DESCRIPTION

Title of Invention: INFORMATION PROCESSING APPARATUS, INFORMATION PROCESSING METHOD, AND PROGRAM

Technical Field

[0001]

The present disclosure relates to an information processing apparatus, an information processing method, and a program.

Background Art

[0002]

PTL 1 discloses a technique for providing information regarding an authentication result to a person who has undergone authentication. PTL 1 discloses that, for an authenticated notification target person, content prompting the authenticated notification target person to continue to pass as is may be determined as notification content, and, for a target person who has not been authenticated, content instructing the target person to move to a predetermined area may be determined as notification content.

Citation List

Patent Literature

[0003]

PTL 1: WO 2020/105142 A1

Summary of Invention

Technical Problem

[0004]

However, with the technique described in PTL 1, for example, a case may be conceivable in which a user cannot appropriately grasp a destination according to an authentication result.

[0005]

An object of the present disclosure is, in view of the above-described problem, to provide a technique that enables a user to appropriately grasp a destination according to an authentication result.

Solution to Problem

[0006]

According to a first aspect of the present disclosure, there is provided an information processing apparatus including an acquisition unit for acquiring

information indicating a position of a user subjected to authentication processing, and a control unit for moving a guidance object from a position associated with the user to a destination according to a result of the authentication processing.

[0007]

According to a second aspect of the present disclosure, there is provided an information processing method including acquiring information indicating a position of a user subjected to authentication processing and moving a guidance object from a position associated with the user to a destination according to a result of the authentication processing.

[0008]

According to a third aspect of the present disclosure, there is provided a program that causes a computer to execute a process of acquiring information indicating a position of a user subjected to authentication processing and moving a guidance object from a position associated with the user to a destination according to a result of the authentication processing.

Advantageous Effects of Invention

[0009]

According to one aspect, a user may appropriately grasp a destination according to an authentication result.

Brief Description of Drawings

[0010]

[Fig. 1] It is a diagram illustrating an example of a configuration of an information processing apparatus according to an example embodiment.

[Fig. 2] It is a diagram illustrating an example of a configuration of an information processing system according to the example embodiment.

[Fig. 3] It is a diagram illustrating an example of a hardware configuration of the information processing apparatus according to the example embodiment.

[Fig. 4] It is a flowchart illustrating an example of processing of the information processing apparatus according to the example embodiment.

[Fig. 5] It is a diagram illustrating an example of movement of a guidance object according to the example embodiment.

Example Embodiment

[0011]

Principles of the present disclosure will be described with reference to

some illustrative example embodiments. It should be understood that these example embodiments are described for illustrative purposes only and help those skilled in the art understand and implement the present disclosure without suggesting any limitation on the scope of the present disclosure. The disclosure described in the present specification is implemented in various ways other than the ways to be described below.

[0012]

In the following description and claims, unless otherwise defined, all technical and scientific terms used in the present specification have the same meanings as those generally understood by one of ordinary skill in the art to which the present disclosure belongs.

[0013]

Hereinafter, example embodiments of the present disclosure will be described with reference to the drawings. Each drawing is merely an illustration for describing one or more example embodiments. Each drawing is not associated only with one particular example embodiment and may also be associated with one or more other example embodiments. As will be understood by one of ordinary skill in the art, various features or steps described with reference to any one drawing may be combined with features or steps shown in one or more other drawings, for example, to create example embodiments that are not explicitly illustrated or described. Not all features or steps shown in any one drawing for describing an illustrative example embodiment are necessarily essential, and some features or steps may be omitted. The order of the steps described in any drawing may be changed as appropriate.

[0014]

(First Example Embodiment)

<Configuration>

With reference to Fig. 1, a configuration of an information processing apparatus 10 according to an example embodiment will be described. Fig. 1 is a diagram illustrating an example of the configuration of the information processing apparatus 10 according to the example embodiment. The information processing apparatus 10 includes an acquisition unit 11 and a control unit 12. Each of these units may be implemented through cooperation of one or more programs installed in the information processing apparatus 10 and hardware such as a processor and

a memory of the information processing apparatus 10.

[0015]

The acquisition unit 11 acquires information indicating a position of a user subjected to authentication processing. The control unit 12 moves a guidance object from a position associated with the user to a destination according to a result of the authentication processing. This enables the user to appropriately grasp the destination according to the authentication result.

