

A METHOD, EQUIPMENT AND MEDIUM FOR PICKING UP MESSAGE

The present application claims priority from CN 202310587959.9
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TECHNICAL FIELD

[0001] The present application relates to the field of communication, in particular to a technology for picking up message.

BACKGROUND

[0002] In the prior art, the gameplay for unfamiliar messages in most social media products currently is to pick up the bottle thrown by an unfamiliar user, open the bottle and communicate to facilitate friend transaction. But in some cases, the number of available bottles is insufficient, so that the user frequently picks up useless starfishes, this
15 situation can cause significant harm to the user experience, cause the user unloads the products, and reduce the retention of the products.

DISCLOSURE OF INVENTION

[0003] An object of the present application is to provide a method, equipment and
20 medium for picking up message.

[0004] According to an aspect of the present application, there is provided a method for picking up message, the method comprises:

[0005] responding to a message picking operation executed by the first user for the message tree, acquiring the target activity message matched with the first user from the message tree, providing the target activity message to the first user, wherein the target
25 activity message is anonymously thrown into the message tree by the second user;

[0006] responding to an interactive trigger operation executed by the first user for the target activity message, enabling the first user and at least one third user to jointly participate in the target activity corresponding to the target activity message, wherein the third user has picked up the target activity message from the message tree.

5 [0007] According to one aspect of the present application, there is provided a computer equipment for picking up message, the equipment comprises:

[0008] a processor; and

[0009] a memory arranged to store computer executable instructions that, when executed, cause the processor to perform the following:

10 [0010] responding to a message picking operation executed by the first user for the message tree, acquiring the target activity message matched with the first user from the message tree, providing the target activity message to the first user, wherein the target activity message is anonymously thrown into the message tree by the second user;

[0011] responding to an interactive trigger operation executed by the first user for the
15 target activity message, enabling the first user and at least one third user to jointly participate in the target activity corresponding to the target activity message, wherein the third user has picked up the target activity message from the message tree.

[0012] According to one aspect of the present application, there is provided a computer-readable medium storing instructions that, when executed, cause a system to
20 perform the following:

[0013] responding to a message picking operation executed by the first user for the message tree, acquiring the target activity message matched with the first user from the message tree, providing the target activity message to the first user, wherein the target activity message is anonymously thrown into the message tree by the second user;

25 [0014] responding to an interactive trigger operation executed by the first user for the target activity message, enabling the first user and at least one third user to jointly participate in the target activity corresponding to the target activity message, wherein the third user has picked up the target activity message from the message tree.

[0015] According to one aspect of the present application, there is provided a network
30 equipment for picking up message, the equipment comprises:

[0016] one module, used for responding to a message picking operation executed by the first user for the message tree, acquiring the target activity message matched with the first user from the message tree, providing the target activity message to the first user,

wherein the target activity message is anonymously thrown into the message tree by the second user;

[0017] one two module, used for responding to an interactive trigger operation executed by the first user for the target activity message, enabling the first user and at least one third user to jointly participate in the target activity corresponding to the target activity message, wherein the third user has picked up the target activity message from the message tree.

[0018] Compared with the prior art, the present application is obtained by responding to a message picking operation executed by the first user for the message tree, acquiring the target activity message matched with the first user from the message tree, providing the target activity message to the first user, wherein the target activity message is anonymously thrown into the message tree by the second user; responding to an interactive trigger operation executed by the first user for the target activity message, enabling the first user and at least one third user to jointly participate in the target activity corresponding to the target activity message, wherein the third user has picked up the target activity message from the message tree. So that the diversification of message types is realized by associating the messages in the message tree with the activities, the surprise can be brought to the user, forward guidance is generated for the user through the activities, the activity of the user is promoted, friend transaction among strangers can be better promoted in the activities, and the user experience of the message tree is improved.

BRIEF DESCRIPTION OF DRAWINGS

[0019] Other features, objects and advantages of the present application will become more apparent upon reading of the detailed description of non-limiting embodiments thereof, which made with reference to the following drawings.

[0020] FIG. 1 illustrates a flow diagram of a method for picking up message, according to an embodiment of the present application;

[0021] FIG. 2 illustrates a flow diagram of a method for picking up message, according to an embodiment of the present application;

[0022] FIG. 3 illustrates a block diagram of a network equipment for picking up message, according to an embodiment of the present application;

[0023] FIG. 4 illustrates an exemplary system that can be used to implement the various embodiments described in the present application;

[0024] The same or similar reference numbers in the drawings identify the same or similar elements.

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DETAILED DESCRIPTION OF EMBODIMENT

[0025] The present application is described in further detail below with reference to the attached drawing figures.

[0026] In a typical configuration of the present application, the terminal, the equipment
10 serving the network, and the trusted party each includes one or more processors (e.g., Central Processing Unit (CPU)), input/output interfaces, network interfaces, and memory.

[0027] The Memory may include forms of volatile Memory, Random Access Memory (RAM), and/or non-volatile Memory in a computer-readable medium, such as Read Only Memory (ROM) or Flash Memory. Memory is an example of a computer-readable
15 medium.

