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Information processing apparatus, non-transitory computer readable medium, and information processing method

Abstract

An information processing apparatus configured to manage a vehicle with a relaxation facility, the information processing apparatus includes a controller configured to acquire stress information regarding a worker working at a workplace, and command the vehicle to move to the workplace based on the acquired stress information.

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Background/Summary

CROSS-REFERENCE TO RELATED APPLICATION
(1) This application claims priority to Japanese Patent Application No. 2022-134434 filed on Aug. 25, 2022, the entire contents of which are incorporated herein by reference.
TECHNICAL FIELD
(2) The present disclosure relates to an information processing apparatus, a program, and an information processing method.
BACKGROUND
(3) Various technology for reducing user stress has been studied.
(4) For example, Patent Literature (PTL) 1 discloses technology that, by the action of fragrance, allows for relaxed and comfortable use of passenger transport vehicles, thus significantly reducing stress and other problems caused by the use of transportation.
CITATION LIST
Patent Literature
(5) PTL 1: JP H5-286355 A
SUMMARY
(6) Providing relaxing facilities for users (hereinafter referred to as "workers") who work at

factories, plants, commercial facilities, offices, and the like (hereinafter referred to as "workplaces") in close proximity to the workplaces leads to reduction in stress of the workers. However, securing space for such facilities is not easy. In other words, there is room for improvement with respect to technology for reducing stress of workers at workplaces.

(7) It would be helpful to improve technology for reducing stress of workers at workplaces.

(8) An information processing apparatus according to the present disclosure is an information processing apparatus configured to manage a vehicle with a relaxation facility, the information processing apparatus including a controller configured to:

(9) acquire stress information regarding a worker working at a workplace; and

(10) command the vehicle to move to the workplace based on the stress information.

(11) A program according to the present disclosure is configured to cause an information processing apparatus to execute operations, the information processing apparatus being configured to manage a vehicle with a relaxation facility, the operations including:

(12) acquiring stress information regarding a worker working at a workplace; and

(13) commanding the vehicle to move to the workplace based on the stress information.

(14) An information processing method according to the present disclosure is an information processing method performed by an information processing apparatus configured to manage a vehicle with a relaxation facility, the information processing method including:

(15) acquiring stress information regarding a worker working at a workplace; and

(16) commanding the vehicle to be dispatched to the workplace based on the stress information.

(17) According to the present disclosure, technology for reducing stress of workers at workplaces can be improved.

Description

BRIEF DESCRIPTION OF THE DRAWINGS

(1) In the accompanying drawings:

(2) FIG. **1** is a diagram illustrating a configuration of a system according to an embodiment of the present disclosure;

(3) FIG. **2** is a block diagram illustrating a configuration of a vehicle according to the embodiment of the present disclosure;

(4) FIG. **3** is a block diagram illustrating a configuration of an information processing apparatus according to the embodiment of the present disclosure;

(5) FIG. **4** is a block diagram illustrating a configuration of a terminal apparatus according to the embodiment of the present disclosure;

(6) FIG. **5** is a flowchart illustrating operations of the system according to the embodiment of the present disclosure;

(7) FIG. **6** is a flowchart illustrating a variation 1 of the operations of the system according to the embodiment of the present disclosure;

(8) FIG. **7** is a flowchart illustrating a variation 2 of the operations of the system according to the embodiment of the present disclosure; and

(9) FIG. **8** is a flowchart illustrating a variation 3 of the operations of the system according to the embodiment of the present disclosure.

DETAILED DESCRIPTION

(10) An embodiment of the present disclosure will be described below with reference to the drawings.

Outline of Embodiment

(11) An outline of a system **1** according to the embodiment of the present disclosure will be described with reference to FIG. **1**. The system **1** includes a vehicle **10**, an information processing

apparatus **20**, and a terminal apparatus **30**. The vehicle **10**, the information processing apparatus **20**, and the terminal apparatus **30** are communicably connected to a network **40** including, for example, the Internet, a mobile communication network, and the like.

(12) The vehicle **10** is an automobile, for example, but is not limited to this, and may be any appropriate vehicle. The vehicle **10** is, for example, a gasoline automobile, a battery electric vehicle (BEV), a hybrid electric vehicle (HEV), a plug-in hybrid electric vehicle (PHEV), a fuel cell electric vehicle (FCEV), or the like, but is not limited to these. The vehicle **10** includes a relaxation facility. The number of vehicles **10** provided in the system **1** may be freely determined. The vehicle **10** may be a manned vehicle or any autonomous vehicle that travels unmanned.