[0016]

(Second Example Embodiment)

Next, with reference to Fig. 2, a configuration of an information processing system 1 according to an example embodiment will be described.

<System Configuration>

Fig. 2 is a diagram illustrating an example of the configuration of the information processing system 1 according to the example embodiment.

In the example of Fig. 2, the information processing system 1 includes an information processing apparatus 10, an image capturing apparatus 20A, an image capturing apparatus 20B, an image capturing apparatus 20C, a display apparatus 30A, a display apparatus 30B, and a display apparatus 30C. The information processing system 1 also includes a mobile object 40A, a mobile object 40B, and a mobile object 40C.

[0017]

Hereinafter, in a case where no distinction needs to be made, the image capturing apparatuses 20A to 20C are also simply referred to as an “image capturing apparatus 20”. In a case where no distinction needs to be made, the display apparatuses 30A to 30C are also simply referred to as a “display apparatus 30”. In a case where no distinction needs to be made, the mobile objects 40A to 40C are also simply referred to as a “mobile object 40”. In the example of Fig. 2, the information processing apparatus 10, the image capturing apparatus 20, the display apparatus 30, and the mobile object 40 are communicably connected via a network N. The number of the information processing apparatuses 10, image capturing apparatuses 20, display apparatuses 30, and mobile objects 40 is not limited to the example of Fig. 2.

[0018]

Examples of the network N include the Internet, a mobile communication

system, a wireless local area network (LAN), a LAN, and a bus. Examples of the mobile communication system include a fifth-generation mobile communication system (5G), a sixth-generation mobile communication system (6G, Beyond 5G), a fourth-generation mobile communication system (4G), and a third-generation mobile communication system (3G).

[0019]

The information processing apparatus 10 is, for example, an apparatus such as a server, a cloud, or a personal computer. The information processing apparatus 10 may perform user authentication for, for example, immigration control (immigration), entry/exit management in an office, entry/exit management in a facility, or the like, by using an image captured by the image capturing apparatus 20. The information processing apparatus 10 guides a user to a destination according to a result of authentication processing by using a guidance object including at least one of a display object displayed by the display apparatus 30 and the mobile object 40.

[0020]

The image capturing apparatus 20 is an image capturing apparatus that captures an image of an eye of the user moving through a passage or the like. In response to control from the information processing apparatus 10, the display apparatus 30 displays a display object for guiding a line of sight of the user toward the image capturing apparatus 20. The display apparatus 30 may be, for example, a spotlight, a projector, or the like.

[0021]

The mobile object 40 may be, for example, a robot capable of traveling by legs or wheels, an electrically conductive wheelchair, an electric transport apparatus (electric cart), a drone (unmanned aircraft), or the like, and the mobile object 40 may be, for example, an apparatus capable of autonomously moving from a departure place to a destination instructed by the information processing apparatus 10. The mobile object 40 may also be, for example, an apparatus capable of autonomously moving, based on an image of a camera mounted on the mobile object 40, in front of a person specified by the information processing apparatus 10 to the destination instructed by the information processing apparatus 10.

[0022]

<Hardware Configuration>

Fig. 3 is a diagram illustrating an example of a hardware configuration of the information processing apparatus 10 according to the example embodiment. In the example of Fig. 3, the information processing apparatus 10 (computer 100) includes a processor 101, a memory 102, and a communication interface 103. Those units may be connected by a bus or the like. The memory 102 stores at least part of a program 104. The communication interface 103 includes an interface necessary for communication with other network elements.

[0023]

In a case where the program 104 is executed through cooperation of the processor 101 and the memory 102 or the like, at least part of processing according to the example embodiment of the present disclosure is performed by the computer 100. The memory 102 may be of any type. The memory 102 may be, as a non-limiting example, a non-transitory computer-readable storage medium. The memory 102 may also be implemented using any suitable data storage technology such as a semiconductor-based memory device, a magnetic memory device and system, an optical memory device and system, a fixed memory, and a removable memory. Although only one memory 102 is shown in the computer 100, several physically different memory modules may be present in the computer 100. The processor 101 may be of any type. The processor 101 may include one or more of a general-purpose computer, a dedicated computer, a microprocessor, a digital signal processor (DSP), and, as a non-limiting example, a processor based on a multi-core processor architecture. The computer 100 may have a plurality of processors such as application-specific integrated circuit chips that are temporally dependent on a clock that synchronizes a main processor.