[0028] Computer-readable media, including both permanent and non-permanent, removable and non-removable media, may implement the information storage by any method or technology. The information may be computer readable instructions, data structures, modules of a program, or other data. Examples of computer storage media
20 include, but are not limited to, Phase-Change Memory (PCM), Programmable Random Access Memory (PRAM), Static Random Access Memory (SRAM), Dynamic Random Access Memory (DRAM), other types of RAM, Read-Only Memory (ROM), Electrically Erasable Programmable Read-Only Memory (EEPROM), flash Memory or other Memory technologies, Compact Disc Read-Only Memory (CD-ROM), Digital Versatile Disks
25 (DVD) or other optical storage, magnetic cassettes, magnetic tape storage or other magnetic storage equipment, or any other non-transmission medium, may be used to store information that may be accessed by the computing equipment.

[0029] The equipment referred to in the present application includes, but is not limited to, a user equipment, a network equipment, or an equipment formed by integrating a user
30 equipment and a network equipment through a network. The user equipment includes, but is not limited to, any mobile electronic product capable of performing human-computer

interaction with a user (e.g., human-computer interaction through a touch panel), such as a smart phone, a tablet computer, and the like, and the mobile electronic product may employ any operating system, such as an Android operating system, an iOS operating system, and the like. The network equipment includes an electronic equipment capable of automatically performing numerical calculation and information processing according to a preset or stored instruction, and its hardware includes, but is not limited to, a microprocessor, an Application Specific Integrated Circuit (ASIC), a Programmable Logic Equipment (PLD), a Field Programmable Gate Array (FPGA), a Digital Signal Processor (DSP), an embedded equipment, and the like. The network equipment includes but is not limited to a computer, a network host, a single network server, multiple network server sets, or a cloud of multiple servers; here, the Cloud is composed of a large number of computers or network servers based on Cloud Computing, which is a kind of distributed computing, one virtual supercomputer consisting of a collection of loosely coupled computers. The network includes, but is not limited to, the internet, a wide area network, a metropolitan area network, a local area network, a VPN network, a wireless Ad Hoc network, etc. Preferably, the equipment may also be a program running on the user equipment, the network equipment, or an equipment formed by integrating the user equipment and the network equipment, the touch terminal, or the network equipment and the touch terminal through a network.

[0030] Of course, those skilled in the art will understand that the above-described equipment is merely exemplary, and that other existing or future existing equipment, such as may be suitable for use with the present application, are intended to be included within the scope of the present application and are hereby incorporated by reference.

[0031] In the description of the present application, "a plurality" means two or more unless specifically defined otherwise.

[0032] Fig. 1 illustrates a flow diagram of a method for picking up message according to an embodiment of the present application, the method includes step S11 and step S12. In step S11, the network equipment responding to a message picking operation executed by the first user for the message tree, acquiring the target activity message matched with the first user from the message tree, providing the target activity message to the first user, wherein the target activity message is anonymously thrown into the message tree by the second user. In step S12, the network equipment responding to an interactive trigger operation executed by the first user for the target activity message, enabling the first user

and at least one third user to jointly participate in the target activity corresponding to the target activity message, wherein the third user has picked up the target activity message from the message tree.

[0033] In step S11, the network equipment responding to a message picking operation
5 executed by the first user for the message tree, acquiring the target activity message matched with the first user from the message tree, providing the target activity message to the first user, wherein the target activity message is anonymously thrown into the message tree by the second user. In some embodiments, the message tree stores the activity messages that the user throws out anonymously, and the user can pick up the activity
10 messages from the message tree, wherein the message type of the activity messages can be general messages or image-text messages, and the message content of the activity messages comprises but is not limited to activity content description information and activity participation links of at least one activity. In some embodiments, a user picking up an activity message from the message tree may comment on the activity message, and
15 the comment information may be seen by the user who has thrown the activity message, or, based on this, the comment information may also be seen by other users who have picked up the activity message. In some embodiments, the activity corresponding to the activity message includes, but is not limited to, a topic chat activity, a game team activity, a merchant group purchase activity, and the like. In some embodiments, in response to a
20 message picking operation of the first user with respect to the message tree, a target activity message matching with the first user is obtained from all activity messages in the message tree, where the matching may refer to that the corresponding activity content matches with user portrait information or personal user information of the first user, or may also refer to that the corresponding activity content matches with historical activity
25 participation records of the first user.

[0034] In step S12, the network equipment responding to an interactive trigger operation executed by the first user for the target activity message, enabling the first user and at least one third user to jointly participate in the target activity corresponding to the target activity message, wherein the third user has picked up the target activity message from
30 the message tree. In some embodiments, the first user may perform an interactive trigger operation with respect to the target activity message, such as clicking on an "engage activity" button in the target activity message or clicking on an activity engagement link in the target activity message. In some embodiments, in response to the interaction trigger

operation, the first user and at least one third user are enabled to participate in a target activity corresponding to the target activity message together, where the third user is another user who has picked up the target activity message from the message tree. And the third user has also performed the interaction trigger operation on the target activity message, but has not started to participate in the corresponding activity, or on this basis, the third user needs to meet the requirement that the operation time for performing the interaction trigger operation needs to be within a predetermined time range before the current time for performing the interaction trigger operation by the first user. In some embodiments, the first user may forward the target activity message to a (non-anonymous) fourth user (e.g., a friend of the first user), and the fourth user may also perform an interactive trigger operation with respect to the target activity message, such that the first user, the fourth user, and at least one third user may participate together in a target activity corresponding to the target activity message. By associating the messages in the message tree with the activities, the application can realize the diversification of message types, bring surprises to the user, generate forward guidance for the user through the activities, promote the activity of the user, promote friend transaction among strangers in the activities, improve the user experience of the message tree.