(13) The information processing apparatus **20** is, for example, a dedicated computer configured to function as a server. The information processing apparatus **20** may be a general purpose personal computer (PC). The information processing apparatus **20** can communicate with the vehicle **10** and the terminal apparatus **30** via the network **40**.

(14) The terminal apparatus **30** is, for example, a general purpose electronic device such as a smartphone or a wearable terminal. The terminal apparatus **30** is an electronic device used, for example, by a worker who uses the relaxation facility of the vehicle **10**. The terminal apparatus **30** is not limited to these, and may be an electronic device that is dedicated to the system **1**.

(15) First, an outline of the present embodiment will be described, and details thereof will be described later. The information processing apparatus **20** manages the vehicle **10** with the relaxation facility. The terminal apparatus **30** acquires stress information on a worker working at a workplace and transmits the stress information to the information processing apparatus **20**. The information processing apparatus **20** acquires the stress information from the terminal apparatus **30**. The information processing apparatus **20** then, based on the stress information, commands the vehicle **10** to move to the workplace.

(16) As described above, according to the present embodiment, the information processing apparatus **20** acquires stress information on a worker and, based on the stress information, commands the vehicle **10** with the relaxation facility to move to a workplace of the worker. Thus, based on the stress information, the worker with a high probability of needing the relaxation facility can be encouraged to use the relaxation facility. For example, the worker can use the relaxation facility even in the workplace that has no relaxation facility. Therefore, technology for reducing stress of workers at workplaces can be improved in that, as long as the vehicle **10** can be dispatched to a workplace, workers at the workplace can be encouraged to use the relaxation facility.

(17) Next, configurations of the system **1** will be described in detail.

(18) (Configuration of Vehicle)

(19) As illustrated in FIG. **2**, the vehicle **10** includes a relaxation facility **11**, a communication interface **12**, a positioner **13**, a memory **14**, and a controller **15**.

(20) The relaxation facility **11** include any stress-relieving facility provided in the vehicle **10**. For example, the relaxation facility **11** includes a massage machine and/or an air purifier. The vehicle **10** may include a soundproof facility and/or a lavatory facility. The vehicle **10** may also include a shower, a bathroom facility, or the like. A massage provider, a massage practitioner, or the like may be on board the vehicle **10**.

(21) The communication interface **12** includes at least one communication interface for connecting to the network **40**. The communication interface is compliant with mobile communication standards such as the 4th generation (4G) standard or the 5th generation (5G) standard, for example, but these examples are not limiting. In the present embodiment, the vehicle **10** communicates with the information processing apparatus **20** and the terminal apparatus **30** via the communication interface **12** and the network **40**.

(22) The positioner **13** includes one or more apparatuses configured to acquire positional information on the vehicle **10**. Specifically, the positioner **13** includes a receiver corresponding to the Global Positioning System (GPS), for example, but is not limited to this, and may include a

receiver corresponding to any satellite positioning system. The positioner **13** may acquire the positional information on the vehicle **10** continually, periodically, or non-periodically.

(23) The memory **14** includes one or more memories. The memories are semiconductor memories, magnetic memories, optical memories, or the like, for example, but are not limited to these. The memories included in the memory **14** may each function as, for example, a main memory, an auxiliary memory, or a cache memory. The memory **14** stores any information used for operations of the vehicle **10**. For example, the memory **14** may store a system program, an application program, embedded software, and the like. The information stored in the memory **14** may be updated with, for example, information acquired from the network **40** via the communication interface **12**.

(24) The controller **15** includes at least one processor, at least one programmable circuit, at least one dedicated circuit, or a combination of these. The processor is a general purpose processor such as a central processing unit (CPU) or a graphics processing unit (GPU), or a dedicated processor that is dedicated to specific processing, for example, but is not limited to these. The programmable circuit is a field-programmable gate array (FPGA), for example, but is not limited to this. The dedicated circuit is an application specific integrated circuit (ASIC), for example, but is not limited to this. The controller **15** controls the operations of the entire vehicle **10**.

(25) (Configuration of Information Processing Apparatus)

(26) As illustrated in FIG. **3**, the information processing apparatus **20** includes a communication interface **21**, a memory **22**, and a controller **23**.