[0024]

Example embodiments of the present disclosure may be implemented in hardware or dedicated circuitry, software, logic, or any combination of hardware, dedicated circuitry, software, and logic. Some aspects may be implemented in hardware, while other aspects may be implemented in firmware or software that can be executed by a controller, a microprocessor, or another computing device.

[0025]

The present disclosure also provides at least one computer program product tangibly stored in a non-transitory computer-readable storage medium.

The computer program product includes computer-executable instructions such as instructions included in program modules, and is executed on a device having a target real processor or virtual processor to execute a process or method of the present disclosure. The program modules include routines, programs, libraries, objects, classes, components, data structures, and the like that execute specific tasks or implement specific abstract data types. Functions of the program modules may be combined or divided among the program modules as desired in various example embodiments. Machine-executable instructions of the program modules can be executed in a local device or a distributed device. In a distributed device, the program modules can be placed in both local and remote storage media.

[0026]

Program codes for executing the method of the present disclosure may be written in any combination of one or more programming languages. The program codes are provided to a processor or a controller of a general-purpose computer, a dedicated computer, or another programmable data processing apparatus. In a case where the program codes are executed by the processor or the controller, functions/operations in a flowchart and/or a block diagram implemented are executed. The program codes are executed entirely on a machine, executed partly on a machine as a standalone software package, executed partly on a machine and partly on a remote machine, or executed entirely on a remote machine or server.

[0027]

In a case where the program is loaded into a computer, the program includes instructions (or software codes) for causing the computer to perform one or more functions described in the example embodiment. The program may be stored in a non-transitory computer-readable medium or a tangible storage medium. As a non-limiting example, the computer-readable medium or the tangible storage medium includes a random-access memory (RAM), a read-only memory (ROM), a flash memory, a solid-state drive (SSD) or another memory technology, a CD-ROM, a digital versatile disc (DVD), a Blu-ray (registered trademark) disc or another optical disc storage, a magnetic cassettes, a magnetic tape, magnetic disc storage, or another magnetic storage device. The program may be transmitted over a transitory computer-readable medium or a

communication medium. As a non-limiting example, the transitory computer-readable medium or the communication medium includes propagating signals in electrical, optical, acoustic, or another form.

[0028]

<Processing>

Next, with reference to Figs. 4 and 5, an example of processing of the information processing apparatus 10 according to the example embodiment will be described. Fig. 4 is a flowchart illustrating an example of processing of the information processing apparatus 10 according to the example embodiment. Fig. 5 is a diagram illustrating an example of movement of the guidance object according to the example embodiment. The process of Fig. 4 may be executed, for example, in a case where the user passing through a passage is detected by a human sensor or the like.

[0029]

In step S101, the control unit 12 authenticates the user based on an image of an eye or the like of the user captured by the image capturing apparatus 20. Here, the control unit 12 may authenticate the user by iris authentication, for example. The iris authentication may be, for example, authentication using a pattern of wrinkles in a circular portion located outside a pupil in a dark portion of an eyeball. The control unit 12 may also authenticate the user by face authentication that performs verification based on positions of feature points of a face, such as eyes, a nose, and a mouth, and a position and a size of a face region, for example.

[0030]

Subsequently, the acquisition unit 11 acquires information indicating a position of the user subjected to the authentication processing by the control unit 12 (step S102). Here, the acquisition unit 11 may acquire the information indicating the position of the user, for example, based on a human sensor installed in a passage or the like. The acquisition unit 11 may also acquire the information indicating the position of the user, for example, based on an image captured by the image capturing apparatus 20.

[0031]

Subsequently, the control unit 12 causes the guidance object including at least one of the display object displayed by the display apparatus 30 and the

mobile object 40 to be set at the position associated with the user (step S103). The position associated with the user may be, for example, a position associated with at least one of a location in front of the user, the eyes of the user, or a point ahead in the line of sight of the user. In a case where the display object by the display apparatus 30 is displayed in front of the user, the control unit 12 may, for example, cause the display object to be displayed near the feet of the user in a traveling direction of the user (exit direction of the passage). In a case where the display object is displayed to the eyes of the user, the control unit 12 may, for example, emit light near the face of the user.