[0035] In some embodiments, the target activity comprises any one of: topic chat activity; game team activity; merchant group purchase activity. In some embodiments, the target activity may be a topic chat activity (e.g., topic chat room), when the second user is interested in the current trending event, or the second user has an idea to find someone for discussion, the second user may create a topic chat room, and put the discussion topic and join link of the topic chat room into the activity message, and throw the activity message into the message tree. And the first user may view the discussion topic after picking up the activity message from the message tree. If the first user is interested in the discussion topic, the first user may perform an interaction triggering operation (i.e., click on the join link) to enter the topic chat room, and interact with other users who pick up the activity message and enter the topic chat room. In some embodiments, the target activity may be a game team activity, for example, the second user is an operation employee of a company, and when the operation employee plan a event, he/she can create a game team activity, or set a team population limit, and put the corresponding game activity information and game link into an activity message and throw the activity message into a message tree. And the first user may view the game activity information after picking up the activity

message from the message tree. If interested, the first user can perform an interactive trigger operation (i.e., clicking the game link) to enter the game, and play the game with other users who pick up the activity message and enter the game. The user who completed the game may obtain a certain reward, or may start playing the game only when the team population is satisfied. In some embodiments, the target activity may be a merchant group purchase activity. For example, the second user is a merchant. When the merchant performs a special offer for a certain item, the group purchase activity may be created, or a group purchase limit may be set, and the merchant may put the corresponding item introduction information and group purchase link into the activity message and throw the activity message into the message tree. After picking up the activity message from the message tree, the first user may view the item introduction information. If interested, the first user can perform an interactive trigger operation (i.e., clicking the group purchase link), and purchase the item in a group with other users who pick up the activity message and want to purchase the item, where the price of purchasing the item by the group is better than the price of purchasing the item by one user alone.

[0036] In some embodiments, the first user matches the activity content of the target activity message. In some embodiments, the matching may refer to the activity content corresponding to the target activity message matching the user profile information (e.g., hobbies) or personal user information of the first user, or may also refer to the activity content corresponding to the target activity message matching the historical activity engagement record of the first user.

[0037] In some embodiments, the first user further matches pickup limit information set by the second user for the target activity message. In some embodiments, the second user may set pickup limit information corresponding to the target activity message, including but not limited to age, gender, hobbies, how close the corresponding location is to the second user, etc., before throwing the target activity message into the message tree. The user portrait information or personal user information of the first user needs to satisfy the pickup limit information.

[0038] In some embodiments, the method further comprises: if the interaction of the first user and the target third user in the target activity satisfies the first preset condition, sending corresponding friend adding prompt information to the first user and the target third user. In some embodiments, if the target activity is a topic chat activity, the interaction refers to an interaction activity condition of multiple users in the target activity.

For example, the interaction includes, but is not limited to, the number of targeted speeches between multiple users (for example, one user replies to the speech of another user, or one user refers to the speech of another user), similarity of views between multiple users about discussion topics, the number of likes between multiple users about speech with each other, and the like. If the target activity is a game team activity, the interaction includes, but is not limited to, whether multiple users are in the same team, the cooperation of multiple users in the target game (for example, the number of tasks completed by cooperation, the number of enemies killed by cooperation), and the like. And if the target activity is a merchant group purchase activity, the interaction includes, but is not limited to, whether multiple users successfully buy the target item, similarity of post-delivery evaluation of the target item among the plurality of users, and the like. In some embodiments, the first preset condition includes, but is not limited to, the number of targeted speeches between multiple users being greater than or equal to a predetermined number threshold, the similarity of views between multiple users about discussion topics satisfying a predetermined similarity threshold, the number of likes between multiple users about speech with each other being greater than or equal to a predetermined number threshold, the plurality of users being located in the same game team, the number of tasks completed by the cooperation of multiple users in the target game or the number of enemies killed by cooperation being greater than or equal to a predetermined number threshold, the plurality of users having successfully purchased the target item, the similarity of post-delivery evaluation of the target item among the plurality of users satisfying a predetermined similarity threshold, and the like. In some embodiments, if the interaction of the first user and the target third user in the target activity satisfies a first preset condition, the network equipment sends corresponding friend adding prompt information to the first user and the target third user, so that the first user or the target third user can send a friend addition request to an opposite side based on the friend adding prompt information.

[0039] In some embodiments, the method further comprises: if the interaction between the first user and one or more third users in the target activity satisfies the second preset condition, the network equipment establishing a new group session, sending the invitation prompt information for joining the group session to the first user and the one or more third users. In some embodiments, the second preset condition is the same as or similar to the first preset condition described above, and is not repeated herein. In some

embodiments, a group session is newly created. The name of the group session is determined according to the activity name or the activity content of the target activity. And then an invitation prompt information for joining the group session is sent to the first user and the one or more third users, so that the first user or the third users can join the group session based on the invitation prompt information.

[0040] In some embodiments, the step S12 comprises: the network equipment responding to an interactive trigger operation executed by the first user for the target activity message, adding the first user into the activity waiting system corresponding to the target activity message; if at least one user in the activity waiting system meets the third preset condition, enabling the at least one user to jointly participate in the target activity, removing the at least one user from the activity waiting system, wherein the first user and the at least one third user have already joined in the activity waiting system. In some embodiments, in response to an interaction trigger operation executed by the first user for the target activity message, the first user does not immediately start participating in the target activity, but adds the first user to an activity waiting system corresponding to the target activity message. And the first user needs to wait for the addition of other users in the activity waiting system, where the activity waiting system may be a first-in-first-out queue, that is, a queue tail of the queue to which the first user adds. In some embodiments, the first user and at least one third user have already joined in the activity waiting system.

