CLAIMS

1. An information transmission system comprising:

a first communication terminal;

a second communication terminal; and

an information server configured to communicate with the first communication terminal and the second communication terminal, wherein:

the second communication terminal includes a biometric information acquisition unit configured to acquire biometric information on a user of the second communication terminal,

the information server records a biometric information database including the biometric information on the user of the second communication terminal, wherein the biometric information is transmitted from the second communication terminal, and information on a normal range of the biometric information,

a first message including predetermined information is transmitted from the information server to the second communication terminal,

a second message including the predetermined information is transmitted from the information server to the second communication terminal when there is no response from the second communication terminal to the information

server until a first standby time elapses after transmission of the first message,

the second communication terminal displays a screen including the first message,

when the second message is transmitted to the second communication terminal, the screen including the first message in the second communication terminal includes the second message,

when there is the response from the second communication terminal to the information server, the screen including at least the first message in the second communication terminal includes a message related to the response from the second communication terminal to the information server,

the first communication terminal receives, from the information server, a notification of information on presence or absence of the response from the second communication terminal to the information server and/or at least one of the biometric information on the user of the second communication terminal or information on whether the biometric information includes information out of the normal range,

the biometric information on the user of the second communication terminal is acquired by the biometric information acquisition unit and is transmitted from the

second communication terminal to the information server,

the information on whether the biometric information includes the information out of the normal range is generated by the information server based on the biometric information database,

the notification of the information on the presence or absence of the response from the second communication terminal to the information server is any one of a reply of at least one of the first message or the second message transmitted from the second communication terminal to the first communication terminal via the information server, transmission of information to the first communication terminal via the information server, the information indicating that the second communication terminal is able to display the first message transmitted from the first communication terminal, and transmission of information to the first communication terminal via the information server, the information indicating that a predetermined operation has been performed in the second communication terminal,

the information server determines whether a message input to the first communication terminal and transmitted from the first communication terminal to the second communication terminal via the information server corresponds to the first message by determining whether the message include a predetermined character string as the

predetermined information,

the second message is generated by any one of the first communication terminal and the information server,

the second message includes information indicating that automatic retransmission is performed by any one of the first communication terminal and the information server and includes the predetermined information,

the first communication terminal displays a screen including the first message,

when the second message is transmitted to the second communication terminal, the screen including the first message in the first communication terminal includes the second message,

when there is the response from the second communication terminal to the information server, the screen including at least the first message in the first communication terminal includes the message related to the response from the second communication terminal to the information server,

the biometric information acquisition unit includes a detection unit configured to detect position information and acceleration of the second communication terminal,

the position information and the acceleration obtained by the detection unit are transmitted as the biometric information from the second communication terminal to the

information server, and

the notification from the information server to the first communication terminal is not performed even if there is no response from the second communication terminal to the information server until the first standby time elapses after the transmission of the first message, when a time zone in which a moving speed of the second communication terminal, the moving speed being calculated based on the position information and the acceleration obtained by the detection unit, is equal to or higher than a speed threshold value is included before the first standby time elapses.

2. The information transmission system according to claim 1, wherein:

the first message and the second message are generated by any one of the first communication terminal and the information server at predetermined time intervals,

the first message includes information indicating that automatic transmission is performed by any one of the first communication terminal and the information server and includes the predetermined information, and

the second message includes information indicating that automatic retransmission is performed by any one of the first communication terminal and the information server and includes the predetermined information.

3. The information transmission system according to claim 1 or 2, wherein:

a third message including the predetermined information is transmitted from the information server to the second communication terminal when there is no response from the second communication terminal to the information server until a second standby time elapses after transmission of the second message,

the third message is generated by any one of the first communication terminal and the information server,

the third message includes information indicating that automatic re-retransmission is performed by any one of the first communication terminal and the information server and includes the predetermined information,

the second communication terminal outputs a reception notification sound for a longer time and/or with a larger volume when receiving the second message than when receiving the first message,

the second communication terminal outputs a reception notification sound for a longer time and/or with a larger volume when receiving the third message than when receiving the second message,

when the third message is transmitted to the second communication terminal, a screen including the first message and the second message in the second communication

terminal includes the third message,

when there is no response from the second communication terminal to the information server and the biometric information includes the information out of the normal range until the second standby time elapses after the transmission of the second message, the first communication terminal receives, from the information server, a notification of at least one of the biometric information on the user of the second communication terminal or the information on whether the biometric information includes the information out of the normal range,

when there is no response from the second communication terminal to the information server until a third standby time elapses after transmission of the third message, the first communication terminal receives, from the information server, a notification of information on presence or absence of the response from the second communication terminal to the information server for at least one of the first message, the second message, or the third message, and

the notification of the information on the presence or absence of the response from the second communication terminal to the information server is any one of a reply of at least one of the first message, the second message, or the third message transmitted from the second communication

terminal to the first communication terminal via the information server, transmission of information to the first communication terminal via the information server, the information indicating that the second communication terminal is able to display the first message transmitted from the first communication terminal, and transmission of information to the first communication terminal via the information server, the information indicating that a predetermined operation has been performed in the second communication terminal.

