METHOD FOR PUSHING PICTURE, MOBILE TERMINAL, AND STORAGE MEDIUM

TECHNICAL FIELD

[0001] The present disclosure relates to the field of terminals, and particularly to a method for pushing a picture, a mobile terminal, and a storage medium.

BACKGROUND

[0002] At present, with the development of science technology, the material life of people is brought to be greatly enriched, and smart terminals also become popular.
[0003] People can work, entertain, and play games through a smart terminal. Specifically, a server may push pictures to a terminal aperiodically; however, the pushed pictures are not likely to be applied as wallpapers of the terminal by a user since the server does not know a state of the user. Additionally, it is hard for the user to choose a favorite picture from the pushed pictures and generally, the user will open a webpage to choose a picture that fits his or her style, the whole process of choosing the picture on the webpage may take a lot of time, which is inconvenient to the user.

SUMMARY

[0004] Embodiments of the present disclosure disclose a method for pushing a picture, a mobile terminal, and a storage medium, which can push a target picture which matches with an emotion type of a user, so as to push a favorite picture of the user more likely, and then, the time for the user choosing the picture is reduced.
[0005] A first aspect of an embodiment of the present disclosure discloses a method for pushing a picture, which includes the follows.
[0006] An image containing a facial expression of a user is acquired, when a screen is lit; the image is analyzed to determine an emotion type of the user; and a target picture is pushed according to the emotion type of the user on a display screen to the user.
[0007] A second aspect of the present disclosure discloses a mobile terminal, which includes a memory configured to store program codes and at least one processor coupled with the memory, wherein the program codes, when executed by the at least one processor, is operable with the at least one processor to perform: an acquiring unit, an analyzing unit, a determining unit, an obtaining unit, and a pushing unit. The acquiring unit is configured to acquire an image containing a facial expression of a user, when a screen is lit. The analyzing unit is configured to analyze the image to determine an emotion type of the user. The determining unit is configured to determine a type of a picture to be pushed according to the emotion type of the user. The obtaining unit is configured to obtain a target picture that matches with the type of the picture to be pushed from a picture gallery. The pushing unit is configured to push the target picture to the user on a display screen to the user.

[0008] A third aspect of the present disclosure discloses a mobile terminal, which includes a camera and a general-purpose processor. The camera is configured to acquire an image containing a facial expression of a user, when a screen is lit. The general-purpose processor is configured to: analyze the image to determine an emotion type of the user; determine a type of a picture to be pushed according to the emotion type of the user; obtain a target picture that matches with the type of the picture to be pushed from a picture gallery; and push the target picture to the user on a display screen to the user.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] To describe the technical solutions in the embodiments of the present disclosure more clearly, the following briefly introduces the accompanying drawings required for describing the embodiments. Apparently, the accompanying drawings in the following description show some embodiments of the present disclosure. Those of ordinary skill in the art may also obtain other drawings based on these accompanying drawings without creative efforts.
[0010] FIG.1A is a schematic flowchart illustrating a method for pushing a picture according to an embodiment of the present disclosure.
[0011] FIG.1B is a schematic flowchart illustrating a method for pushing a picture according to an embodiment of the present disclosure.
[0012] FIG.2 is a schematic flowchart illustrating another method for pushing a picture according to an embodiment of the present disclosure.
[0013] FIG.3 is a schematic flowchart illustrating another method for pushing a picture according to an embodiment of the present disclosure.
[0014] FIG.4 is a schematic block diagram illustrating a mobile terminal according to an embodiment of the present disclosure.
[0015] FIG.5 is a schematic block diagram illustrating another mobile terminal according to an embodiment of the present disclosure.
[0016] FIG.6 is a schematic block diagram illustrating another mobile terminal according to an embodiment of the present disclosure.
[0017] FIG.7 is a schematic physical structure diagram illustrating a mobile terminal according to an embodiment of the present disclosure.
[0018] FIG.8 is a schematic physical structure diagram illustrating another mobile terminal according to an embodiment of the present disclosure.

DETAILED DESCRIPTION OF ILLUSTRATED EMBODIMENTS

[0019] Technical solutions in the embodiments of the present disclosure will be described clearly and completely hereinafter with reference to the accompanying drawings in the embodiments of the present disclosure. Apparently, the described embodiments are merely some rather than all embodiments of the present disclosure. All other embodiments obtained by those of ordinary skill in the art based on the embodiments of the present disclosure without creative efforts shall fall within the protection scope of the present disclosure.
[0019a] The term “comprising” or “including” is being used in a non-exclusive manner.

