll-displayed downward in the object display area, the display position of the recommended object in the object display area is adjusted downward. When the display position adjustment of the recommended object in the object display area is received, the currently positioned primary label in the current primary label display area is determined and this primary label is determined as the first target primary label.

[0075] In practical applications, before the display position adjustment of the recommended object in the object display area, a preset trigger operation for the object display area may be triggered, and the preset trigger operation for the object display area may be a preset slide operation. Specifically, when the preset slide operation for the object display area is received, the display position adjustment of the recommended object in the object display area is controlled.

[0076] S103: in response to detecting that a first target recommended object under a first target secondary label corresponding to the first target primary label is displayed at a first target display position in the object display area, the currently positioned primary label in the primary label display area is controlled to be switched from the first target primary label to a second target primary label, and a recommended object corresponding to the second target primary label is displayed in the object display area.

[0077] The second target primary label is determined based on a display order of primary labels in the primary

label display area and a direction of the display position adjustment, and the first target secondary label is determined based on a display order of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment.

[0078] In the embodiment of the present disclosure, the first target display position may refer to any display position in the object display area. Specifically, the first target display position may be a position slightly above the middle position of the object display area, or may be a position slightly below the middle position of the object display area.

[0079] In the embodiment of the present disclosure, the first target secondary label is determined based on the display order of the secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment of the recommended object in the object display area.

[0080] Specifically, if the display position of the recommended object in the object display area is adjusted downward, the secondary labels under the first target primary label are displayed in a display order from the last secondary label to the first secondary label, and the recommended objects corresponding to the first target primary label are scroll-displayed in a display order from the last recommended object to the first recommended object, then the first secondary label under the first target primary label is determined as the first target secondary label, and the first recommended object corresponding to the first secondary label is determined as the first target recommended object; if the display position of the recommended object corresponding to the first target primary label in the object display area is adjusted upward, the secondary labels under the first target primary label are displayed in a display order from the first secondary label to the last secondary label, and the recommended objects corresponding to the first target primary label are scroll-displayed in a display order from the first recommended object to the last recommendation object, then the last secondary label under the first target primary label is determined as the first target secondary label, and the last recommended object corresponding to the first secondary label is determined as the first target recommended object.

[0081] Based on the understanding of the above content, in a case where it is detected that the first target recommended object under the first target secondary label corresponding to the first target primary label is displayed at the first target display position in the object display area, the currently positioned primary label in the primary label display area is controlled to be switched from the first target primary label to the second target primary label, and the recommended object corresponding to the second target primary label is displayed in the object display area.

[0082] The second target primary label may be determined based on the display order of the primary labels in the primary label display area and the direction of the display position adjustment of the recommended object in the object display area. The second target primary label may be a primary label adjacent to the first target primary label. Specifically, the second target primary label is determined based on the adjustment direction of the display position of the recommended object in the object display area.

[0083] If the display position of the recommended object in the object display area is adjusted downward, the second target primary label may be a previous primary label adjacent to the first target primary label. If the

display position of the recommended object in the object display area is adjusted upward, the second target primary label may be a next primary label adjacent to the first target primary label.

[0084] Fig. 3 is a schematic diagram of an object display page provided by an embodiment of the present disclosure. In the object display page shown in Fig. 2, it is assumed that the display position of the recommended object in the object display area is adjusted upward (swiped upward). In a case where it is detected that the first target recommended object under the first target secondary label 206 "snacks" corresponding to the first target primary label 203 is displayed at the first target display position in the object display area, the currently positioned primary label is controlled to be switched from the first target primary label 203 to the next primary label, that is, the second target primary label "discount", and the recommended object corresponding to the second target primary label is displayed in the object display area. In the object display page shown in Fig. 3, the currently positioned primary label is switched to the primary label 301 "discount", and the recommended object corresponding to the primary label 301 "discount " is displayed in the object display area.

[0085] Based on the foregoing embodiments, after the currently positioned primary label in the primary label display area is controlled to be switched from the first target primary label to the second target primary label, the secondary label may be controlled to be synchronously switched when the primary label is switched. Specifically, the currently positioned secondary label in the secondary label display area is controlled to be switched from the first target secondary label to a second target secondary label under the second target primary label, and then the recommended object corresponding to the second target secondary label is displayed in the object display area. In other words, when the first target primary label is switched to the second target primary label, the secondary label is switched in linkage, and the first target secondary label under the first target primary label is switched to the second target secondary label under the second target primary label.

