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CAPTURING USER REACTION

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CAPTURING USER REACTION

ABSTRACT

A reaction recording system records a recipient's reaction to a message that is presented to the recipient. The system receives a message from a sender for display to a recipient. On receiving user input from the recipient to present the message, the system presents the message to the recipient and records the recipient's reaction to the message. In certain cases, the system transmits media recording the recipient's reaction to the sender of the message.

PROBLEM STATEMENT

When people communicate over a digital medium, messages are sent via fire and forget. The sender of a message rarely comes to know that a recipient has read the message or even opened the message. Some messaging applications add a cost to receiving the message, wherein a message is only viewable for a defined time period and the sender is informed when the recipient has viewed the message. However, with certain traditional implementations of these messaging applications, it is not possible to gauge the recipient's reaction to the message. A method and system that records a reaction of a recipient while a message is presented to the recipient, is described.

REACTION RECORDING SYSTEM

The system and techniques described in this disclosure relate to a reaction recording system that records a recipient's reaction while a message is being presented to the recipient. The reaction recording system can be implemented for use in an Internet, an intranet, or other client

and server environment. The reaction recording system can include and implement computer-executable program instructions implemented locally on a client device or implemented across a client device and server environment. The client device can be any electronic device such as a mobile device, a smartphone, a tablet, a handheld electronic device, a wearable device, etc. In certain embodiments, the reaction recording system may be integrated into a messaging application (e.g., an email application). In certain other embodiments, the reaction recording system may be provided separately from a messaging application but may communicate and operate in conjunction with the messaging application.

Fig. 1 illustrates an example computer-executable method 100 for recording a reaction of a recipient while a message is presented to the recipient. Method 100 can be performed by the reaction recording system disclosed herein.

As shown in Fig. 1, the system receives a message from a sender (block 110). In certain examples, the message maybe a text message or a multimedia message having digital content, e.g., image, audio, or video. In certain cases, the message may also include advertisements targeted to the recipients of the message. On receiving the message, the system provides a notification to the recipient on the recipient's electronic device. The notification can include an audible alert, e.g., a ringtone, a physical alert, e.g., vibration, or a visual notification on the recipient's electronic device.

On receiving the notification, the recipient may decide to read the message by opening the message on the recipient's electronic device. The recipient may, for example, provide user input to trigger opening of the message. The recipient may provide the user input on the recipient's electronic device through, for example, a keypad, mouse, touch interface, on any

other suitable input interface. The recipient's user input may include, for example, a touch, tap or swipe gesture on a touchscreen display of the electronic device, a right click of a mouse, a press on the "enter" key on a keyboard, and the like. The system receives the recipient's input to present the message on the electronic device (block 120).

The system then presents the message to the recipient in a suitable format (block 130). For example, the message may be presented on a display and/or using an audio player of the recipient's electronic device. The system may present the message for a predetermined time period or until the recipient provides user input to trigger closing of the message. The predetermined time period may be determined automatically by the system or may be input by the recipient into the system during configuration of the system. The predetermined time period can be stored in a memory of the recipient's electronic device, in a cloud, or in an account associated with the recipient, etc.

When the recipient chooses to read the message, the system may present to the recipient an alert message that the recipient's reaction will be recorded as the recipient reads the message. In certain cases, the system may obtain the recipient's authorization on whether the recipient wishes to have his reaction recorded while the message is presented. Upon receiving the recipient's authorization, the system records the recipient's reaction to the message (block 140). The system may record the recipient's reaction by, for example, trigger activation of a camera and/or an audio recorder of the recipient's electronic device on which the message is presented. The recipient's reaction may be recorded in any suitable format including, but not limited to, one or more images of the recipient's face and/or body (captured using the camera), a video of the recipient's face and/or body (captured using the camera), audio of the recipient's utterances

(captured using the microphone of the recipient's electronic device), combinations of the above, and the like. As a result, one or more of the following types of reactions of the recipient may be recorded: facial expressions indicating whether the recipient is happy, sad, excited, shy, nervous, etc., body language, movements, utterances, and the like.

In one example, the recipient's reaction may be recorded during the entire time that the message is presented (i.e., from opening of the message to closing of the message). In another example, the recipient's reaction may be recorded for a predetermined duration while the message is being viewed by the recipient (e.g., for the first minute or so). In another example, the system may begin recording the recipient's reaction prior to opening of the message (e.g., upon receiving the message but prior to opening of the message), and/or may end recording the message after the message has been closed (e.g., a predetermined time period after the message has been closed).

In certain cases, the system may determine that the recipient's face is visible in a camera of the electronic device before recording the recipient's reaction. Additionally, or alternatively, the system can alert the recipient to move his face within the field of view of the camera.