[0032]

In a case where the display object is displayed ahead in the line of sight of the user, the control unit 12 may, for example, cause the display object to be displayed near an intersection between a line-of-sight direction detected based on an image captured by the image capturing apparatus 20 and a wall of the passage or the like. In this case, the control unit 12 may calculate a three-dimensional position of the intersection based on the line-of-sight direction and three-dimensional position information about the wall of the passage or the like. The three-dimensional position information about the wall of the passage or the like may be registered in the information processing apparatus 10 in advance by an operator (administrator) or the like, or may be calculated based on an image captured by the image capturing apparatus 20.

[0033]

The display object may be, for example, a display object including a message such as “Please proceed to the inspection lane” projected by a projector. The display object may also be, for example, a light beam emitted by a spotlight or the like.

[0034]

The control unit 12 may determine the guidance object according to at least one of the result of the authentication processing for the user and an attribute of the user. This enables, for example, the user to be guided more appropriately. In a case where the guidance object is determined according to the result of the authentication processing for the user, the control unit 12 may, for example, set a specific guidance object for the user only in a case where the user is a user registered in a black list. This enables, for example, only a user

falling under a special case to be guided to a special destination. The specific guidance object may be, for example, the mobile object 40 that automatically follows the user, or a display object in a specific display mode (for example, highlighted display).

[0035]

The control unit 12 may, for example, set different guidance objects for the user for each result of the authentication processing for the user. In this case, the control unit 12 may, for example, determine the mobile object 40 as the guidance object for a user registered in the black list (person requiring inspection), and determine the display object displayed by the display apparatus 30 as the guidance object for a user (for whom person identification has failed) who is not registered in the lists (black list and allowed list) (authentication-failed user). The control unit 12 may, for example, refrain from guiding a user registered in the allowed list (authenticated user) without setting a guidance object. This enables, for example, only a user falling under a special case to be guided to a special destination.

[0036]

In a case where the guidance object is determined according to the attribute of the user, the control unit 12 may, for example, cause the display apparatus 30 to display a display object including a text message, a symbol, or a figure for an adult. The control unit 12 may, for example, cause the display apparatus 30 to display a display object including a character such as an animal for a child. The control unit 12 may, for example, assign the mobile object 40 in the form of a character such as an animal to a child. This enables, for example, interest of the user in the guidance object to increase, and thus the line of sight may be guided more appropriately toward a camera.

[0037]

Subsequently, the control unit 12 moves the guidance object to a destination according to the result of the authentication processing (step S104). This enables the user to appropriately grasp the destination according to the authentication result. Here, the control unit 12 may gradually move the guidance object from the position associated with the user to the destination. In this case, the display apparatus 30 may, for example, control an actuator or the like based on a command received from the control unit 12 and change an irradiation

direction of light. The three-dimensional position information about the image capturing apparatus 20 may be registered in the information processing apparatus 10 in advance by the operator (administrator) or the like. The mobile object 40 may also, for example, autonomously move to the destination specified by the information processing apparatus 10 based on a command received from the control unit 12.

[0038]

Fig. 5 illustrates an example of the movement of the guidance object according to the example embodiment. In the example of Fig. 5, a user Y moving through a passage that allows movement to an authenticated-user lane 501, a user-requiring-inspection lane 502, and an authentication-failed-user lane 503 is illustrated. In the example of Fig. 5, a message 511 reading “Please proceed to the authenticated-user lane” and an arrow 512 indicating the direction of the authenticated-user lane 501 are displayed by the display apparatus 30 as the guidance object in front of a traveling direction 510 of the user Y who is an authenticated user.

[0039]

The control unit 12 may move the guidance object with at least one of a movement time and a movement distance according to the result of the authentication processing. This enables, for example, a specific user to be guided more appropriately by guiding the specific user until the specific user reaches a destination lane. In this case, the control unit 12 may, for example, move the guidance object for an authenticated user for a relatively short time and over a short distance. The control unit 12 may, for example, move the guidance object for a person requiring inspection for a relatively long time and over a long distance. This enables, for example, a person requiring inspection who is a terrorist or who has received a deportation order to be less likely to proceed to the authenticated-user lane or the like.

