

CLAIMS

1. A server computer for verifying a location of a user device, the server computer comprising:

a memory interface connected to a memory device, the memory device configured to store a database comprising a plurality of verification questions and a plurality of gathering questions, wherein each question of the plurality of verification questions and the plurality of gathering questions is associated with a location of a plurality of locations, wherein the database comprises an answer to each of the plurality of verification questions, and wherein the database does not comprise an answer to each of the plurality of gathering questions;

a communication interface configured to receive data from the user device and to transmit data to the user device; and

a processing unit configured to:

receive location data from the user device via the communication interface, the location data representing the location of the user device;

select at least one verification question from the plurality of verification questions and at least one gathering question from the plurality of gathering questions associated with the location of the user device represented by the location data from the database via the memory interface;

transmit the at least one verification question and the at least one gathering question to the user device and receive an answer provided by the user device to each of the at least one verification question and the at least one gathering question from the user device via the communication interface;

for the at least one verification question, determine if the answer provided by the user device corresponds to the answer comprised in the database; and

if the answer provided by the user device to the at least one verification question corresponds to the answer of the at least one verification question comprised in the database, verify the location of the user device represented by the received location data, ~~and~~ store the answer provided by the user device to the at least one gathering question in the database of the memory device in association with the at least one gathering question, and use the at least one gathering question as a verification question to another user.

2. The server computer of claim 1,
wherein the plurality of verification questions and/or the plurality of gathering questions comprise one or more questions regarding an attribute of a map.
3. The server computer of claim 1 or 2,
wherein the processing unit is configured to:
 - if the answer provided by the user device to the at least one verification question corresponds to the answer of the at least one verification question comprised in the database, store the answer provided by the user device to the at least one gathering question as a preliminary gathering answer in the database via the memory interface;
 - determine, if other preliminary gathering answers comprised in the database of the memory device in association with the at least one gathering question and provided by other users are similar to the preliminary gathering answer;
 - if other preliminary gathering answers associated with the at least one gathering question are similar to the preliminary question, determine, if a weighted number of similar preliminary gathering answers is above a threshold value; and
 - if the determined weighted number of similar preliminary gathering answers is above the threshold value, store the preliminary gathering answer via the memory interface as an answer associated with the at least one gathering question in the database in association with the at least one gathering question.

4. The server computer of any one of claims 1 to 3,
 wherein the processing unit is further configured to, if the answer provided by the user device to the at least one verification question does not correspond to the answer of the at least one verification question comprised in the database:
 - select one or more additional questions associated with the location of the user device represented by the location data from the database via the memory interface, wherein the one or more additional questions comprise at least one additional verification question selected from the plurality of verification questions;
 - transmit the one or more additional questions to the user device and receive an answer provided by the user device to each of the one or more additional questions from the user device via the communication interface;
 - for the at least one additional verification question, determine, if the answer provided by the user device corresponds to the answer comprised in the database; and
 - if the answer provided by the user device to the at least one additional verification question corresponds to the answer of the at least one additional verification question comprised in the database, verify the location of the user device represented by the received location data.
5. The server computer of claim 4,
 wherein the processing unit is further configured to:
 - if the answer provided by the user device to the at least one additional verification question corresponds to the answer of the at least one additional verification question comprised in the database, store the answer provided by the user device to the at least one gathering question via the memory interface in the database of the memory device in association with the at least one gathering question.
6. The server computer of claim 5,
 wherein the processing unit is configured to:
 - if the answer provided by the user device to the at least one additional verification question corresponds to the answer of the at least one additional verification question comprised in the database, store the answer provided by the user device to the at least one gathering question via the memory interface as a preliminary gathering answer in the database of the memory device;

determine, if other preliminary gathering answers comprised in the database in association with the at least one gathering question and provided by other users are similar to the preliminary gathering answer;

if other preliminary gathering answers associated with the at least one gathering question are similar to the preliminary gathering answer, determine, if a weighted number of similar preliminary gathering answers is above a first threshold value; and

if the determined weighted number of similar preliminary gathering answers is above the first threshold value, store the preliminary gathering answer as an answer associated with the at least one gathering question via the memory interface in the database of the memory device.