If at least one user in the activity waiting system currently satisfies a third preset condition, the at least one user is caused to begin participating in the target activity and is removed from the activity waiting system. If there is no at least one user in the activity waiting system that currently meets the third preset condition, the network equipment continues to wait for new users to join in the activity waiting system until the at least one user in the activity waiting system satisfies the third preset condition. In some embodiments, the third preset condition may be that the number of the at least one user reaches a predetermined number threshold, or the number of the at least one user reaches a predetermined number threshold and the predetermined matching degree condition is satisfied between the at least one user.

[0041] In some embodiments, the if at least one user in the activity waiting system meets the third preset condition, enabling the at least one user to jointly participate in the target activity comprises: if the number of the users corresponding to at least one user in the activity waiting system reaches the preset number threshold, enabling the at least one

user to jointly participate in the target activity. In some embodiments, if the number of users that have joined the active waiting system is greater than or equal to a preset number threshold, at least one user in the active waiting system that is at the head of the queue is removed from the active waiting system and the at least one user is caused to
5 begin jointly participating in the target activity.

[0042] In some embodiments, the if the number of the users corresponding to at least one user in the activity waiting system reaches the preset number threshold, enabling the at least one user to jointly participate in the target activity comprises: if the number of the users corresponding to at least one user in the activity waiting system reaches the preset
10 number threshold and the at least one user meets the preset matching degree condition, enabling the at least one user to jointly participate in the target activity. In some embodiments, if the number of users who have joined the active waiting system is greater than or equal to a preset number threshold, determining whether a preset matching degree condition is satisfied between at least one user of the activity waiting system who is
15 located at the head of the queue. If so, the network equipment directly removes the at least one user from the active waiting system and allows the at least one user to start participating in the target activity together, if not, the network equipment removes one or more users with the lowest matching degree with other users from the at least one user, and supplements one or more users located at the back of the queue in the sequence of the
20 queue, so that the updated number of the at least one user still maintains the number threshold, and the network equipment continuously determines whether the preset matching degree condition is satisfied between the at least one updated user, and so on, until at least one user meeting a preset matching degree condition and having the corresponding number of people being the number threshold is determined from all the
25 users who have joined the activity waiting system, wherein the preset matching degree condition may mean that the similarity between the user portrait information or the personal user information corresponding to each of the at least one user is greater than or equal to a preset similarity threshold.

[0043] In some embodiments, the method further comprises: the network equipment
30 responding to the first user exiting participation in the target activity, rejoining the first user to the activity waiting system. In some embodiments, if the first user chooses to quit the target activity in advance (the target activity is not finished yet) in the process of participating in the target activity with other users, the network equipment needs to rejoin

the first user to the activity waiting system, that is, the network equipment joins the first user to the tail of the queue again. In some embodiments, if the first user successfully completes the target activity, the first user is not rejoined to the activity waiting system after the target activity is completed.

5 [0044] In some embodiments, the method further comprises: if the first user joins the activity waiting system, responding to a praise operation executed by the first user for the target activity message, increasing the clout value of the target activity message in the message tree so as to improve the probability of other users picking up the target activity message from the message tree. In some embodiments, when a user picks up an activity
10 message from the message tree, in addition to determining the activity message that the user can eventually pick up based on the degree of match between each activity message in the message tree and the first user, the clout value of each activity message in the message tree is also taken into account. In some embodiments, if the first user has joined the activity waiting system and has not started to participate in the target activity, the first
15 user may perform a praise operation on the target activity message, increasing the clout value of the target activity message in the message tree, so that the probability that other users pick up the target activity message from the message tree becomes higher.

[0045] In some embodiments, the method further comprises: updating the clout value of the target activity message in the message tree according to the activity participation
20 condition corresponding to the target activity message so as to adjust the probability of other users picking up the target activity message from the message tree. In some embodiments, the activity participation condition includes, but is not limited to, the number of people participating in the target activity, the task completion of the users in the target activity, the frequency of interaction of the users in the target activity, the
25 evaluation information of the user for the target activity after the activity is completed, etc.. According to the activity participation condition, the network equipment can determine whether and how to update the clout value of the target activity message in the message tree, so that the probability of other users picking up the target activity message from the message tree becomes larger or smaller. For example, if the number of currently
30 participants in the target activity exceeds a preset number threshold, or the average number of tasks completed by the users in the target activity is greater than or equal to a preset number threshold, or the average frequency of interaction of the users in the target activity reaches a preset frequency threshold, or the average of the users' scores for the

target activity after the activity is completed exceeds a preset score threshold, or, the number of good comments made by the user on the target activity after the activity is completed reaches a preset number threshold, the network equipment can increase the clout value of the target activity message in the message tree, and the increase of clout value may be set fixedly, or may also be determined according to the activity participation condition corresponding to the target activity message.