[0040]

The control unit 12 may also move the guidance object with at least one of a movement time and a movement distance according to the attribute of the user. This enables, for example, a user having a specific attribute to be guided more appropriately by guiding the user until the user reaches the destination lane. In this case, the control unit 12 may, for example, move the guidance object for an

adult for a relatively short time and over a short distance. The control unit 12 may, for example, move the guidance object for a child, an elderly person, and the like for a relatively long time and over a long distance. This enables, for example, a child, an elderly person, and the like to be less likely to proceed to the user-requiring-inspection lane or the like for attendants or the like to deal with the user.

[0041]

The control unit 12 may also, in a case where the result of the authentication processing is an authentication failure, move the guidance object from the position associated with the user toward the direction of the image capturing apparatus 20 that captures an image for authentication based on the eyes of the user. This enables, for example, in a case where iris authentication or the like fails because the user does not face the direction of the image capturing apparatus 20, the user to be caused to face the direction of the image capturing apparatus 20 and the authentication processing to be executed again. In a case where the user is caused to face the direction of the image capturing apparatus 20, an image of the eyes of the user may be captured from the front, and therefore accuracy of the iris authentication may be improved.

[0042]

The control unit 12 may also cause the guidance object to be displayed in a display mode according to the movement direction of the user and a direction from the position of the user to the destination according to the result of the authentication processing. This enables, for example, an abnormality to be notified to a person requiring inspection and surrounding attendants or the like in a case where the person requiring inspection is moving toward the authenticated-user lane or the like. In this case, the control unit 12 may, for example, cause the display object displayed by the display apparatus 30 or the mobile object 40 to be more strongly highlighted as a degree of divergence (for example, angle formed by two directions) between the movement direction of the user and the direction from the position of the user to the destination according to the result of the authentication processing becomes larger. Examples of the highlighted display may include at least one of irradiation with light having higher intensity, display of a larger display object, irradiation with light of a more conspicuous color (for example, red), and output of a warning sound.

[0043]

The control unit 12 may also, for example, cause a warning to be issued by the guidance object in a case where the movement direction of the user is a movement direction according to an authentication result different from the result of the authentication processing. This enables, for example, an abnormality to be notified to a person requiring inspection and surrounding attendants or the like in a case where the person requiring inspection is moving toward the authenticated-user lane or the like. In this case, the control unit 12 may, for example, cause the display object displayed by the display apparatus 30 or the mobile object 40 to be more strongly highlighted as a degree of divergence (for example, angle formed by two directions) between the movement direction of the user and the direction from the position of the user to a destination according to a result different from the result of the authentication processing becomes smaller.

[0044]

<Modified Example>

The information processing apparatus 10 may be an apparatus included in a single housing, but the information processing apparatus 10 of the present disclosure is not limited to this. Each unit of the information processing apparatus 10 may be implemented by, for example, cloud computing configured by one or more computers. The information processing apparatus 10 and at least one of the image capturing apparatus 20, the display apparatus 30, and the mobile object 40 may be housed in the same housing and configured as an integrated information processing apparatus. At least part of processing of the functional units of the information processing apparatus 10 may be executed by at least one of the image capturing apparatus 20, the display apparatus 30, and the mobile object 40. Such information processing apparatuses 10 are also included in one example of the “information processing apparatus” of the present disclosure.

[0045]

While the present disclosure has been particularly shown and described with reference to example embodiments thereof, the present disclosure is not limited to these example embodiments. It will be understood by those of ordinary skill in the art that various changes in form and details may be made therein without departing from the spirit and scope of the present disclosure as defined by the claims. And each example embodiment can be appropriately

combined with other example embodiments.

[0046]

The present invention is not limited to the above example embodiments, and may be modified as appropriate without departing from the spirit and scope of the present invention.

[0047]

Some or all of the above example embodiments may also be described as in the following Supplementary Notes, but are not limited to the following.

Some or all of elements (for example, configurations and functions) described in each Supplementary Note dependent on Supplementary Note 1 may also depend on an independent Supplementary Note of another category by a similar dependency relationship. Some or all of elements described in any Supplementary Note may be applied to various types of hardware, software, recording means for recording software, systems, and methods.

(Supplementary Note 1)

An information processing apparatus including:

an acquisition unit for acquiring information indicating a position of a user subjected to authentication processing; and

a control unit for moving a guidance object from a position associated with the user to a destination according to a result of the authentication processing.

(Supplementary Note 2)

The information processing apparatus according to Supplementary Note 1, in which the position associated with the user includes a position determined according to at least one of a location in front of the user, eyes of the user, or a point ahead in a line of sight of the user.