[0086] If the second target primary label is the next primary label adjacent to the first target primary label, the second target secondary label is the first secondary label under the second target primary label. If the second target primary label is the previous primary label adjacent to the first target primary label, the second target secondary label is the last secondary label under the second target primary label.

[0087] In practical applications, if a plurality of secondary labels under the second target primary label are displayed in the secondary label display area, when the recommended object corresponding to the second target primary label is displayed in the object display area, the recommended objects respectively corresponding to the secondary labels under the second target primary label may be scroll-displayed in the object display area based on the display order of the plurality of secondary labels corresponding to the second target primary label in the secondary label display area and the direction of the display position adjustment of the recommended object in the object display area.

[0088] Specifically, a secondary label under the currently positioned second target primary label in the secondary label display area is determined as a third target secondary label. The third target secondary label belongs to any secondary label under the second target primary label.

[0089] In a case where it is detected that a second target recommended object under the third target secondary

label is displayed at a second target display position in the object display area, it is determined whether the third target secondary label belongs to secondary label to be switched under the second target primary label.

[0090] The second target recommended object is a recommended object corresponding to the third target secondary label and is determined based on the direction of the display position adjustment of the recommended object in the object display area. If the display position of the recommended object in the object display area is adjusted downward and the recommended objects are displayed in a display order from the last recommended object to the first recommended object, the second target recommended object may be the first recommended object under the third target secondary label. If the display position of the recommended object in the object display area is adjusted upward and the recommended objects are displayed in a display order from the first recommended object to the last recommended object, the second target recommended object may be the last recommended object under the third target secondary label. The second target display position may be any display position in the object display area, specifically a position slightly above the middle position of the object display area, or a position slightly below the middle position of the object display area.

[0091] The secondary labels to be switched under the second target primary label are determined based on the display order of the plurality of secondary labels under the second target primary label in the secondary label display area and the direction of the display position adjustment. Specifically, if the display position of the recommended object in the object display area is adjusted downward, the plurality of secondary labels under the second target primary label are displayed in a display order from the last secondary label to the first secondary label, and the first secondary label is determined as a secondary label to be switched. If the display position of the recommended object in the object display area is adjusted upward, the plurality of secondary labels under the second target primary label are displayed in a display order from the first secondary label to the last secondary label, and the last secondary label is determined as a secondary label to be switched.

[0092] If it is determined that the third target secondary label does not belong to the secondary labels to be switched under the second target primary label, the currently positioned secondary label in the secondary label display area is controlled to be switched from the third target secondary label to a fourth target secondary label under the second target primary label based on the display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, and a recommended object corresponding to the fourth target secondary label is displayed in the object display area.

[0093] The fourth target secondary label is a secondary label under the second target primary label and adjacent to the third target secondary label. The fourth target secondary label may be determined based on the direction of the display position adjustment of the recommended object in the object display area. Specifically, if the display position of the recommended object in the object display area is adjusted downward, the fourth target secondary label is a previous secondary label adjacent to the third target secondary label; if the display position of the recommended object in the object display area is adjusted upward, the fourth target secondary label is a next secondary label adjacent to the third target secondary label.

[0094] The third target secondary label does not belong to the secondary labels to be switched corresponding

to the second target primary label, indicating that the third target secondary label is any secondary label other than the first secondary label and the last secondary label.

[0095] In the embodiment of the present disclosure, in a case where it is detected that the first target recommended object under the first target secondary label corresponding to the first target primary label is displayed at the first target display position in the object display area, the currently positioned primary label in the primary label display area is controlled to be switched from the first target primary label to the second target primary label. When the recommended object corresponding to the second target primary label is displayed, in order to prompt that the primary label to which the recommended object in the object display area belongs is switched, the identifier corresponding to the second target primary label is further displayed at the second preset display position in the object display area. The second preset display position may be any display position in the object display area, specifically a display position before the recommended object corresponding to the second target primary label starts to be displayed in the object display area. The identifier is used for prompting to display the recommended object corresponding to the second target primary label.

[0096] Specifically, before the recommended object corresponding to the second target primary label starts to be displayed in the object display area, the identifier corresponding to the second target primary label is displayed at the second preset display position in the object display area, and then, the recommended object corresponding to the second target primary label is controlled to be displayed in the object display area.

[0097] In the object display page shown in Fig. 3, the identifier corresponding to the second target primary label is displayed at a display position before the recommended object corresponding to the second target primary label starts to be displayed in the object display area, that is, at the second preset display position, as shown by 302.