4. The information transmission system according to claim 1, wherein:

the information server records a position information database including position information on the second communication terminal, and

the first communication terminal displays, based on the position information database and the biometric information database, the position information on the second communication terminal and at least one of the biometric information on the user of the second communication terminal or the information on whether the biometric information includes the information out of the normal range.

5. The information transmission system according to claim 4, wherein:

the first communication terminal displays the screen including the first message,

when the second message is transmitted to the second communication terminal, the screen including the first message in the first communication terminal includes the second message,

when there is the response form the second communication terminal to the information server, the screen including at least the first message in the first communication terminal includes the message related to the response from the second communication terminal to be information server,

the biometric information acquisition unit includes a detection unit configured to detect position information on the second communication terminal,

the position information obtained by the detection unit is transmitted as the biometric information from the second communication terminal to the information server, and

the first communication terminal displays, based on the position information database and the biometric information database, a first screen including the position information on the second communication terminal and the information on whether the biometric information on the user of the second communication terminal includes the information out of the normal range in a switchable state from the screen

including the first message.

6. The information transmission system according to claim 5, wherein the first communication terminal displays, based on the biometric information database, a second screen showing, in time series, the biometric information on the user of the second communication terminal in a switchable state from the first screen or the screen including the first message.

7. The information transmission system according to claim 6, wherein:

the first screen includes, as the information on whether the biometric information on the user of the second communication terminal includes the information out of the normal range, a biometric abnormality mark turned on when the biometric information on the user of the second communication terminal includes the information out of the range, and

when the biometric abnormality mark included in the first screen is operated in a state in which the first screen is displayed on the first communication terminal, the first communication terminal switches to display of the second screen.

8. The information transmission system according to claim 7, wherein:

the first communication terminal displays a third

screen including a calling instruction area for a phone number of the user of the second communication terminal, a calling instruction area for a phone number of person related to the user of the second communication terminal, and a calling instruction area for a phone number of a predetermined institution,

the third screen includes, as the calling instruction area for the phone number of the predetermined institution, a calling instruction area for a phone number of at least one of a fire department or a police station specified based on the position information on the second communication terminal, and

when a specific operation is performed in a state in which the second screen is displayed on the first communication terminal, the first communication terminal switches to display of the third screen.

9. The information transmission system according to claim 6, wherein:

the second screen includes an activity state display area indicating, in time series, information on whether the user of the second communication terminal is active and information on whether the user of the second communication terminal is moving,

when the second communication terminal is being operated or when acceleration of the second communication

terminal is equal to or greater than an acceleration threshold value, it is determined that the user of the second communication terminal is active, and

when a moving speed of the second communication terminal is equal to or higher than a speed threshold value, it is determined that the user of the second communication terminal is moving.

10. The information transmission system according to claim 6, wherein the second screen includes an activity state display area including, in time series, information on whether the user of the second communication terminal is active and information on whether the user of the second communication terminal is moving, and at least one of a body temperature display area illustrating a time-series change in a body temperature of the user of the second communication terminal and information on a normal range of the body temperature, a pulse information display area illustrating a time-series change in a pulse of the user of the second communication terminal and information on a normal range of the pulse, or a blood pressure information display area illustrating a time-series change in a blood pressure of the user of the second communication terminal and information on a normal range of the blood pressure.

11. The information transmission system according to claim 4, wherein the information server varies, based on external

information, the normal range of the biometric information.

12. The information transmission system according to claim 5, wherein:

at least one of the first communication terminal or the information server determines, a based on the information on whether the biometric information on the user of the second communication terminal includes the information out of the normal range, a detail level of the position information on the second communication terminal displayed on the first screen,

when the biometric information on the user of the second communication terminal includes the information out of the normal range, the position information on the second communication terminal is displayed on the first screen at a fine position information level, and

when the biometric information on the user of the second communication terminal does not include the information out of the normal range, the position information on the second communication terminal is displayed on the first screen at the fine position information level or at a position information level coarser than the fine position information level.

