

CLAIMS

What is claimed is:

1. A computer-implemented method for processing service participation requests from a user terminal, wherein the user terminal comprises an iOS operating system and an application (APP) associated with a computer device operating as an APP server, the method comprising the steps of:

receiving, by the computer device, a service participation request for a target service transmitted by the user terminal, wherein the service participation request carries an identifier of the user terminal and an identifier of the APP, wherein a system server corresponding to the iOS operating system maintains a table storing target identification data for each APP in each user terminal, and wherein the target identification data for each APP comprises a first reserved bit having a first value and a second reserved bit having a second value;

transmitting, by the computer device, a request for a passage certificate to the system server through a device check interface;

receiving, by the computer device, the passage certificate from the system server, wherein the passage certificate is used for communicating with the system server to obtain target identification data and is valid for a predetermined duration time;

obtaining, by the computer device, target identification data from the system server corresponding to the iOS operating system based on the passage certificate and the service participation request, wherein the target identification data comprises the first value of the first reserved bit indicating whether the user terminal has participated in the target service, and the second value of the second reserved bit indicating whether device data of the user terminal has been modified;

determining, by the computer device, whether the first value is a first specified value and whether the second value is a second specified value, wherein the first specified value indicates that the user terminal has participated in the target service, and the second specified value indicates that the device data of the user terminal has been modified;

in response to determining that the first value is the first specified value and/or the second value is the second specified value, denying, by the computer device, the service participation request to prohibit the user terminal to participate in the target service;

in response to determining that the first value is not the first specified value and the second value is not the second specified value, granting, by computer device, the service participation request to allow the user terminal to participate in the target service, and

in response to receiving the service participation request, writing, by the computer device, the first specified value to the first reserved bit to replace the first value.

2. The method of claim 1, wherein the obtaining, by the computer device, the target identification data of the APP of the user terminal from the system server based on the passage certificate and the service participation request comprises:

transmitting, by the computer device, a data obtaining request to the system server, wherein the data obtaining request carries the passage certificate, the identifier of the user terminal, and the identifier of the APP; and

receiving, by the computer device from the system server, the target identification data corresponding to the identifier of the user terminal and the identifier of the APP.

3. The method of claim 1, further comprising:

setting, by the computer device, the second value of the second reserved bit to the second specified value when it is determined that the device data of the user terminal is modified.

4. The method of claim 1, further comprising:

detecting, by the computer device, whether the device data of the user terminal changes, and

in response to detecting that the device data of the user terminal changes, determining, by the computer device, that the device data of the user terminal has been modified.

5. The method of claim 1, wherein the first reserved bit and the second reserved bit are given a first initial value and a second initial value, respectively, when the iOS operating system is installed on the user terminal.

6. An apparatus for processing service participation requests from a user terminal that comprises: an iOS operating system and an application (APP) comprising:

one or more processors; and

a memory communicatively connected to the one or more processors, wherein the memory stores instructions executable by the one or more processors to cause the one or more processors to perform operations including:

receiving a service participation request for a target service transmitted by the user terminal, wherein the service participation request carries an identifier of the user terminal and an identifier of the APP, wherein a system server corresponding to the iOS operating system maintains a table storing target identification data for each APP in each user terminal, and wherein the target identification data for each APP comprises a first reserved bit having a first value and a second reserved bit having a second value;

transmitting a request for a passage certificate to the system server through a device check

interface;

receiving the passage certificate from the system server, wherein the passage certificate is used for communicating with the system server to obtain target identification data and is valid for a predetermined duration time;

obtaining target identification data from the system server corresponding to the iOS operating system based on the passage certificate and the service participation request, wherein the target identification data comprises the first value of the first reserved bit indicating whether the user terminal has participated in the target service, and the second value of the second reserved bit indicating whether device data of the user terminal has been modified;

determining whether the first value is a first specified value and whether the second value identification data is a value, wherein the first specified value indicates that the user terminal has participated in the target service, and the second specified value indicates that the device data of the user terminal has been modified;

in response to determining that the first value is the first specified value and/or the second value is the second specified value, denying the service participation request to prohibit the user terminal to participate in the target service;

in response to determining that the first value is not the first specified value and the second value is not the second specified value, granting the service participation request to allow the user terminal to participate in the target service; and

in response to receiving the service participation request, writing the first specified value to the first reserved bit to replace the first value.

