a face of a user based on first image data obtained by capturing an image of the user wearing the glasses, second image data obtained by capturing an image of the user without the glasses, the marker, and the color, wherein the glasses are lensless.

[0026]

The "glasses" herein may be lensless glasses (i.e., plain-glass spectacles).

The glasses have a predetermined color (a color pattern: a standard color for color determination) for determining the color of each position of the face of the user, and a marker for determining the relative position of the predetermined color in the glasses.

[0027]

In the first image data in which the user is wearing the glasses, the face, which is the target of the color determination, and the color pattern, which is the reference of the color determination, are very close to each other. Also, it can be regarded that the state of the ambient light in the first image data and the state of the ambient light in the second image data are almost the same. This is because the capture of the second image data can be performed continuously from the capture of the first image data after a slight movement of the user to take off the glasses.

[0028]

Therefore, even in a shooting environment where the user takes a selfie using a smartphone camera at home, the degree of exposure of the ambient light before and after removing the glasses is almost the same, and accurate color reading is possible by performing calibration with the color read from the part having a color pattern and reading face color information from the face part of the image. This makes it possible to easily and accurately obtain information of the face color of the user without requiring a specially-controlled lighting environment or special photographic equipment.

[0029]

The glasses may comprise a frame having the marker and the color.

[0030]

What is claimed is:

1. A recommended cosmetics presentation control system, comprising:

glasses: and

a computer system,

the glasses including a position determination marker at a predetermined position and a predetermined color at a predetermined position,

the computer system comprising:

an image acquisition section for acquiring first image data obtained by capturing an image of a user wearing the glasses, and second image data obtained by capturing an image of the user without the glasses;

a determination section for determining a color of each position of a face of the user based on the first image data and the second image data using the marker and the color; and

a presentation control section for controlling selection of cosmetics to be recommended to the user from a predetermined cosmetics database based on determination results of the determination section, and presentation of the cosmetics to the user.

2. The recommended cosmetics presentation control system as defined in claim 1, wherein the glasses comprise a frame having the marker and the color.

3. The recommended cosmetics presentation control system as defined in claim 2, wherein the first image data is obtained by capturing an image of the user wearing the glasses at a different face orientation, and

the determination section carries out a first shininess correction process with respect to a captured image part of the frame based on an image of the user with a different

face orientation included in the first image data, and determines a color of each position of the face of the user using a color difference between a color of the captured image part of the frame after the first shininess correction process and the color of the frame.

4. The recommended cosmetics presentation control system as defined in claim 2 or 3, wherein the second image data is obtained by capturing an image of the user without the glasses at a different face orientation, and the determination section carries out a second shininess correction process with respect to each captured image part of the face of the user based on an image of the user with a different face orientation included in the second image data.

5. The recommended cosmetics presentation control system as defined in any one of claims 1 to 4, wherein:

the determination section determines a color of hair of the user, and

the presentation control section controls selection of cosmetics based on the color of the hair determined by the determination section and presentation of the cosmetics.

6. The recommended cosmetics presentation control system as defined in any one of claims 1 to 5, wherein the presentation control section performs a control for selecting a model that satisfies a predetermined matching condition for the determination result of the determination section from a model database, and presenting the cosmetics associated with the model, the model database storing information of cosmetics applied to the model associated with each model.

7. The recommended cosmetics presentation control system as defined in claim 6, wherein:

the model database stores before-makeup model data associating with the model, the before-makeup model data being data of results of the acquisition of image data of the model by the image acquisition section and the determination by the determination section performed with respect to the model before wearing makeup, and

the presentation control section performs a control for selecting a model that satisfies the matching condition for the determination result of the determination section for the user based on the before-makeup model data, and presenting cosmetics associated with the model.

8. The recommended cosmetics presentation control system as defined in claim 6 or 7, wherein:

the determination section includes a facial feature amount determination section for determining a facial feature amount regarding a size, a shape, and a position of the face or face parts of the user based on the position of the marker in the captured image,

the model database stores data of the facial feature amount of the model while associating the data with the model, and

the presentation control section performs a control for selecting a model having data of the facial feature amount satisfying the matching condition for the determination result of the facial feature amount determination section, and presenting cosmetics associated with the model.

9. Glasses comprising:

a position determination marker provided at a predetermined position; and

a color with a predetermined color provided at a predetermined position,

the glasses allowing a computer system to determine a color of each position of a face of a user based on first image data obtained by capturing an image of the user

wearing the glasses, second image data obtained by capturing an image of the user without the glasses, the marker, and the color, wherein the glasses are lensless.

10. The glasses as defined in claim 9, wherein the glasses comprise a frame having the marker and the color.

11. A recommended cosmetics presentation control method executed by a computer system, the method comprising the steps of:

acquiring first image data obtained by capturing an image of the user wearing glasses having a position determination marker at a predetermined position and a predetermined color at a predetermined position, and second image data obtained by capturing an image of the user without the glasses;

determining a color of each position of a face of the user based on the first image data and the second image data using the marker and the color; and

controlling selection of cosmetics to be recommended to the user from a predetermined cosmetics database based on determination results of the determination step, and presentation of the cosmetics to the user.