(27) The communication interface **21** includes at least one communication interface for connecting to the network **40**. The communication interface may be compliant with, for example, mobile communication standards, wired local area network (LAN) standards, or wireless LAN standards, but these examples are not limiting. The communication interface may be compliant with any appropriate communication standards. In the present embodiment, the information processing apparatus **20** communicates with the vehicle **10** and the terminal apparatus **30** via the communication interface **21** and the network **40**. The information processing apparatus **20** may communicate via the communication interface **21** and the network **40** with vehicles other than the vehicle **10** according to the present embodiment, such as automobiles that do not have power supply capabilities, for example.

(28) The memory **22** includes one or more memories. The memories included in the memory **22** may each function as, for example, a main memory, an auxiliary memory, or a cache memory. The memory **22** stores any information used for operations of the information processing apparatus **20**.

(29) For example, the memory **22** may store a system program, an application program, a database, map information, and the like. The information stored in the memory **22** may be updated with, for example, information acquired from the network **40** via the communication interface **21**.

(30) The controller **23** includes at least one processor, at least one programmable circuit, at least one dedicated circuit, or a combination of these. The controller **23** controls the operations of the entire information processing apparatus **20**.

(31) (Configuration of Terminal Apparatus)

(32) As illustrated in FIG. **4**, the terminal apparatus **30** includes a communication interface **31**, a memory **32**, an input interface **33**, an output interface **34**, a positional information acquisition interface **35**, a controller **36**, and a stress information acquisition interface **37**.

(33) The communication interface **31** includes a communication module connected to the network **40**. For example, the communication interface **21** may include a communication module compliant with mobile communication standards such as the 4th generation (4G) and the 5th generation (5G) standards. In an embodiment, the terminal apparatus **30** connects to the network **40** via the communication interface **31**. The communication interface **31** transmits and receives various information via the network **40**.

(34) The memory **32** is, for example, a semi-conductor memory, a magnetic memory, an optical

memory, or the like, but is not limited to these. The memory **32** may function as, for example, a main memory, an auxiliary memory, or a cache memory. The memory **32** stores any information used for operations of the terminal apparatus **30**. For example, the memory **32** may store a system program, an application program, various types of information received by the communication interface **21**, and the like. The information stored in the memory **32** may be updated with information received from the network **40** via the communication interface **31**, for example.

(35) The input interface **33** includes at least one input interface for detecting user input to acquire input information based on an operation by a user. The input interface **33** is, for example, a physical key, a capacitive key, a touch screen integrally provided with a display of the output interface **34**, a microphone for receiving audio input, or the like, but is not limited to these.

(36) The output interface **34** includes at least one output interface for outputting information to notify the user of the information. The output interface **34** is, for example, a display for outputting the information in the form of an image, a speaker for outputting the information in the form of audio, or the like, but is not limited to these.

(37) The positional information acquisition interface **35** includes at least one device for acquiring positional information on the terminal apparatus **30**. Specifically, the positional information acquisition interface **35** includes a receiver corresponding to the Global Positioning System (GPS), for example, but is not limited to this, and may include a receiver corresponding to any satellite positioning system. The positional information acquisition interface **35** may acquire the positional information on the terminal apparatus **30** continually, periodically, or non-periodically.

(38) The controller **36** includes at least one processor, at least one programmable circuit, at least one dedicated circuit, or a combination of these. The controller **36** controls operations of the entire terminal apparatus **30**.

(39) The stress information acquisition interface **37** generates stress information on a worker. The stress information is any information that represents stress felt by the worker. The stress information may be qualitative or quantitative information. For example, the stress information acquisition interface **37** may be any sensor that detects vital information on the worker. Alternatively, the stress information acquisition interface **37** may acquire the stress information by performing image recognition processing on an image in which the worker's facial expression is captured and classifying the worker's facial expression. For example, the stress information acquisition interface **37** may be a dedicated processor that generates the stress information based on the vital information on the worker. The stress information acquisition interface **37** may also acquire vital information on the worker from an external device such as a wearable device and generate the stress information based on such vital information.

(40) (Operations of System)

(41) Operations of the system **1** according to the present embodiment will be described with reference to FIG. **5**.

(42) Step S**101**: The controller **23** of the information processing apparatus **20** acquires stress information regarding a worker working at a workplace.