[0098] In practical applications, in order to display the number of recommended objects corresponding to a target user and the primary label to which the recommended objects corresponding to the target user belong, the embodiment of the present disclosure further supports displaying a target numerical value at a first preset display position corresponding to a third target primary label in the primary label display area. The target numerical value is used for representing the number of recommended objects that belong to the recommended objects corresponding to the third target primary label in a recommended object set corresponding to the target user. The third target primary label may be any primary label in the primary label display area, and the third target primary label is a primary label to which the recommended objects corresponding to the target user belong. The recommended object set corresponding to the target user may specifically be recommended objects in a shopping cart of the target user. The first preset display position may be any display position within a display range of the third target primary label.

[0099] In the object display page shown in Fig. 3, the third target primary label is the second target primary label 301, and a target numerical value is displayed at the first preset display position corresponding to the second target primary label, as shown by 303, which is used for representing the number of recommended objects that belong to the second target primary label and that are added to the shopping cart by the target user.

[00100] In the recommended object processing method provided by the embodiment of the present disclosure, the object display page is displayed, wherein the object display page includes the primary label display area, the secondary label display area, and the object display area, the primary label display area is used for displaying the preset primary label, the secondary label display area is used for displaying the secondary label under the primary label, and the object display area is used for displaying the recommended object; the currently positioned primary label in the primary label display area is determined as the first target primary label in response to the display position adjustment of the recommended object in the object display area; and in response to detecting that the first target recommended object under the first target secondary label corresponding to the first target primary label is displayed at the first target display position in the object display area, the currently positioned primary label in the primary label display area is controlled to be switched from the first target primary label to the second target primary label, and the recommended object corresponding to the second target primary label is displayed in the object display area. The second target primary label is determined based on the display order of the primary labels in the primary label display area and the direction of the display position adjustment, and the first target secondary label is determined based on the display order of the secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment.

[00101] The embodiment of the present disclosure supports that: when the display position of the recommended object in the object display area is adjusted, in response to detecting that the first target recommended object is displayed at the first target display position in the object display area, the first target primary label corresponding to the first target recommended object is controlled to be switched to the second target primary label, and the recommended object corresponding to the second target primary label is displayed in the object display area, which enriches the related interaction manners of the recommendation objects, thereby improving the user experience.

[00102] In order to facilitate the understanding of the method for processing a recommended object provided by the embodiment of the present disclosure, Fig. 4 is a flowchart of another method for processing a recommended object provided by an embodiment of the present disclosure, which specifically includes the following steps.

[00103] S401: an object display page is displayed.

[00104] The object display page includes a primary label display area, a secondary label display area, and an object display area, the primary label display area is used for displaying a preset primary label, the secondary label display area is used for displaying a secondary label under the primary label, and the object display area is used for displaying recommendation object.

[00105] S402: a currently positioned primary label in the primary label display area is determined as a first target primary label in response to a display position adjustment of a recommended object in the object display area.

[00106] Steps S401 and S402 may be understood with reference to the contents of steps S101 and S102, which will not be repeated herein.

[00107] S403: a currently positioned secondary label in the secondary label display area is determined as a fifth target secondary label.

[00108] In the embodiment of the present disclosure, the currently positioned secondary label in the secondary label display area is a secondary label under the first target primary label, and the currently positioned secondary label is determined as the fifth target secondary label.

[00109] S404: in response to detecting that a third target recommended object under the fifth target secondary label is displayed at a third target display position in the object display area, it is determined whether the fifth target secondary label belongs to a secondary label to be switched corresponding to the first target primary label, wherein the third target recommended object is determined based on the direction of the display position adjustment, and the secondary label to be switched is determined based on a display order of a plurality of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment.

[00110] In the embodiment of the present disclosure, the third target recommended object is determined based on the direction of the display position adjustment of the recommended object in the object display area. Specifically, if the display position of the recommended object in the object display area is adjusted downward, that is, the recommended objects are displayed in a display order from the last recommended object to the first recommended object, the third target recommended object may be the first recommended object under the fifth target secondary label; if the display position of the recommended object in the object display area is adjusted upward, that is, the recommended objects are displayed in a display order from the first recommended object to the last recommended object, the third target recommended object may be the last recommended object under the fifth target secondary label. The third target display position may be any display position in the object display area. Specifically, the third target display position may be a position slightly above a middle position of the object display area, or a position slightly below the middle position of the object display area.

[00111] In the embodiment of the present disclosure, in response to the display position adjustment of the recommended object in the object display area, in a case where it is detected that the third target recommended object under the fifth target secondary label is displayed at the third target display position in the object display area, it is determined whether the fifth target secondary label belongs to the labels to be switched corresponding to the first target primary label.