[0046] In some embodiments, the method further comprises: allowing the first user to anonymously drop a second activity message to one or more third users if the interaction between the first user and the one or more third users in the target activity satisfies the fourth preset condition, wherein the first user has picked up the second activity message from the message tree. In some embodiments, the fourth preset condition is the same as or similar to the first preset condition, and is not repeated herein. In some embodiments, if the fourth preset condition is satisfied, the network equipment allows the first user to anonymously drop the second activity message to one or more of the at least one third user with whom the first user participates in the target activity, so that each of the one or more third users can perform an interaction triggering operation with respect to the second activity message, wherein the second activity message is an activity message other than the target activity message that the first user has picked up from the message tree, or it is also required to satisfy that the first user does not drop the second activity message back to the message tree, that is, the first user can only anonymously drop the activity message that the first user has picked up and dropped back to the message tree to a third user with whom the first user participates in the target activity together, or it is also required to satisfy that the second activity corresponding to the second activity message has not finished, that is, the user can currently participate in the second activity by performing an interaction triggering operation with respect to the second activity message, or, it is also required to satisfy that the first user participated in the second activity corresponding to the second activity message.

[0047] In some embodiments, the method further comprises: if the interaction between the first user and one or more third users in the target activity satisfies the fifth preset condition, acquiring a third activity message from the message tree in response to a message picking operation executed by the first user for a target third user in the one or more third users, providing the third activity message to the first user, wherein the target third user has picked up the third activity message from the message tree. In some

embodiments, the fifth preset condition is the same as or similar to the first preset condition, and is not repeated herein. In some embodiments, if the fifth preset condition is satisfied, the first user may perform a message pickup operation with respect to one or more third users of the at least one third user with whom the first user participates in the target activity, that is, if the first user performs a message pickup operation with respect to a target third user of the one or more third users, the network equipment may obtain a third activity message from the message tree and provide the third activity message to the first user, wherein the third activity message is an activity message other than the target activity message that the target third user has picked up from the message tree, or it is also required to satisfy that the target third user has not thrown the third activity message back to the message tree, that is, the first user can only obtain activity messages that the target third user has picked up and thrown back to the message tree.

[0048] In some embodiments, the target third user has engaged in the third activity corresponding to the third activity message and the third activity has not yet ended. In some embodiments, the third activity message further needs to satisfy that the target third user has engaged in the third activity corresponding to the third activity message, and the third activity has not yet ended, that is, the user may currently also engage in the third activity by performing an interactive trigger operation with respect to the third activity message.

[0049] Fig. 2 illustrates a flow diagram of a method for picking up message according to an embodiment of the present application.

[0050] As shown in fig. 2, a user may throw activity messages (including text-type activity messages, image-text-type activity messages, and activity messages corresponding to topic chat activities (topic chat rooms)) into the message tree, a merchant operation system may also throw corresponding activity messages into the message tree for various activities (including game team activities and merchant group purchase activities). The various activity messages may be opened to the user after being checked. The activity messages ultimately picked up by the user are subject to recommendation algorithm. When the user picks up the activity messages from the message tree, it is determined that there are any activity messages suitable for the user. If there are activity messages, the assembled activity messages are returned to the user, otherwise, default activity messages are returned to the user.

[0051] Fig. 3 illustrates a block diagram of a network equipment for picking up message

according to an embodiment of the present application, the equipment comprises one one module 11 and one two module 12. One one module 11, used for responding to a message picking operation executed by the first user for the message tree, acquiring the target activity message matched with the first user from the message tree, providing the target activity message to the first user, wherein the target activity message is anonymously thrown into the message tree by the second user. One two module 12, used for responding to an interactive trigger operation executed by the first user for the target activity message, enabling the first user and at least one third user to jointly participate in the target activity corresponding to the target activity message, wherein the third user has picked up the target activity message from the message tree.

[0052] One one module 11, used for responding to a message picking operation executed by the first user for the message tree, acquiring the target activity message matched with the first user from the message tree, providing the target activity message to the first user, wherein the target activity message is anonymously thrown into the message tree by the second user. In some embodiments, the message tree stores the activity messages that the user throws out anonymously, and the user can pick up the activity messages from the message tree, wherein the message type of the activity messages can be general messages or image-text messages, and the message content of the activity messages comprises but is not limited to activity content description information and activity participation links of at least one activity. In some embodiments, a user picking up an activity message from the message tree may comment on the activity message, and the comment information may be seen by the user who has thrown the activity message, or, based on this, the comment information may also be seen by other users who have picked up the activity message. In some embodiments, the activity corresponding to the activity message includes, but is not limited to, a topic chat activity, a game team activity, a merchant group purchase activity, and the like. In some embodiments, in response to a message picking operation of the first user with respect to the message tree, a target activity message matching with the first user is obtained from all activity messages in the message tree, where the matching may refer to that the corresponding activity content matches with user portrait information or personal user information of the first user, or may also refer to that the corresponding activity content matches with historical activity participation records of the first user.

[0053] One two module 12, used for responding to an interactive trigger operation

executed by the first user for the target activity message, enabling the first user and at least one third user to jointly participate in the target activity corresponding to the target activity message, wherein the third user has picked up the target activity message from the message tree. In some embodiments, the first user may perform an interactive trigger operation with respect to the target activity message, such as clicking on an "engage activity" button in the target activity message or clicking on an activity engagement link in the target activity message. In some embodiments, in response to the interaction trigger operation, the first user and at least one third user are enabled to participate in a target activity corresponding to the target activity message together, where the third user is another user who has picked up the target activity message from the message tree. And the third user has also performed the interaction trigger operation on the target activity message, but has not started to participate in the corresponding activity, or on this basis, the third user needs to meet the requirement that the operation time for performing the interaction trigger operation needs to be within a predetermined time range before the current time for performing the interaction trigger operation by the first user. In some embodiments, the first user may forward the target activity message to a (non-anonymous) fourth user (e.g., a friend of the first user), and the fourth user may also perform an interactive trigger operation with respect to the target activity message, such that the first user, the fourth user, and at least one third user may participate together in a target activity corresponding to the target activity message. By associating the messages in the message tree with the activities, the application can realize the diversification of message types, bring surprises to the user, generate forward guidance for the user through the activities, promote the activity of the user, promote friend transaction among strangers in the activities, improve the user experience of the message tree.