7. The server computer of any one of claims 4 to 6,
wherein the one or more additional questions further comprise at least one additional gathering question selected from the plurality of gathering questions;
wherein the processing unit is further configured to:

if the answer provided by the user device to the at least one additional verification question corresponds to the answer of the at least one additional verification question comprised in the database, store the answer provided by the user device to the at least one additional gathering question via the memory interface in the database of the memory device in association with the at least one additional gathering question.

8. The server computer of claim 7,
wherein the processing unit is configured to:

if the answer provided by the user device to the at least one additional verification question corresponds to the answer of the at least one additional verification question comprised in the database, store the answer provided by the user device to the at least one additional gathering question via the memory interface as a preliminary gathering answer in the database of the memory device;

determine, if other preliminary gathering answers comprised in the database in association with the at least one additional gathering question and provided by other users are similar to the preliminary gathering answer;

if other preliminary gathering answers associated with the at least one additional gathering question are similar to the preliminary gathering answer, determine, if a weighted number of similar preliminary gathering answers is above a first threshold value; and

if the determined weighted number of similar preliminary gathering answers is above the first threshold value, store the preliminary gathering answer as an answer associated with the at least one additional gathering question in the database of the memory device.

9. The server computer of any one of claims 4 to 8,
wherein the processing unit is further configured to:

if the answer provided by the user device to the at least one additional verification question corresponds to the answer of the at least one additional verification question comprised in the database, store the answer provided by the user device to the at least one verification question via the memory interface as a preliminary verification answer in the database of the memory device;

determine, if other preliminary verification answers comprised in the database in association with the at least one verification question and provided by other users are similar to the preliminary verification answer;

if other preliminary verification answers associated with the at least one verification question are similar to the preliminary verification answer, determine, if a weighted number of similar preliminary verification answers is above a second threshold value; and

if the determined weighted number of similar preliminary verification answers is above the second threshold value, store the preliminary verification answer as an answer associated with the at least one verification question via the memory interface in the database of the memory device.

10. The server computer of claim 9,
wherein the processing unit is configured to store the preliminary verification answer as an answer associated with the at least one verification question in the database of the memory device such that the answer currently comprised in the database in association with the at least one verification question is replaced with the answer to the at least one verification question received from the user device.
11. The server computer of any one of claims 4 to 10,
wherein the processing unit is further configured to:
if the answer provided by the user device to the at least one additional verification question does not correspond to the answer of the at least one additional verification question comprised in the database, transmit a rejection notification to the user device rejecting a requested verification of the location of the user device or transmit one or more other verification questions of the plurality of verification questions associated with the location of the user device to the user device via the communication interface.
12. The server computer of any one of claims 1 to 11,
wherein the processing unit is further configured to:
if the location of the user device is verified, transmit a verification notification to the user device via the communication interface verifying the location of the user device represented by the received location data.
13. The server computer of any one of claims 1 to 12,
wherein the plurality of verification questions and/or the plurality of gathering questions comprise one or more of a dichotomous question, a checkbox question, a slider question, a question which involves taking a photo using the user device, and/or a type-in question.
14. A system comprising
the server computer of any one of claims 1 to 13; and
a user device comprising:
a positioning sensor configured to acquire the location data;
a communication interface configured to transmit the location data to the server computer and to receive the respective questions from the server computer; and

a user interface configured to provide the received questions to a user using the user device and to receive the answers provided by the user.

15. A method for verifying a location of a user device using a server computer, the method comprising:

the server computer receiving location data from the user device, the location data representing the location of the user device;

the server computer transmitting a plurality of questions associated with the location data to the user device, wherein the server computer stores a database comprising each of the plurality of questions, the plurality of questions comprising at least one verification question and at least one gathering question, wherein the database comprises an answer to the at least one verification question, and wherein the database does not comprise an answer to the at least one gathering question;

the server computer receiving an answer to each of the plurality of questions from the user device;

for the at least one verification question of the plurality of questions, the server computer determining if the answer provided by the user device corresponds to the answer comprised in the database; and

if the answer provided by the user device to the at least one verification question corresponds to the answer of the at least one verification question comprised in the database, the server computer verifying the location of the user device represented by the received location data, ~~and~~ storing the answer provided by the user device to the at least one gathering question in the database in association with the at least one gathering question, and using the at least one gathering question as a verification question to another user.

16. A computer program element comprising program instructions, which, when executed by one or more processors, cause the one or more processors to perform the method of claim 15.
17. A computer-readable medium comprising program instructions, which, when executed by one or more processors, cause the one or more processors to perform the method of claim 15.