[00112] The secondary labels to be switched corresponding to the first target primary label are determined based on the display order of the plurality of secondary labels under the first target primary label and the direction of the display position adjustment of the recommended object in the object display area. Specifically, if the display position of the recommended object in the object display area is adjusted downward, the plurality of secondary labels under the first target primary label are displayed in a display order from the last secondary label to the first secondary label, and the first secondary label is determined as a secondary label to be switched. If the display position of the recommended object in the object display area is adjusted upward, the plurality of secondary labels under the second target primary label are displayed in a display order from the first secondary

label to the last secondary label, and the last secondary label is determined as a secondary label to be switched.

[00113] S405: in response to determining that the fifth target secondary label does not belong to the secondary label to be switched corresponding to the first target primary label, the currently positioned secondary label in the secondary label display area is switched to a secondary label adjacent to the fifth target secondary label based on the display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, and a recommended object corresponding to the secondary label adjacent to the fifth target secondary label is displayed in the object display area.

[00114] In the embodiment of the present disclosure, the fifth target secondary label does not belong to the secondary labels to be switched under the first target primary label, indicating that the fifth target secondary label is any secondary label other than the first secondary label and the last secondary label under the first target primary label.

[00115] In the embodiment of the present disclosure, in response to the display position adjustment of the recommended object in the object display area, when it is detected that the third target recommended object corresponding to the fifth target secondary label is displayed at the third target display position in the object display area, and based on the fact that the fifth target secondary label does not belong to the labels to be switched corresponding to the first target primary label, the currently positioned secondary label is switched to the secondary label adjacent to the fifth target secondary label, and the recommended object corresponding to the adjacent secondary label is displayed in the object display area.

[00116] The secondary label adjacent to the fifth target secondary label is also determined based on the display order of the plurality of secondary labels under the first target primary label and the direction of the display position adjustment of the recommended object in the object display area. Specifically, if the display position of the recommended object in the object display area is adjusted downward, the secondary label adjacent to the fifth target secondary label is a previous secondary label adjacent to the fifth target secondary label; if the display position of the recommended object in the object display area is adjusted upward, the secondary label adjacent to the fifth target secondary label is the first secondary label adjacent to the fifth target secondary label.

[00117] S406: in response to determining that the fifth target secondary label belongs to the secondary label to be switched corresponding to the first target primary label, the currently positioned primary label in the primary label display area is switched to a primary label adjacent to the first target primary label based on the direction of the display position adjustment and the display order of primary labels in the primary label display area, and a recommended object under a secondary label corresponding to the primary label adjacent to the first target primary label is displayed in the object display area.

[00118] In the embodiment of the present disclosure, the fifth target secondary label belongs to the labels to be switched corresponding to the first target primary label, indicating that the fifth target secondary label is the first secondary label or the last secondary label under the first target primary label.

[00119] In the embodiment of the present disclosure, in response to the display position adjustment of the

recommended object in the object display area, when it is detected that the third target recommended object corresponding to the fifth target secondary label is displayed at the third target display position in the object display area, and it is determined that the fifth target secondary label belongs to the labels to be switched corresponding to the first target primary label, the currently positioned primary label is switched to the primary label adjacent to the first target primary label, and the recommended object corresponding to the adjacent primary label is displayed in the object display area.

[00120] In the embodiment of the present disclosure, the primary label adjacent to the first target primary label is also determined based on the direction of the display position adjustment of the recommended object in the object display area and the display order of the primary labels. Specifically, if the display position of the recommended object in the object display area is adjusted downward, the primary label adjacent to the first target primary label is a previous primary label adjacent to the first target primary label; if the display position of the recommended object in the object display area is adjusted upward, the primary label adjacent to the first target primary label is a next primary label adjacent to the first target primary label.

[00121] The embodiment of the present disclosure supports that when the display position of the recommended object in the object display area is adjusted, once it is detected that the third target recommended object is displayed at the third target display position in the object display area, by determining whether the fifth target secondary label corresponding to the third target recommended object belongs to the secondary labels to be switched, it is determined whether to switch the secondary label or the primary label, and the corresponding recommended object is displayed in the object display area, which enriches the related interaction manners of the recommended objects, thereby improving the user experience.

[00122] In order to facilitate the understanding of the above embodiments, the embodiments of the present disclosure will be introduced by taking a livestream channel as a specific application scenario.

[00123] First, when a preset trigger operation acted on a livestream channel page is received, an object display page is displayed on the livestream channel page. A recommended object in a target recommended object set is displayed in an object display area on the object display page, and the target recommended object set includes a recommended object under account information corresponding to the livestream channel page and a recommended object in a target livestream channel corresponding to the livestream channel page.