[0054] In some embodiments, the target activity comprises any one of: topic chat activity; game team activity; merchant group purchase activity. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0055] In some embodiments, the first user matches the activity content of the target activity message. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0056] In some embodiments, the first user further matches pickup limit information set

by the second user for the target activity message. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0057] In some embodiments, the network equipment is further used for: if the
5 interaction of the first user and the target third user in the target activity satisfies the first preset condition, sending corresponding friend adding prompt information to the first user and the target third user. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

10 [0058] In some embodiments, the network equipment is further used for: if the interaction between the first user and one or more third users in the target activity satisfies the second preset condition, establishing a new group session, sending the invitation prompt information for joining the group session to the first user and the one or more
15 third users. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0059] In some embodiments, the one two module 12 is used for: responding to an interactive trigger operation executed by the first user for the target activity message, adding the first user into the activity waiting system corresponding to the target activity
20 message; if at least one user in the activity waiting system meets the third preset condition, enabling the at least one user to jointly participate in the target activity, removing the at least one user from the activity waiting system, wherein the first user and the at least one third user have already joined in the activity waiting system. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not
25 described again, and are included herein by reference.

[0060] In some embodiments, the if at least one user in the activity waiting system meets the third preset condition, enabling the at least one user to jointly participate in the target activity comprises: if the number of the users corresponding to at least one user in the activity waiting system reaches the preset number threshold, enabling the at least one
30 user to jointly participate in the target activity. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0061] In some embodiments, the if the number of the users corresponding to at least

one user in the activity waiting system reaches the preset number threshold, enabling the at least one user to jointly participate in the target activity comprises: if the number of the users corresponding to at least one user in the activity waiting system reaches the preset number threshold and the at least one user meets the preset matching degree condition, enabling the at least one user to jointly participate in the target activity. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0062] In some embodiments, the network equipment is further used for: responding to the first user exiting participation in the target activity, rejoining the first user to the activity waiting system. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0063] In some embodiments, the network equipment is further used for: if the first user joins the activity waiting system, responding to a praise operation executed by the first user for the target activity message, increasing the clout value of the target activity message in the message tree so as to improve the probability of other users picking up the target activity message from the message tree. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0064] In some embodiments, the network equipment is further used for: updating the clout value of the target activity message in the message tree according to the activity participation condition corresponding to the target activity message so as to adjust the probability of other users picking up the target activity message from the message tree. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0065] In some embodiments, the network equipment is further used for: allowing the first user to anonymously drop a second activity message to one or more third users if the interaction between the first user and the one or more third users in the target activity satisfies the fourth preset condition, wherein the first user has picked up the second activity message from the message tree. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0066] In some embodiments, the network equipment is further used for: if the

interaction between the first user and one or more third users in the target activity satisfies the fifth preset condition, acquiring a third activity message from the message tree in response to a message picking operation executed by the first user for a target third user in the one or more third users, providing the third activity message to the first user,
5 wherein the target third user has picked up the third activity message from the message tree. Here, the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0067] In some embodiments, the target third user has engaged in the third activity corresponding to the third activity message and the third activity has not yet ended. Here,
10 the related operations are the same as or similar to those of the embodiment shown in fig. 1, and thus are not described again, and are included herein by reference.

[0068] In addition to the methods and equipments described in the embodiments above, the present application also provides a computer readable storage medium storing computer code that, when executed, performs the method as described in any of the
15 previous claims.

[0069] The present application also provides a computer program product for performing a method as in any one of the preceding claims when executed by a computer equipment.

[0070] The present application also provides a computer equipment, comprising:

20 [0071] one or more processors;

[0072] a memory for storing one or more computer programs;

[0073] the one or more computer programs, when executed by the one or more processors, cause the one or more processors to implement the method as recited in any preceding claim.

25 [0074] FIG. 4 illustrates an exemplary system that can be used to implement the various embodiments described in the present application;

[0075] In some embodiments, as shown in FIG. 4, the system 300 can be implemented as any of the equipments in each of the described embodiments. In some embodiments, system 300 may include one or more computer-readable media (e.g., system memory or
30 NVM/storage 320) having instructions and one or more processors (e.g., processor(s) 305) coupled with the one or more computer-readable media and configured to execute the instructions to implement modules to perform the actions described in the present application.

[0076] For an embodiment, system control module 310 may include any suitable interface controllers to provide any suitable interface to at least one of processor(s) 305 and/or to any suitable equipment or component in communication with system control module 310.

5 [0077] The system control module 310 may include a memory controller module 330 to provide an interface to the system memory 315. Memory controller module 330 may be a hardware module, a software module, and/or a firmware module.

[0078] System memory 315 may be used to load and store data and/or instructions for system 300, for example. For one embodiment, system memory 315 may include any
10 suitable volatile memory, such as suitable DRAM. In some embodiments, the system memory 315 may comprise a double data rate type four synchronous dynamic random access memory (DDR4 SDRAM).