After recording the recipient's reaction, the system transmits media recording the recipient's reaction to the sender (block 150). In certain cases, the system may obtain the recipient's authorization prior to transmitting the media to the sender of the message. The system can transmit the audio, pictures and/or video of the recipient's reaction in, for example, a multimedia message, electronic mail, or direct upload to the sender's electronic device. Additionally or alternatively, before transmitting the recipient's reaction to the sender, the system can first play the media for the recipient. In some cases, the recipient may be prompted to

select a photo from the multiple photos captured by the camera while the recipient was viewing the message to be shared with the sender. By recording the recipient's reaction, the system enhances social interactions by enabling the sender to measure the response of the recipient towards the message.

Fig. 2 shows an example use of a reaction recording system. As shown in block 210 of Fig. 2(a), the sender sends a message to a receiver. In certain examples, the message can be a text message, multimedia message, advertisement, etc. At block 220, the receiver receives a notification of the incoming message at an electronic device. When the receiver decides to view the message, the system receives a request or user input from the receiver to present the message. Before presenting the message, the system determines that the receiver's face is visible in a camera 260 of the electronic device. The system then presents the message on a display of the electronic device. The system records the receiver's reaction while viewing the message as shown in block 230 of Fig. 2(b). For example, the system can capture a photo or video of the recipient while he/she reads the message. As shown in block 240, the system transmits the media indicating the receiver's reaction to the sender. The receiver's reaction is then presented to the sender as shown in block 250 of Fig. 2(c).

The subject matter described in this disclosure can be implemented in software and/or hardware (for example, computers, circuits, or processors). The subject matter can be implemented on a single device or across multiple devices (for example, a client device and a server device). Devices implementing the subject matter can be connected through a wired and/or wireless network. Such devices can receive input from one or more recipients (for example, from a mouse, keyboard, or touchscreen) and produce an output to one or more users

(for example, through a display). Specific examples disclosed are provided for illustrative purposes and do not limit the scope of the disclosure.