[00124] The preset trigger operation for the livestream channel page may specifically be triggering a shopping cart control on the livestream channel page, the account information corresponding to the livestream channel page may specifically be a store corresponding to the livestream channel page, and the recommended objects under the account information corresponding to the livestream channel page may specifically be commodity objects in the store, including commodity objects in the livestream channel and commodity objects not in livestream.

[00125] In addition, the preset primary label in the primary label display area of the object display page displayed on the livestream channel page may include a livestream label, a recommendation label, and/or an attribute resource value adjustment label.

[00126] The livestream label is used for identifying a recommended object in the target livestream channel corresponding to the livestream channel page. In other words, the recommended object corresponding to the livestream label is a livestream commodity in the current livestream channel.

[00127] The recommendation label is used for identifying a recommended object in the target recommended object set whose target data is higher than a preset data value, for example, a commodity whose sales volume is higher than preset data, a commodity whose rate of positive reviews is higher than a preset data value, and the like; the attribute resource value adjustment label is used for identifying a recommended object in the target recommended object set whose adjustment information of an attribute resource value satisfies a preset adjustment amplitude, which may specifically be a commodity whose price reduction satisfies a preset adjustment amplitude.

[00128] Fig. 5 is a schematic diagram of an object display page provided by an embodiment of the present disclosure. Recommended objects in the target recommended object set and account information corresponding to the livestream channel page are displayed in an object display area of the object display page, as shown in 501. In addition, a livestream label 502, a recommendation label 503, an attribute resource value adjustment label 504, and the like are displayed in a primary label display area of the object display page. The recommended object corresponding to the livestream label 502 is displayed on the object display page on the current livestream channel page. The secondary label corresponding to the livestream label 502 includes "All", "Vegetables", and "Fruits".

[00129] When it is received that the display position of the recommended object in the object display area is adjusted upward, the livestream label 502 currently positioned is determined as the first target primary label. The secondary labels under the livestream label are displayed in a display order from "All" to "Fruits", and the recommended objects are displayed in an order from the first recommended object to the last recommended object. If it is detected that the first target recommended object 505 (the last recommended object) corresponding to the first target secondary label ("Fruits") under the livestream label 502 is displayed to the first target display position in the object display area, the livestream label 502 currently positioned in the primary label display area is controlled to be switched to the recommendation label 503, the identifier corresponding to the recommendation label is displayed at a position before starting to display the recommended object corresponding to the recommendation label 503 in the object display area, and then the recommended object corresponding to the recommendation label 503 is displayed in the object display area (as shown in Fig. B in the object display page in Fig. 5).

[00130] Based on the above method embodiments, the present disclosure further provides an apparatus for processing recommended object. Fig. 6 is a schematic structural diagram of a recommended object processing apparatus provided by an embodiment of the present disclosure. The apparatus includes:

[00131] a first display module 601, configured to display an object display page, wherein the object display page includes a primary label display area, a secondary label display area, and an object display area, the primary label display area is used for displaying a preset primary label, the secondary label display area is used for

displaying a secondary label under the primary label, and the object display area is used for displaying recommended object;

[00132] a first determination module 602, configured to determine a currently positioned primary label in the primary label display area as a first target primary label in response to a display position adjustment of the recommended object in the object display area; and

[00133] a first control module 603, configured to control, in response to detecting that a first target recommended object under a first target secondary label corresponding to the first target primary label is displayed at a first target display position in the object display area, the currently positioned primary label in the primary label display area to be switched from the first target primary label to a second target primary label, and display a recommended object corresponding to the second target primary label in the object display area;

[00134] wherein the second target primary label is determined based on a display order of the primary labels in the primary label display area and a direction of the display position adjustment, and the first target secondary label is determined based on a display order of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment.

[00135] In an optional implementation, a plurality of primary labels are displayed in the primary label display area, and the apparatus further includes:

[00136] a second control module, configured to control, in response to a preset trigger operation acting on the primary label display area, a display position adjustment of the primary label in the primary label display area based on a direction indicated by the preset trigger operation.

[00137] In an optional implementation, the apparatus further includes:

[00138] a third control module, configured to control a currently positioned secondary label in the secondary label display area to be switched from the first target secondary label to a second target secondary label under the second target primary label; and

[00139] accordingly, the first control module includes a first display module, which is configured to:

display a recommended object corresponding to the second target secondary label under the second target primary label in the object display area.

[00141] In an optional implementation, a plurality of secondary labels under the second target primary label are displayed in the secondary label display area, and the first control module includes a first display module, which is configured to:

sequentially display, in the object display area and based on a display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, recommended objects respectively corresponding to the plurality of secondary labels under the second target primary label.