[0079] For an embodiment, system control module 310 may include one or more input/output (I/O) controllers to provide interfaces to NVM/storage 320 and
15 communication interface(s) 325.

[0080] For example, NVM/storage 320 may be used to store data and/or instructions. NVM/storage 320 may include any suitable non-volatile memory (e.g., flash memory) and/or may include any suitable non-volatile storage equipment(s) (e.g., one or more hard disk drive(s) (HDD (s)), one or more Compact Disc (CD) drive(s), and/or one or more
20 Digital Versatile Disc (DVD) drive (s)).

[0081] NVM/storage 320 may include storage resources that are physically part of the equipment on which system 300 is installed or may be accessed by the equipment and not necessarily part of the equipment. For example, NVM/storage 320 may be accessible over a network via communication interface(s) 325.

25 [0082] Communication interface(s) 325 may provide an interface for system 300 to communicate over one or more networks and/or with any other suitable equipment. System 300 may wirelessly communicate with one or more components of a wireless network according to any of one or more wireless network standards and/or protocols.

[0083] For an embodiment, at least one of the processor(s) 305 may be packaged
30 together with logic for one or more controller(s) of the system control module 310, such as memory controller module 330. For one embodiment, at least one of the processor(s) 305 may be packaged together with logic for one or more controllers of the system control module 310 to form a System In Package (SiP). For one embodiment, at least one

of the processor(s) 305 may be integrated on the same die with logic for one or more controller(s) of the system control module 310. For one embodiment, at least one of the processor(s) 305 may be integrated on the same die with logic for one or more controller(s) of the system control module 310 to form a system on chip (SoC).

5 [0084] In various embodiments, system 300 may be, but is not limited to being: a server, a workstation, a desktop computing equipment, or a mobile computing equipment (e.g., a laptop computing equipment, a handheld computing equipment, a tablet, a netbook, etc.). In various embodiments, system 300 may have more or fewer components and/or different architectures. For example, in some embodiments, system 300 includes one or
10 more cameras, a keyboard, a Liquid Crystal Display (LCD) screen (including a touch screen display), a non-volatile memory port, multiple antennas, a graphics chip, an Application Specific Integrated Circuit (ASIC), and speakers.

[0085] In addition to the methods and equipment described in the embodiments above, the present application also provides a computer readable storage medium storing
15 computer code that, when executed, performs the method as described in any of the previous claims.

[0086] The present application also provides a computer program product for performing a method as in any one of the preceding claims when executed by a computer equipment.

20 [0087] The present application also provides a computer equipment, comprising:

[0088] one or more processors;

[0089] a memory for storing one or more computer programs;

[0090] the one or more computer programs, when executed by the one or more processors, cause the one or more processors to implement the method as recited in any
25 preceding claim.

[0091] It should be noted that the present application may be implemented in software and/or in a combination of software and hardware, for example, as an Application Specific Integrated Circuit (ASIC), a general purpose computer or any other similar hardware equipment. In one embodiment, the software program of the present application
30 may be executed by a processor to implement the steps or functions described above. Likewise, the software programs (including associated data structures) of the present application can be stored in a computer readable recording medium, such as RAM , magnetic or optical drive or diskette and the like. Further, some of the steps or functions

of the present application may be implemented in hardware, for example, as circuitry that cooperates with the processor to perform various steps or functions.

[0092] Furthermore, parts of the present application may be applied as a computer program product, e.g. computer program instructions, which, when executed by a computer, may invoke or provide the method and/or solution according to the present application by operation of the computer. Those skilled in the art will appreciate that the forms of computer program instructions that reside on a computer-readable medium include, but are not limited to, source files, executable files, installation package files, and the like, and that the manner in which the computer program instructions are executed by a computer includes, but is not limited to: the computer directly executes the instruction, or the computer compiles the instruction and then executes the corresponding compiled program, or the computer reads and executes the instruction, or the computer reads and installs the instruction and then executes the corresponding installed program. In this regard, computer readable media can be any available computer readable storage media or communication media that can be accessed by a computer.

[0093] Communication media includes media whereby communication signals, including, for example, computer readable instructions, data structures, program modules, or other data, are transmitted from one system to another. Communication media may include conductive transmission media such as cables and wires (e.g., fiber optics, coaxial, etc.) and wireless (non-conductive transmission) media capable of propagating energy waves, such as acoustic, electromagnetic, RF, microwave, and infrared. Computer readable instructions, data structures, program modules or other data may be embodied in a modulated data signal, such as a carrier wave or similar mechanism that is embodied in a wireless medium, such as part of spread-spectrum techniques. The term "modulated data signal" means a signal that has one or more of its characteristics set or changed in such a manner as to encode information in the signal. The modulation may be analog, digital, or hybrid modulation techniques.

[0094] As an example rather than a limitation, computer-readable storage media may include volatile and nonvolatile, removable and non-removable media implemented in any method or technology for storage of information such as computer-readable instructions, data structures, program modules or other data. For example, computer-readable storage media include, but are not limited to, volatile memory such as random access memory (RAM, DRAM, SRAM); and non-volatile memory such as flash

memory, various read-only memories (ROM, PROM, EPROM, EEPROM), magnetic and ferromagnetic/ferroelectric memories (MRAM, FeRAM); and magnetic and optical storage equipments (hard disk, magnetic tape, CD, DVD); or other now known media or later developed that are capable of storing computer-readable information/data for use by a computer system.