[0019b] Any discussion about prior art is not an admission that the prior art is part of the common general knowledge in the field of the invention.

[0020] There is provided a method for pushing a picture, a mobile terminal, and a storage medium according to embodiments of the present disclosure, which can push a

WHAT IS CLAIMED IS:

1. A method for pushing a picture, comprising:

acquiring an image containing a facial expression of a user, when a screen is lit;

analyzing the image to determine an emotion type of the user; and

pushing a target picture according to the emotion type of the user on a display screen to the user.

2. The method of claim 1, wherein the pushing a target picture according to the emotion type of the user comprises:

determining a type of a picture to be pushed according to the emotion type of the user;

obtaining the target picture that matches with the type of the picture to be pushed from a picture gallery; and

pushing the target picture to the user.

3. The method of claim 1 or 2, wherein the analyzing the image to determine an emotion type of the user comprises:

comparing the image with a template to determine a location of eyes and a location of mouth; and

analyzing a shape of the eyes and a shape of the mouth to determine the emotion type of the user.

4. The method of claim 1 or 2, wherein the analyzing the image to determine an emotion type of the user comprises:

comparing the image with a template to determine locations of multiple facial features;

analyzing shapes of the facial features to determine multiple candidate emotion types; and

determining an emotion type with the highest proportion of analysis results among the candidate emotion types as the emotion type of the user, the analysis results being acquired by analyzing the shapes of the facial features to determine the multiple candidate emotion types.

5. The method of claim 1 or 2, wherein the analyzing the image to determine an emotion type of the user comprises:

comparing the image with a user emotion model to determine a target emotion picture from the user emotion model that matches with the image; and

determining the emotion type of the user according to the target emotion picture.

6. The method of claim 5, wherein the method further comprises the following before the comparing the image with a user emotion model to determine a target emotion picture from the user emotion model that matches with the image:

acquiring a preset number of expression images of the user; and

learning the expression images according to a preset machine learning scheme to obtain the user emotion model.

7. The method of claim 5 or 6, wherein the method further comprises the following after pushing the target picture to the user:

recording a choosing result of the user; and

updating the user emotion model according to the choosing result of the user.

8. A mobile terminal, comprising:

a memory configured to store program codes;

at least one processor coupled with the memory;

the program codes, when executed by the at least one processor, being operable with the at least one processor to perform the method of any of claim 1 to claim 7.

9. A mobile terminal, comprising:

a camera, configured to acquire an image containing a facial expression of a user, when a screen is lit; and

a general-purpose processor, configured to: analyze the image to determine an emotion type of the user; determine a type of a picture to be pushed according to the emotion type of the user; obtain a target picture that matches with the type of the picture to be pushed from a picture gallery; and push the target picture to the user on a display screen to the user.

10. The mobile terminal of claim 9, wherein the general-purpose processor configured to analyze the image to determine an emotion type of the user is configured to:

compare the image with a template to determine a location of eyes and a location of mouth; and

analyze a shape of the eyes and a shape of the mouth to determine the emotion type of the user.

11. The mobile terminal of claim 9, wherein the general-purpose processor configured to analyze the image to determine an emotion type of the user is configured to:

compare the image with a user emotion model to determine a target emotion picture from the user emotion model that matches with the image; and

determine the emotion type of the user according to the target emotion picture.

12. The mobile terminal of claim 11, wherein the general-purpose processor is further configured to:

acquire a preset number of expression images of the user; and

learn the expression images according to a preset machine learning scheme to obtain the user emotion model.

13. The mobile terminal of claim 12, wherein the general-purpose processor comprises an application processor and an artificial intelligence (AI) unit, the AI unit is integrated with the application processor, and the AI unit is configured to:

acquire a preset number of expression images of the user; and

learn the expression images according to a preset machine learning scheme to obtain the user emotion model.

14. The mobile terminal of claim 12, wherein the general-purpose processor comprises an application processor and an artificial intelligence (AI) unit, the AI unit is separated from the application processor, and the AI unit is configured to:

acquire a preset number of expression images of the user; and

learn the expression images according to a preset machine learning scheme to obtain the user emotion model.

15. The mobile terminal of claim 13 or 14, wherein the AI unit is further configured to:

compare the image with the user emotion model to determine the target emotion picture from the user emotion model that matches with the image; and

determine the emotion type of the user according to the target emotion picture.

16. Software that when executed by a computer, the computer is able to perform the method of any of claims 1 to 7.