[00143] In an optional implementation, the first control module includes a first display module, and the first

display module includes:

[00144] a first determination sub-module, configured to determine a currently positioned secondary label in the secondary label display area as a third target secondary label;

[00145] a second determination sub-module, configured to determine, in response to detecting that a second target recommended object under the third target secondary label is displayed at a second target display position in the object display area, whether the third target secondary label belongs to secondary label to be switched under the second target primary label, wherein the secondary label to be switched is determined based on a display order of the plurality of secondary labels under the second target primary label in the secondary label display area and the direction of the display position adjustment; and

[00146] a third determination sub-module, configured to control, in response to determining that the third target secondary label does not belong to the secondary label to be switched under the second target primary label, the currently positioned secondary label in the secondary label display area to be switched from the third target secondary label to a fourth target secondary label under the second target primary label based on the display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, and display a recommended object corresponding to the fourth target secondary label in the object display area, wherein the fourth target secondary label is a secondary label under the second target primary label and adjacent to the third target secondary label.

[00147] In an optional implementation, a target numerical value is displayed at a first preset display position corresponding to a third target primary label in the primary label display area, and the target numerical value is used for representing a number of recommended objects corresponding to the third target primary label in a recommended object set corresponding to a target user.

[00148] In an optional implementation, the apparatus further includes:

[00149] a second display module, configured to display an identifier corresponding to the second target primary label at a second preset display position in the object display area, wherein the identifier is used for prompting to display the recommended object corresponding to the second target primary label.

[00150] In an optional implementation, the first display module is configured to:

[00151] display the object display page on a livestream channel page, wherein a recommended object in a target recommended object set is displayed in the object display area on the object display page, and the target recommended object set includes a recommended object under account information corresponding to the livestream channel page and a recommended object in a target livestream channel corresponding to the livestream channel page.

[00152] In an optional implementation, the preset primary labels in the primary label display area include a livestream label, and the livestream label is used for identifying a recommended object in the target livestream channel corresponding to the livestream channel page;

[00153] and/or

[00154] a preset primary label in the primary label display area includes a recommendation label and/or an attribute resource value adjustment label, the recommendation label is used for identifying a recommended object in the target recommended object set whose target data is higher than a preset data value, and the attribute resource value adjustment label is used for identifying a recommended object in the target recommended object set whose adjustment information of an attribute resource value satisfies a preset adjustment amplitude threshold.

[00155] In an optional implementation, the apparatus further includes:

[00156] a second determination module, configured to determine a currently positioned secondary label in the secondary label display area as a fifth target secondary label;

[00157] a third determination module, configured to determine, in response to detecting that a third target recommended object under the fifth target secondary label is displayed at a third target display position in the object display area, whether the fifth target secondary label belongs to secondary label to be switched corresponding to the first target primary label, wherein the third target recommended object is determined based on the direction of the display position adjustment, and the secondary label to be switched is determined based on a display order of a plurality of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment; and

[00158] a second display module, configured to switch, in response to determining that the fifth target secondary label does not belong to the secondary label to be switched corresponding to the first target primary label, the currently positioned secondary label in the secondary label display area to a secondary label adjacent to the fifth target secondary label based on the display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, and display a recommended object corresponding to the adjacent secondary label in the object display area.

[00159] In an optional implementation, the first control module is configured to:

[00160] switch, in response to determining that the fifth target secondary label belongs to the secondary label to be switched corresponding to the first target primary label, the currently positioned primary label in the primary label display area to a primary label adjacent to the first target primary label based on the direction of the display position adjustment and the display order of the primary labels in the primary label display area, and display a recommended object under a secondary label corresponding to the primary label adjacent to the first target primary label in the object display area.

[00161] In the apparatus for processing a recommended object provided by the embodiment of the present disclosure, an object display page is displayed, wherein the object display page includes a primary label display area, a secondary label display area, and an object display area, the primary label display area is used for displaying preset a primary label, the secondary label display area is used for displaying a secondary label under the primary label, and the object display area is used for displaying the recommended object; a currently positioned primary label in the primary label display area is determined as a first target primary label in response

to a display position adjustment of a recommended object in the object display area; and in response to detecting that a first target recommended object under a first target secondary label corresponding to the first target primary label is displayed at a first target display position in the object display area, the currently positioned primary label in the primary label display area is controlled to be switched from the first target primary label to a second target primary label, and a recommended object corresponding to the second target primary label is displayed in the object display area. The second target primary label is determined based on a display order of primary labels in the primary label display area and a direction of the display position adjustment, and the first target secondary label is determined based on a display order of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment.