[0095] An embodiment according to the present application comprises an apparatus. The apparatus comprises a memory for storing computer program instructions and a processor for executing the program instructions, wherein when the computer program instructions are executed by the processor, the apparatus is triggered to perform a method and/or solution according to embodiments of the present application as described above.

[0096] It will be evident to those skilled in the art that the present application is not limited to the details of the foregoing illustrative embodiments, and that the present application may be embodied in other specific forms without departing from the spirit or essential attributes thereof. The present embodiments are therefore to be considered in all respects as illustrative and not restrictive, the scope of the present application being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein. Any reference sign in a claim should not be construed as limiting the claim concerned. Furthermore, it will be obvious that the term "comprise" does not exclude other elements or steps, and the singular does not exclude the plural. A plurality of units or apparatus recited in the apparatus claims may also be implemented by one unit or apparatus in software or hardware. The terms first, second, etc. are used to denote names, but not to denote any particular order.

CLAIMS

1. A method for picking up message, wherein the method comprises:

5 responding to a message picking operation executed by the first user for the message
tree, acquiring the target activity message matched with the first user from the message
tree, providing the target activity message to the first user, wherein the target activity
message is anonymously thrown into the message tree by the second user;

10 responding to an interactive trigger operation executed by the first user for the target
activity message, enabling the first user and at least one third user to jointly participate in
the target activity corresponding to the target activity message, wherein the third user has
picked up the target activity message from the message tree.

2. The method according to claim 1, wherein the target activity comprises any one
of:

15 topic chat activity;
game team activity;
merchant group purchase activity.

3. The method according to claim 1 or 2, wherein the first user matches the activity
20 content of the target activity message.

4. The method according to claim 3, wherein the first user further matches pickup
limit information set by the second user for the target activity message.

25 5. The method according to claim 1 or 2, wherein the method further comprises:
if the interaction of the first user and the target third user in the target activity
satisfies the first preset condition, sending corresponding friend adding prompt
information to the first user and the target third user.

30 6. The method according to claim 1 or 2, wherein the method further comprises:
if the interaction between the first user and one or more third users in the target
activity satisfies the second preset condition, establishing a group session, sending the

invitation prompt information for joining the group session to the first user and the one or more third users.

7. The method according to claim 5, wherein the responding to an interactive trigger operation executed by the first user for the target activity message, enabling the first user and at least one third user to jointly participate in the target activity corresponding to the target activity message comprises:

responding to an interactive trigger operation executed by the first user for the target activity message, adding the first user into the activity waiting system corresponding to the target activity message;

if at least one user in the activity waiting system meets the third preset condition, enabling the at least one user to jointly participate in the target activity, removing the at least one user from the activity waiting system, wherein the first user and the at least one third user have already joined in the activity waiting system.

15

8. The method according to claim 7, wherein the if at least one user in the activity waiting system meets the third preset condition, enabling the at least one user to jointly participate in the target activity comprises:

if the number of the users corresponding to at least one user in the activity waiting system reaches the preset number threshold, enabling the at least one user to jointly participate in the target activity.

9. The method according to claim 8, wherein the if the number of the users corresponding to at least one user in the activity waiting system reaches the preset number threshold, enabling the at least one user to jointly participate in the target activity comprises:

if the number of the users corresponding to at least one user in the activity waiting system reaches the preset number threshold value and the at least one user meets the preset matching degree condition, enabling the at least one user to jointly participate in the target activity.

10. The method according to claim 7, wherein the method further comprises:
responding to the first user exiting participation in the target activity, rejoining the

first user to the activity waiting system.

11. The method according to claim 7, wherein the method further comprises:

5 if the first user joins the activity waiting system, responding to a praise operation executed by the first user for the target activity message, increasing the clout value of the target activity message in the message tree so as to improve the probability of other users picking up the target activity message from the message tree.

12. The method according to claim 7, wherein the method further comprises:

10 updating the clout value of the target activity message in the message tree according to the activity participation condition corresponding to the target activity message so as to adjust the probability of other users picking up the target activity message from the message tree.

13. The method according to claim 1 or 2, wherein the method further comprises:

15 allowing the first user to anonymously drop a second activity message to one or more third users if the interaction between the first user and the one or more third users in the target activity satisfies the fourth preset condition, wherein the first user has picked up the second activity message from the message tree.

14. The method according to claim 1 or 2, wherein the method further comprises:

20 if the interaction between the first user and one or more third users in the target activity satisfies the fifth preset condition, acquiring a third activity message from the message tree in response to a message picking operation executed by the first user for a target third user in the one or more third users, providing the third activity message to the first user, wherein the target third user has picked up the third activity message from the message tree.

25 15. The method according to claim 14, wherein the target third user has engaged in the third activity corresponding to the third activity message and the third activity has not yet ended.

16. A computer equipment for picking up message, comprises a memory, a processor

and a computer program stored on the memory, characterized in that the processor executes the computer program to implement the steps of the method according to any one of claims 1 to 15.

5 17. A computer-readable storage medium on which a computer program/instructions are stored, characterized in that the computer program/instructions, when executed by a processor, implement the steps of the method according to any one of claims 1 to 15.

10 18. A computer program product comprises a computer program, characterized in that the computer program realizes the steps of the method according to any one of claims 1 to 15 when executed by a processor.