(Supplementary Note 3)

The information processing apparatus according to Supplementary Note 1 or 2, in which

the control unit determines the guidance object according to at least one of the result of the authentication processing or an attribute of the user, and

the guidance object includes at least one of a display object displayed by a display apparatus or a mobile object.

(Supplementary Note 4)

The information processing apparatus according to Supplementary Note 1 or 2, in which the control unit moves the guidance object with at least one of a movement time or a movement distance according to the result of the authentication processing.

(Supplementary Note 5)

The information processing apparatus according to Supplementary Note 1 or 2, in which the control unit moves the guidance object with at least one of a movement time or a movement distance according to an attribute of the user.

(Supplementary Note 6)

The information processing apparatus according to Supplementary Note 1 or 2, in which the control unit moves the guidance object, in a case where the result of the authentication processing is an authentication failure, from the position associated with the user toward a direction of an image capturing apparatus that captures an image for authentication based on eyes of the user.

(Supplementary Note 7)

The information processing apparatus according to Supplementary Note 1 or 2, in which the control unit causes the guidance object to be displayed in a display mode according to a movement direction of the user and a direction from the position of the user to the destination according to the result of the authentication processing.

(Supplementary Note 8)

The information processing apparatus according to Supplementary Note 1 or 2, in which the control unit causes a warning to be issued by the guidance object in a case where a movement direction of the user is a movement direction according to an authentication result different from the result of the authentication processing.

(Supplementary Note 9)

An information processing method including:

acquiring information indicating a position of a user subjected to authentication processing; and

moving a guidance object from a position associated with the user to a destination according to a result of the authentication processing.

(Supplementary Note 10)

A program for causing a computer to execute a process including:

acquiring information indicating a position of a user subjected to authentication processing; and

moving a guidance object from a position associated with the user to a destination according to a result of the authentication processing.

[0048]

This application is based upon and claims the benefit of priority from Japanese patent application No. 2024-022701, filed on February 19, 2024, the disclosure of which is incorporated herein in its entirety by reference.

Reference Signs List

[0049]

1	information processing system
10	information processing apparatus
11	acquisition unit
12	control unit
20	image capturing apparatus
30	display apparatus
40	mobile object

CLAIMS

[Claim 1]

An information processing apparatus comprising:

an acquisition unit for acquiring information indicating a position of a user subjected to authentication processing; and

a control unit for moving a guidance object from a position associated with the user to a destination according to a result of the authentication processing.

[Claim 2]

The information processing apparatus according to claim 1, wherein the position associated with the user includes a position determined according to at least one of a location in front of the user, eyes of the user, or a point ahead in a line of sight of the user.

[Claim 3]

The information processing apparatus according to claim 1 or 2, wherein

the control unit determines the guidance object according to at least one of the result of the authentication processing or an attribute of the user, and

the guidance object includes at least one of a display object displayed by a display apparatus or a mobile object.

[Claim 4]

The information processing apparatus according to claim 1 or 2, wherein the control unit moves the guidance object with at least one of a movement time or a movement distance according to the result of the authentication processing.

[Claim 5]

The information processing apparatus according to claim 1 or 2, wherein the control unit moves the guidance object with at least one of a movement time or a movement distance according to an attribute of the user.

[Claim 6]

The information processing apparatus according to claim 1 or 2, wherein the control unit moves the guidance object, in a case where the result of the authentication processing is an authentication failure, from the position associated with the user toward a direction of an image capturing apparatus that captures an image for authentication based on eyes of the user.

[Claim 7]

The information processing apparatus according to claim 1 or 2, wherein the control unit causes the guidance object to be displayed in a display mode according to a movement direction of the user and a direction from the position of the user to the destination according to the result of the authentication processing.

[Claim 8]

The information processing apparatus according to claim 1 or 2, wherein the control unit causes a warning to be issued by the guidance object in a case where a movement direction of the user is a movement direction according to an authentication result different from the result of the authentication processing.

[Claim 9]

An information processing method comprising:

acquiring information indicating a position of a user subjected to authentication processing; and

moving a guidance object from a position associated with the user to a destination according to a result of the authentication processing.

[Claim 10]

A program for causing a computer to execute a process comprising:

acquiring information indicating a position of a user subjected to authentication processing; and

moving a guidance object from a position associated with the user to a destination according to a result of the authentication processing.