(43) Any method can be employed to acquire the stress information. For example, the controller **23** may acquire the stress information from the terminal apparatus **30** via the communication interface **21** and the network **40**. Alternatively, the controller **23** may receive the stress information from an external server via the communication interface **21** and the network **40**, or may calculate the stress information based on the worker's vital information received from the external server.

(44) Step S**102**: Based on the stress information, the controller **23** commands the vehicle **10** to move to the workplace.

(45) For example, the controller **23** detects an anomaly based on the stress information. Upon detecting such an anomaly, the controller **23** commands the vehicle **10** to move to the workplace at which the worker is present. In other words, upon detecting an anomaly based on the acquired stress information, the controller **23** dispatches the vehicle **10** with the relaxation facility **11** to the

workplace of the worker.

(46) As described above, the information processing apparatus **20** acquires stress information on a worker and, based on the stress information, commands the vehicle **10** with the relaxation facility to move to a workplace of the worker. Thus, based on the stress information, the worker with a high probability of needing the relaxation facility can be encouraged to use the relaxation facility.

(47) (Variation 1 of Operations of System)

(48) A variation 1 of the operations of the system **1** according to the present embodiment will be described with reference to FIG. **6**.

(49) Step S**201**: The controller **23** of the information processing apparatus **20** acquires stress information regarding a worker working at a workplace.

(50) Such stress information includes a stress level of the worker. The stress level is quantitative information expressed, for example, as a numerical value on a scale of 100. The higher the value of the stress level, the higher the stress felt by the worker.

(51) Step S**202**: The controller **23** determines whether the stress level is greater than or equal to a first threshold. The first threshold is determined based on a probability that workers need relaxation facilities. When the stress level is greater than or equal to the first threshold, the process proceeds to step S**203**. When the stress level is less than the first threshold, the process ends.

(52) Step S**203**: When the stress level is greater than or equal to the first threshold, the controller **23** commands the vehicle **10** to move to the workplace.

(53) As described above, the information processing apparatus **20** acquires stress information on a worker, and commands the vehicle **10** with the relaxation facility **11** to move to the worker's workplace when a stress level is greater than or equal to a first threshold. This allows the worker whose stress level is greater than or equal to the first threshold to be encouraged to use the relaxation facility **11**.

(54) (Variation 2 of Operations of System)

(55) A variation 2 of the operations of the system **1** according to the present embodiment will be described with reference to FIG. **7**.

(56) Step S**301**: The controller **23** of the information processing apparatus **20** acquires a reservation application for the relaxation facility **11** from a worker working at a workplace.

(57) Any method can be employed to acquire the reservation application. For example, the controller **23** may acquire the reservation application from the terminal apparatus **30** via the communication interface **21** and the network **40**. Alternatively, the controller **23** may receive the reservation application from an external server via the communication interface **21** and the network **40**.

(58) Step S**302**: The controller **23** acquires stress information regarding a worker working at a workplace. Such stress information includes a stress level.

(59) Step S**303**: The controller **23** determines whether the stress level is greater than or equal to a second threshold. The second threshold is determined based on a probability that workers need relaxation facilities. The second threshold may be the same as or different from the first threshold described above. When the stress level is greater than or equal to the second threshold, the process proceeds to step S**304**. When the stress level is less than the second threshold, the process proceeds to step S**305**.

(60) Step S**304**: When the stress level is greater than or equal to the second threshold, the controller **23** commands the vehicle **10** to move to the workplace.

(61) Step S**305**: When the stress level is less than the second threshold, the controller **23** notifies the worker that a reservation is not possible. Any appropriate method can be adopted to notify that a reservation is not possible. For example, the controller **23** may notify the terminal apparatus **30** that a reservation is not possible via the communication interface **21** and the network **40**.

(62) As described above, upon receiving a reservation application for the relaxation facility **11** from a worker, the information processing apparatus **20** acquires stress information on the worker, and

commands the vehicle **10** with the relaxation facility **11** to move to the worker's workplace when a stress level is greater than or equal to a second threshold. This allows the worker whose stress level is greater than or equal to the second threshold to be encouraged to use the relaxation facility **11**.

(63) The second threshold may be a lower value than the first threshold, for example. This can encourage a worker whose stress level is lower than the first threshold and has a certain amount of leeway but is higher than the second threshold to use the relaxation facility **11**. This allows workers whose stress levels have increased to some extent and who request to use the relaxation facility **11** to release stress early.