7. The apparatus according to claim 6, wherein the obtaining the target identification data of the APP of the user terminal from the system server based on the passage certificate and the service participation request comprises:

transmitting a data obtaining request to the system server, wherein the data obtaining request carries the passage certificate, the identifier of the user terminal, and the identifier of the APP; and

receiving, from the system server, the target identification data corresponding to the identifier of the user terminal and the identifier of the APP.

8. The apparatus of claim 6, wherein the operations further comprise:

setting the second value of the second reserved bit to the second specified value when it is determined that the device data of the user terminal is modified.

9. The apparatus of claim 6, wherein the operations further comprise:

detecting whether the device data of the user terminal changes, and

in response to detecting that the device data of the user terminal changes, determining that the device data of the user terminal has been modified.

10. The apparatus of claim 6, wherein the first reserved bit and the second reserved bit are given a first initial value and a second initial value, respectively, when the iOS operating system is installed on the user terminal.

11. One or more non-transitory computer-readable storage media storing instructions for processing service participation requests from a user terminal that comprises an iOS operating system and an application (APP), wherein the instructions, when executed by one or more processors, cause the one or more processors to perform operations including:

receiving a service participation request for a target service transmitted by the user terminal, the service participation request carries an identifier of the user terminal and an identifier of the APP, wherein a system server corresponding to the iOS operating system maintains a table storing target identification data for each APP in each user terminal, and wherein the target identification data for each APP comprises a first reserved bit having a first value and a second reserved bit having a second value;

transmitting a request for a passage certificate to the system server through a device check interface;

receiving the passage certificate from the system server, wherein the passage certificate is used for communicating with the system server to obtain target identification data and is valid for a predetermined duration time;

obtaining target identification data from the system server corresponding to the iOS operating system based on the passage certificate and the service participation request, wherein the target identification data comprises the first value of the first reserved bit indicating whether the user terminal has participated in the target service, and the second value of the second reserved bit indicating whether device data of the user terminal has been modified;

determining whether the first value is a first specified value and whether the second value is a second specified value, wherein the first specified value indicates that the user terminal has participated in the target service, and the second specified value indicates that the device data of the user terminal has been modified;

in response to determining that the first value is the first specified value and/or the second value is the second specified value, denying the service participation request to prohibit the user terminal to participate in the target service;

in response to determining that the first value is not the first specified value and the second value is not the second specified value, granting the service participation request to allow the

user terminal to participate in the target service; and

in response to receiving the service participation request, writing the first specified value to the first reserved bit to replace the first value.

12. The one or more non-transitory computer-readable storage media of claim 11, wherein the obtaining the target identification data of the APP of the user terminal from the system server based on the passage certificate and the service participation request comprises:

transmitting a data obtaining request to the system server, wherein the data obtaining request carries the passage certificate, the identifier of the user terminal, and the identifier of the APP; and

receiving, from the system server, the target identification data corresponding to the identifier of the user terminal and the identifier of the APP.

13. The one or more non-transitory computer-readable storage media of claim 11, wherein the operations further comprise:

setting the second value of the second reserved bit to the second specified value when it is determined that the device data of the user terminal is modified.

14. The one or more non-transitory computer-readable storage media of claim 11, wherein the operations further comprise:

detecting whether the device data of the user terminal changes, and

in response to detecting that the device data of the user terminal changes, determining that the device data of the user terminal has been modified.

15. The one or more non-transitory computer-readable storage media of claim 11, wherein the first reserved bit and the second reserved bit are given a first initial value and a second initial value, respectively, when the iOS operating system is installed on the user terminal.