[00162] The embodiment of the present disclosure supports that: when the display position of the recommended object in the object display area is adjusted, in response to detecting that the first target recommended object is displayed at the first target display position in the object display area, the first target primary label corresponding to the first target recommended object is controlled to be switched to the second target primary label, and the recommended object corresponding to the second target primary label is displayed in the object display area, which enriches the related interaction manners of the recommendation objects, thereby improving the user experience.

[00163] In addition to the above methods and apparatuses, an embodiment of the present disclosure further provides 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 for processing a recommended object described in the embodiment of the present disclosure.

[00164] An embodiment of the present disclosure further provides a computer program product, including a computer program/instruction, wherein the computer program/instruction, when executed by a processor, implements the method for processing a recommended object described in the embodiment of the present disclosure.

[00165] In addition, an embodiment of the present disclosure further provides a recommended object processing device, as shown in Fig. 7, which may include:

[00166] a processor 701, a memory 702, an input apparatus 703, and an output apparatus 704. The number of the processor 701 in the recommended object processing device may be one or more, and one processor is taken 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 manners, and connection through a bus is taken as an example in Fig. 7.

[00167] The memory 702 may be used for storing software programs and modules, and the processor 701 executes various functional applications and data processing of the recommended object 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, wherein 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 for receiving input digital or character information, and generating signal input related to user settings and function control of the device for processing a recommended object.

5 **[00168]** 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 runs the application programs stored in the memory 702, so as to implement various functions of the above device for processing a recommended object.

10 **[00169]** 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
15 the phrase "including a" does not exclude that there are other same elements in the process, method, object or device including the element.

20 **[00170]** 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 the embodiments described herein, but rather to the widest scope consistent with the principles and novel features disclosed herein.

I/We Claim:

1. A method for processing a recommended object, comprising:

displaying an object display page, wherein the object display page comprises a primary label display area, a secondary label display area, and an object display area, the primary label display area is used for displaying a preset primary label, the secondary label display area is used for displaying a secondary label under the primary label, and the object display area is used for displaying the recommended object;

determining a currently positioned primary label in the primary label display area as a first target primary label in response to a display position adjustment of the recommended object in the object display area; and

controlling, in response to detecting that a first target recommended object under a first target secondary label corresponding to the first target primary label is displayed at a first target display position in the object display area, the currently positioned primary label in the primary label display area to be switched from the first target primary label to a second target primary label, and displaying a recommended object corresponding to the second target primary label in the object display area;

wherein the second target primary label is determined based on a display order of primary labels in the primary label display area and a direction of the display position adjustment, and the first target secondary label is determined based on a display order of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment.

2. The method of claim 1, wherein a plurality of primary labels are displayed in the primary label display area, and the method further comprises:

controlling, in response to a preset trigger operation acting on the primary label display area, a display position adjustment of the primary label in the primary label display area based on a direction indicated by the preset trigger operation.

3. The method of claim 1, wherein after controlling the currently positioned primary label in the primary label display area to be switched from the first target primary label to the second target primary label, the method further comprises:

controlling a currently positioned secondary label in the secondary label display area to be switched from the first target secondary label to a second target secondary label under the second target primary label; and

wherein displaying the recommended object corresponding to the second target primary label in the object display area comprises:

displaying a recommended object corresponding to the second target secondary label under the second target primary label in the object display area.

4. The method of claim 1, wherein a plurality of secondary labels under the second target primary label are displayed in the secondary label display area, and displaying the recommended object corresponding to the

second target primary label in the object display area comprises:

sequentially displaying, in the object display area and based on a display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, recommended objects respectively corresponding to the plurality of secondary labels under the second target primary label.

5. The method of claim 4, wherein sequentially displaying, in the object display area and based on the display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, the recommended objects respectively corresponding to the plurality of secondary labels under the second target primary label comprises:

determining a currently positioned secondary label in the secondary label display area as a third target secondary label;

determining, in response to detecting that a second target recommended object under the third target secondary label is displayed at a second target display position in the object display area, whether the third target secondary label belongs to a secondary label to be switched under the second target primary label, wherein the secondary label to be switched is determined based on a display order of the plurality of secondary labels under the second target primary label in the secondary label display area and the direction of the display position adjustment; and

controlling, in response to determining that the third target secondary label does not belong to the secondary label to be switched under the second target primary label, the currently positioned secondary label in the secondary label display area to be switched from the third target secondary label to a fourth target secondary label under the second target primary label based on the display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, and displaying a recommended object corresponding to the fourth target secondary label in the object display area, wherein the fourth target secondary label is a secondary label under the second target primary label and adjacent to the third target secondary label.