(64) The reservation application may include a desired usage time frame for the relaxation facility **11**. In this case, at step S**303**, the controller **23** commands the vehicle **10** to be dispatched to the workplace in the desired usage time period. In other words, the controller **23** commands the vehicle **10** to move to the workplace so that the worker can use the relaxation facility **11** in such a desired usage time period. This enables the worker to use the relaxation facility **11** in the desired usage time period.

(65) The reservation application may include a desired usage time, and an upper limit of the desired usage time may be set according to the stress level. This enables the worker to use the relaxation facility **11** for a time length according to the stress level.

(66) The reservation application may include the type of relaxation facility desired. In this case, at step S**303**, the controller **23** selects a vehicle **10** with the relaxation facility and commands the vehicle **10** to be dispatched to the workplace.

(67) (Variation 3 of Operations of System)

(68) A variation 3 of the operations of the system **1** according to the present embodiment will be described with reference to FIG. **8**.

(69) Step S**401**: The controller **23** of the information processing apparatus **20** acquires stress information regarding a worker working at a workplace. Such stress information includes a stress level.

(70) Step S**402**: The controller **23** determines whether the stress level is greater than or equal to a first threshold. When the stress level is greater than or equal to the first threshold, the process proceeds to step S**403**. When the stress level is less than the first threshold, the process proceeds to step S**404**.

(71) Step S**403**: When the stress level is greater than or equal to the first threshold, the controller **23** commands the vehicle **10** to move to the workplace.

(72) Step S**404**: When the stress level is less than the first threshold, the controller **23** determines whether the stress level is greater than or equal to a third threshold. The third threshold is determined based on a probability that workers need relaxation facilities. The third threshold is a lower value than the first threshold. When the stress level is greater than or equal to the third threshold, the process proceeds to step S**405**. When the stress level is less than the third threshold, the process ends.

(73) Step S**405**: When the stress level is greater than or equal to the third threshold, the controller **23** makes an inquiry for a reservation application to the worker working at the workplace. Any method can be employed to make the inquiry for the reservation application. For example, the controller **23** may make the inquiry for the reservation application by sending a push notification regarding the reservation application to the terminal apparatus **30** via the communication interface **21** and the network **40**.

(74) Step S**406**: The controller **23** determines whether the reservation application is acquired. When it is determined that the reservation application is acquired, the process proceeds to step S**403**. When it is not determined that the reservation application is acquired, the process ends.

(75) As described above, the information processing apparatus **20** acquires stress information on a worker, and commands the vehicle **10** with the relaxation facility **11** to move to the worker's workplace when a stress level is greater than or equal to a first threshold. This allows the worker

whose stress level is greater than or equal to the first threshold to be encouraged to use the relaxation facility **11**. In addition, since an inquiry for a reservation application is made to a worker whose stress level is less than the first threshold and greater than or equal to the third threshold, the use of the relaxation facility **11** can be encouraged for the worker whose stress level is less than the first threshold and has a certain degree of leeway, but is greater than or equal to the third threshold. This allows workers whose stress levels have increased to some extent and who request to use the relaxation facility **11** to release stress early.

(76) As described above, according to the present embodiment, the information processing apparatus **20** acquires stress information on a worker and, based on the stress information, commands the vehicle **10** with the relaxation facility to move to a workplace of the worker. Thus, based on the stress information, the worker with a high probability of needing the relaxation facility **11** can be encouraged to use the relaxation facility **11**. For example, the worker can use the relaxation facility **11** of the vehicle **10** even in the workplace that has no relaxation facility. Therefore, technology for reducing stress of workers at workplaces can be improved in that, as long as the vehicle **10** can be dispatched to a workplace, workers at the workplace can be encouraged to use the relaxation facility **11**.

(77) While the present disclosure has been described with reference to the drawings and examples, it should be noted that various modifications and revisions may be implemented by those skilled in the art based on the present disclosure. Accordingly, such modifications and revisions are included within the scope of the present disclosure. For example, functions or the like included in each component, each step, or the like can be rearranged without logical inconsistency, and a plurality of components, steps, or the like can be combined into one or divided.

(78) For example, an embodiment in which the configuration and operations of the information processing apparatus **20** in the above embodiment are distributed to multiple computers capable of communicating with each other can be implemented. For example, an embodiment in which some or all of the components of the information processing apparatus **20** are provided in the vehicle **10** can also be implemented. For example, a navigation apparatus mounted in the vehicle **10** may be equipped with some or all of the components of the information processing apparatus **20**.