13. A method of transmitting and receiving information between a first communication terminal and a second communication terminal via an information server configured

to communicate with the first communication terminal and the second communication terminal, wherein:

the second communication terminal includes a biometric information acquisition unit configured to acquire biometric information on a user of the second communication terminal, and

the information server records a biometric information database including the biometric information on the user of the second communication terminal, wherein the biometric information is transmitted from the second communication terminal, and information on a normal range of the biometric information,

the method comprising:

a first message transmission step of transmitting, by the information server, a first message including predetermined information to the second communication terminal;

a second message transmission step of transmitting, by the information server, a second message including the predetermined information to the second communication terminal when there is no response from the second communication terminal to the information server until a first standby time elapses after transmission of the first message;

a notification step of notifying, by the information

server, the first communication terminal of information on presence or absence of the response from the second communication terminal to the information server and/or at least one of the biometric information on the user of the second communication terminal or information on whether the biometric information includes information out of the normal range,

a third message transmission step of transmitting, by the information server, a third message including the predetermined information to the second communication terminal when there is no response from the second communication terminal to the information server until a second standby time elapses after transmission of the second message;

a first notification step of notifying, as one of the notification steps performed by the information server, the first communication terminal of at least one of the biometric information on the user of the second communication terminal or the information on whether the biometric information includes the information out of the normal range when there is no response from the second communication terminal to the information server and the biometric information includes the information out of the normal range until the first standby time elapses after the transmission of the first message;

a second notification step of notifying, as one of the notification steps performed by the information server, the first communication terminal of at least one of the biometric information on the user of the second communication terminal or the information on whether the biometric information includes the information out of the normal range when there is no response from the second communication terminal to the information server and the biometric information includes the biometric information out of the normal range until the second standby time elapses after the transmission of the second message; and

a third notification step of notifying, as one of the notification steps performed by the information server, the first communication terminal of information on presence or absence of the response from the second communication terminal to the information server for at least one of the first message, the second message, or the third message when there is no response from the second communication terminal to the information server until a third standby time elapses after transmission of the third message,

wherein:

the second communication terminal displays a screen including the first message,

when the second message is transmitted to the second communication terminal, the screen including the first

message in the second communication terminal includes the second message,

when there is the response from the second communication terminal to the information server, the screen including at least the first message in the second communication terminal includes a message related to the response from the second communication terminal to the information server,

the biometric information on the user of the second communication terminal is acquired by the biometric information acquisition unit and is transmitted from the second communication terminal to the information server,

the information on whether the biometric information includes the information out of the normal range is generated by the information server based on the biometric information database,

the notification of the information on the presence or absence of the response from the second communication terminal to the information server is any one of a reply of at least one of the first message or the second message transmitted from the second communication terminal to the first communication terminal via the information server, transmission of information to the first communication terminal via the information server, the information indicating that the second communication terminal is able

to display the first message transmitted from the first communication terminal, and transmission of information to the first communication terminal via the information server, the information indicating that a predetermined operation has been performed in the second communication terminal,

the second message includes information indicating that automatic retransmission is performed by any one of the first communication terminal and the information server and includes the predetermined information,

the third message includes information indicating that automatic re-retransmission is performed by any one of the first communication terminal and the information server and includes the predetermined information,

when the third message is transmitted to the second communication terminal, a screen including the first message and the second message in the second communication terminal includes the third message,

the first communication terminal displays a screen including the first message,

when the second message is transmitted to the second communication terminal, the screen including the first message in the first communication terminal includes the second message,

when there is the response from the second communication terminal to the information server, the

screen including at least the first message in the first communication terminal includes the message related to the response from the second communication terminal to the information server,

the biometric information acquisition unit includes a detection unit configured to detect position information and acceleration of the second communication terminal,

the position information and the acceleration obtained by the detection unit are transmitted as the biometric information from the second communication terminal to the information server,

when a time zone in which a moving speed of the second communication terminal, the moving speed being calculated based on the position information and the acceleration obtained by the detection unit, is equal to or higher than a speed threshold value is included until the first standby time elapses, the notification step is not performed by the information server even if there is no response from the second communication terminal to the information server until the first standby time elapses after the transmission of the first message, and

the notification of the information on the presence or absence of the response from the second communication terminal to the information server is any one of a reply of at least one of the first message, the second message, or

the third message transmitted from the second communication terminal to the first communication terminal via the information server, transmission of information to the first communication terminal via the information server, the information indicating that the second communication terminal is able to display the first message transmitted from the first communication terminal, and transmission of information to the first communication terminal via the information server, the information indicating that a predetermined operation has been performed in the second communication terminal.