6. The method of claim 1, wherein a target numerical value is displayed at a first preset display position corresponding to a third target primary label in the primary label display area, and the target numerical value is used for representing a number of recommended objects corresponding to the third target primary label in a recommended object set corresponding to a target user;

and/or,

before displaying the recommended object corresponding to the second target primary label in the object display area, the method further comprises:

displaying an identifier corresponding to the second target primary label at a second preset display position in the object display area, wherein the identifier is used for prompting to display the recommended object corresponding to the second target primary label.

7. The method of claim 1, wherein displaying the object display page comprises:

displaying the object display page on a livestream channel page, wherein a recommended object in a target recommended object set is displayed in the object display area on the object display page, and the target recommended object set comprises a recommended object under account information corresponding to the
5 livestream channel page and a recommended object in a target livestream channel corresponding to the livestream channel page.

8. The method of claim 7, wherein the preset primary label in the primary label display area comprises a
10 livestream label, and the livestream label is used for identifying the recommended object in the target livestream channel corresponding to the livestream channel page;

and/or,

a preset primary label in the primary label display area comprise a recommendation label and/or an attribute resource value adjustment label, the recommendation label is used for identifying a recommended
15 object in the target recommended object set whose target data is higher than a preset data value, and the attribute resource value adjustment label is used for identifying a recommended object in the target recommended object set whose adjustment information of an attribute resource value satisfies a preset adjustment amplitude threshold.

9. The method of claim 1, wherein after determining the currently positioned primary label in the primary
20 label display area as the first target primary label in response to the display position adjustment of the recommended object in the object display area, the method further comprises:

determining a currently positioned secondary label in the secondary label display area as a fifth target
secondary label;

determining, in response to detecting that a third target recommended object under the fifth target
25 secondary label is displayed at a third target display position in the object display area, whether the fifth target secondary label belongs to a secondary label to be switched corresponding to the first target primary label, wherein the third target recommended object is determined based on the direction of the display position adjustment, and the secondary label to be switched is determined based on a display order of a plurality of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment; and

30 switching, in response to determining that the fifth target secondary label does not belong to the secondary label to be switched corresponding to the first target primary label, the currently positioned secondary label in the secondary label display area to a secondary label adjacent to the fifth target secondary label based on the display order of the plurality of secondary labels in the secondary label display area and the direction of the display position adjustment, and displaying a recommended object corresponding to the secondary label
35 adjacent to the fifth target secondary label in the object display area.

10. The method of claim 9, wherein in the case wherein controlling, in response to detecting that the first
target recommended object under the first target secondary label corresponding to the first target primary label

is displayed at the first target display position in the object display area, the currently positioned primary label in the primary label display area to be switched from the first target primary label to the second target primary label, and displaying the recommended object corresponding to the second target primary label in the object display area comprises:

switching, in response to determining that the fifth target secondary label belongs to the secondary label to be switched corresponding to the first target primary label, the currently positioned primary label in the primary label display area to a primary label adjacent to the first target primary label based on the direction of the display position adjustment and the display order of the primary labels in the primary label display area, and displaying a recommended object under a secondary label corresponding to the primary label adjacent to the first target primary label in the object display area.

11. An apparatus for processing a recommended object, comprising:

a first display module, configured to display an object display page, wherein the object display page comprises a primary label display area, a secondary label display area, and an object display area, the primary label display area is used for displaying a preset primary label, the secondary label display area is used for displaying a secondary label under the primary label, and the object display area is used for displaying the recommended object;

a first determination module, configured to determine a currently positioned primary label in the primary label display area as a first target primary label in response to a display position adjustment of the recommended object in the object display area; and

a first control module, configured to control, in response to detecting that a first target recommended object under a first target secondary label corresponding to the first target primary label is displayed at a first target display position in the object display area, the currently positioned primary label in the primary label display area to be switched from the first target primary label to a second target primary label, and display a recommended object corresponding to the second target primary label in the object display area;

wherein the second target primary label is determined based on a display order of primary labels in the primary label display area and a direction of the display position adjustment, and the first target secondary label is determined based on a display order of secondary labels under the first target primary label in the secondary label display area and the direction of the display position adjustment.

12. A computer-readable storage medium, wherein the computer-readable storage medium stores instructions, 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 device for processing a recommended object, 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, comprising a computer program/instruction, wherein the computer program/instruction, when executed by a processor, implements the method of any of claims 1 to 10.