DRAWINGS

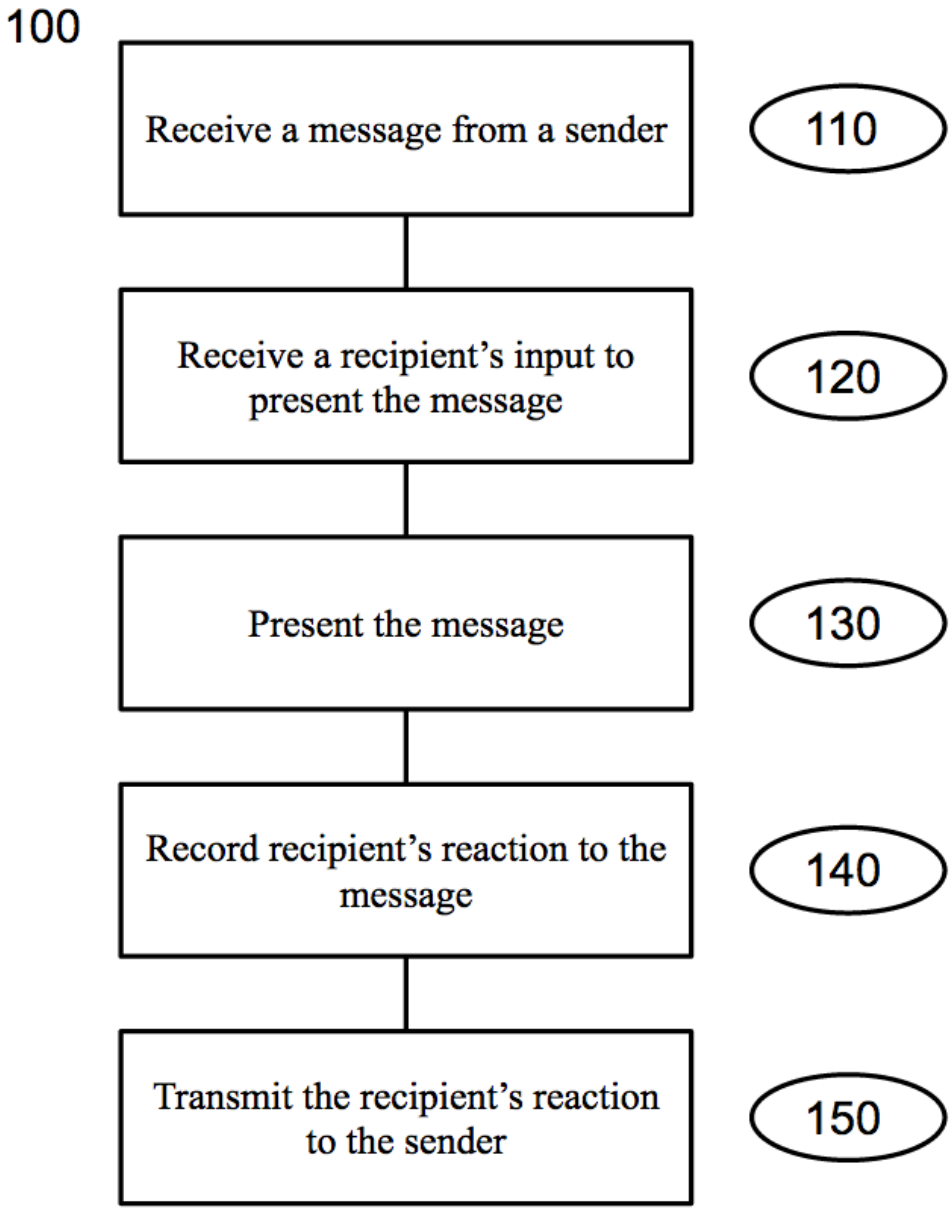

Fig. 1

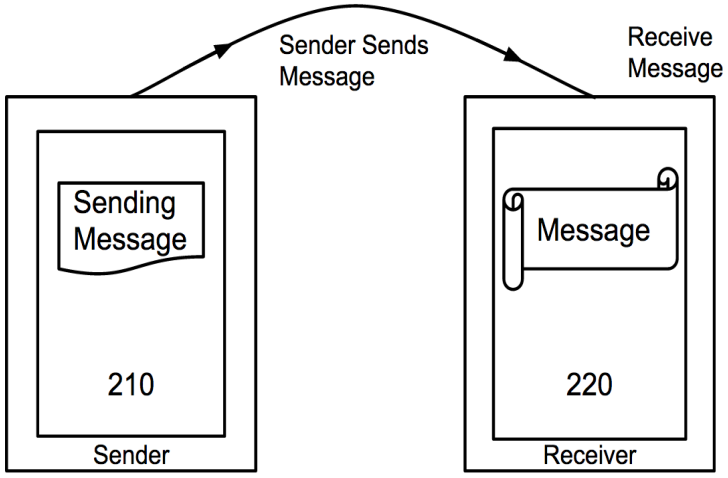

Fig. 2(a)

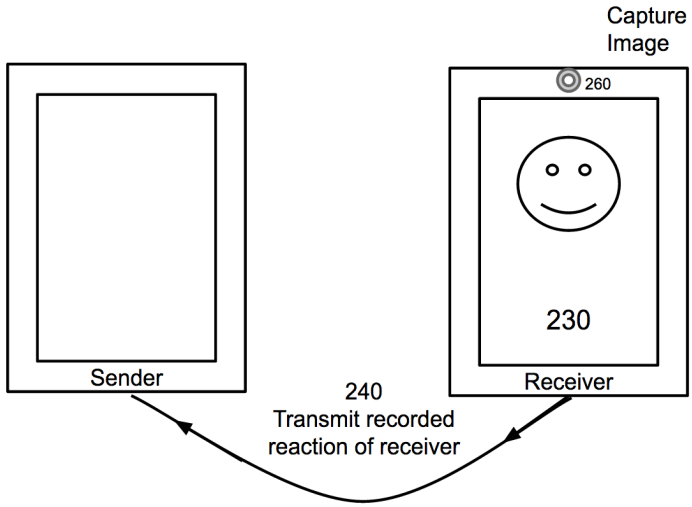

Fig. 2(b)

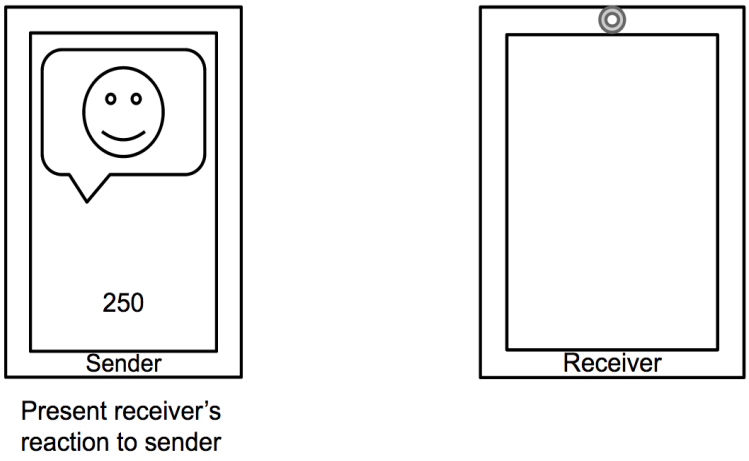

Fig. 2(c)