(79) For example, an embodiment in which a general purpose computer functions as the information processing apparatus **20** according to the above embodiment can also be implemented. Specifically, a program in which processes for realizing the functions of the information processing apparatus **20** according to the above embodiment are written may be stored in a memory of a general purpose computer, and the program may be read and executed by a processor. Accordingly, the present disclosure can also be implemented as a program executable by a processor, or a non-transitory computer readable medium storing the program.

(80) For example, a configuration that causes a general purpose electronic device such as a smartphone, a computer, or the like to function as the information processing apparatus **20** according to the embodiment described above is possible. Specifically, a program in which processes for realizing the functions of the information processing apparatus **20** or the like according to the embodiment are written may be stored in a memory of the electronic device, and the program may be read and executed by a processor of the electronic device. Accordingly, in an embodiment, the present disclosure can also be implemented as a program executable by a processor.

(81) Examples of some embodiments of the present disclosure are described below. However, it should be noted that the embodiments of the present disclosure are not limited to these examples. [Appendix 1] An information processing apparatus configured to manage a vehicle with a relaxation facility, the information processing apparatus comprising a controller configured to: acquire stress information regarding a worker working at a workplace; and command the vehicle to move to the workplace based on the stress information. [Appendix 2] The information processing apparatus according to appendix 1, wherein the stress information includes a stress level of the

worker, and when the stress level is greater than or equal to a first threshold, the controller is configured to command the vehicle to move to the workplace. [Appendix 3] The information processing apparatus according to appendix 1 or 2, wherein the vehicle includes a soundproof facility and/or a lavatory facility. [Appendix 4] The information processing apparatus according to any one of appendices 1 to 3, wherein the relaxation facility includes a massage machine and/or an air purifier. [Appendix 5] The information processing apparatus according to any one of appendices 1 to 4, wherein the stress information includes a stress level of the worker, and the controller is further configured to: acquire a reservation application regarding the worker; and when the stress level is greater than or equal to a second threshold, command the vehicle to move to the workplace based on the reservation application. [Appendix 6] The information processing apparatus according to appendix 5, wherein the reservation application includes a desired usage time period for the relaxation facility, and the controller is configured to command the vehicle to be dispatched to the workplace in the desired usage time period. [Appendix 7] The information processing apparatus according to any one of appendices 1 to 4, wherein the controller is configured to: inquire a reservation application by the worker for the relaxation facility when the stress level is less than a first threshold and greater than or equal to a third threshold; and command the vehicle to move to the workplace when the reservation application is acquired. [Appendix 8] A program configured to cause an information processing apparatus to execute operations, the information processing apparatus being configured to manage a vehicle with a relaxation facility, the operations comprising: acquiring stress information regarding a worker working at a workplace; and commanding the vehicle to move to the workplace based on the stress information. [Appendix 9] The program according to appendix 8, wherein the stress information includes a stress level of the worker, and when the stress level is greater than or equal to a first threshold, the operations comprise commanding the vehicle to move to the workplace. [Appendix 10] The program according to appendix 9, wherein the vehicle includes a soundproof facility and/or a lavatory facility. [Appendix 11] The program according to any one of appendices 8 to 10, wherein the relaxation facility includes a massage machine and/or an air purifier. [Appendix 12] The program according to any one of appendices 8 to 11, wherein the stress information includes a stress level of the worker, and the operations comprise: acquiring a reservation application regarding the worker; and when the stress level is greater than or equal to a second threshold, commanding the vehicle to move to the workplace based on the reservation application. [Appendix 13] The program according to appendix 12, wherein the reservation application includes a desired usage time period for the relaxation facility, and the operations comprise commanding the vehicle to move to the workplace in the desired usage time period. [Appendix 14] The program according to any one of appendices 8 to 11, wherein the operations comprise: inquiring a reservation application by the worker for the relaxation facility when the stress level is less than a first threshold and greater than or equal to a third threshold; and commanding the vehicle to move to the workplace when the reservation application is acquired. [Appendix 15] An information processing method performed by an information processing apparatus configured to manage a vehicle with a relaxation facility, the information processing method comprising: acquiring stress information regarding a worker working at a workplace; and commanding the vehicle to move to the workplace based on the stress information. [Appendix 16] The information processing method according to appendix 15, wherein the stress information includes a stress level of the worker, and when the stress level is greater than or equal to a first threshold, the information processing method comprises commanding the vehicle to move to the workplace. [Appendix 17] The information processing method according to appendix 15 or 16, wherein the vehicle includes a soundproof facility and/or a lavatory facility. [Appendix 18] The information processing method according to any one of appendices 15 to 17, wherein the relaxation facility includes a massage machine and/or an air purifier. [Appendix 19] The information processing method according to any one of appendices 15 to 18, wherein the stress information includes a stress level of the worker, and the information processing method

comprises: acquiring a reservation application regarding the worker; and when the stress level is greater than or equal to a second threshold, commanding the vehicle to move to the workplace based on the reservation application. [Appendix 20] The information processing method according to appendix 19, wherein the reservation application includes a desired usage time period for the relaxation facility, and the information processing method comprises commanding the vehicle to be dispatched to the workplace in the desired usage time period.

Claims

1. An information processing apparatus configured to control a vehicle with a relaxation facility, the information processing apparatus comprising a controller configured to: receive, from a terminal apparatus of a worker working at a workplace, stress information including a stress level of the worker; in a case that the stress level is greater than or equal to a first threshold, control the vehicle to autonomously move to the workplace; and in a case that the stress level is less than the first threshold and greater than or equal to a second threshold that is lower than the first threshold, transmit information inquiring for a reservation application for the relaxation facility to the terminal apparatus of the worker, and control the vehicle to autonomously move to the workplace in response to receiving the reservation application for the relaxation facility from the terminal apparatus of the worker.
2. The information processing apparatus according to claim 1, wherein the vehicle includes a soundproof facility and/or a lavatory facility.
3. The information processing apparatus according to claim 1, wherein the relaxation facility includes a massage machine and/or an air purifier.
4. The information processing apparatus according to claim 1, wherein the received reservation application includes a desired usage time period for the relaxation facility, and the controller is configured to control the vehicle to autonomously move to the workplace in the desired usage time period.
5. A non-transitory computer readable medium storing a program configured to cause an information processing apparatus to execute operations, the information processing apparatus being configured to control a vehicle with a relaxation facility, the operations comprising: receiving, from a terminal apparatus of a worker working at a workplace, stress information including a stress level of the worker; in a case that the stress level is greater than or equal to a first threshold, controlling the vehicle to autonomously move to the workplace; and in a case that the stress level is less than the first threshold and greater than or equal to a second threshold that is lower than the first threshold, transmitting information inquiring for a reservation application for the relaxation facility to the terminal apparatus of the worker, and controlling the vehicle to autonomously move to the workplace in response to receiving the reservation application for the relaxation facility from the terminal apparatus of the worker.
6. The non-transitory computer readable medium according to claim 5, wherein the vehicle includes a soundproof facility and/or a lavatory facility.
7. The non-transitory computer readable medium according to claim 5, wherein the relaxation facility includes a massage machine and/or an air purifier.
8. The non-transitory computer readable medium according to claim 5, wherein the received reservation application includes a desired usage time period for the relaxation facility, and the operations comprise controlling the vehicle to autonomously move to the workplace in the desired usage time period.
9. An information processing method performed by an information processing apparatus configured to control a vehicle with a relaxation facility, the information processing method comprising: receiving, from a terminal apparatus of a worker working at a workplace, stress information including a stress level of the worker; in a case that the stress level is greater than or equal to a first

threshold, controlling the vehicle to autonomously move to the workplace; and in a case that the stress level is less than the first threshold and greater than or equal to a second threshold that is lower than the first threshold, transmitting information inquiring for a reservation application for the relaxation facility to the terminal apparatus of the worker, and controlling the vehicle to autonomously move to the workplace in response to receiving the reservation application for the relaxation facility from the terminal apparatus of the worker.

10. The information processing method according to claim 9, wherein the vehicle includes a soundproof facility and/or a lavatory facility.

11. The information processing method according to claim 9, wherein the relaxation facility includes a massage machine and/or an air purifier.

12. The information processing method according to claim 9, wherein the received reservation application includes a desired usage time period for the relaxation facility, and the information processing method comprises controlling the vehicle to autonomously move to the workplace in the desired usage time period.

13. The information processing apparatus according to claim 1, wherein the stress information is acquired by the terminal apparatus of the worker performing image recognition processing on an image in which facial expression of the worker is captured and classifying the facial expression of the worker.