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CAPTURE MODES, FILTERS AND FRAMES FOR VISUAL CONTENT

ABSTRACT

A system, method, and computer readable media are disclosed for performing swipe operations to edit visual content. The device application may include a smart feature to provide a plurality of subtle filters and/or frames for easy post-capture use with a swipe. The swipe filters and/or frames may be customized based on geographic location or nationality. Subtle filters with skin smoothing or improved lighting effects and boost filters may be used. Frames may be based on a location or city, or time - a day of week or time of day or relevant holiday frame may be used. The filters enhance the image quality and the frames provide visual context to the photo. The swiping options provide the user a compelling reason to use the device application and share daily moments on social networks.

BACKGROUND

Social media allow users to create, send, receive, and share various types of information including user generated content such as texts, images, video clips, audio clips, and other types of digital media. Because of their collaborative nature and growing accessibility, social media platforms such as social networks have become a popular means by which many people share photos and other media content. Social networking platforms are constantly evolving to provide users with increasingly sophisticated functionality.

Improvements in mobile phones with built-in cameras have enabled users to share images and video clips on social networks from any location. For instance, improved front-facing cameras in mobile phones allow users to capture high quality and vivid images, also known as “selfies”. Mobile device applications (or apps) now provide a variety of in-application features which work by interfacing with the device camera. Such device applications may allow taking and sharing images including selfies. It is estimated that half of all captures of images and video clips recorded from popular social networking apps use the

front-facing camera. The social networking app may enable users to regularly upload short user-generated images and/or video clips in the form of “stories”. It is estimated that about sixty percent of the images related to stories contain people in them and furthermore about thirty percent of the images related to stories are selfies. There is a need for an integrated tool to easily capture, create, and share images through mobile device applications.

Features that make the most impact and are actively used by users to share their images or videos are greatly desired. For instance, color filters are widely used to make images more appealing and interesting. Similarly, frames may be added to contents of a story, allowing users to provide context. Existing applications do not offer well-crafted filters and frames as a convenient feature for regular usage.

DESCRIPTION

A system, method, and computer readable media are disclosed to facilitate capturing and sharing images and for performing swipe operations to edit visual content. The method includes running a device application 121 configured to display an interface for accessing built-in camera functionalities 122 and/or accessing a swipe feature 123 including swipe filters and frames for editing captured images, as illustrated in FIG. 1A. The device may be a smart phone including a first camera location on a first side of the device and a second camera located on the second side of the device. One or more sensors may be included to detect motion, contact/touch and orientation of the device. The built-in camera functionalities include instructions for coordinating capture, display, editing, sharing and archiving images. The capture modes, such as a selfie mode, may be integrated with image tools for editing the captured images.

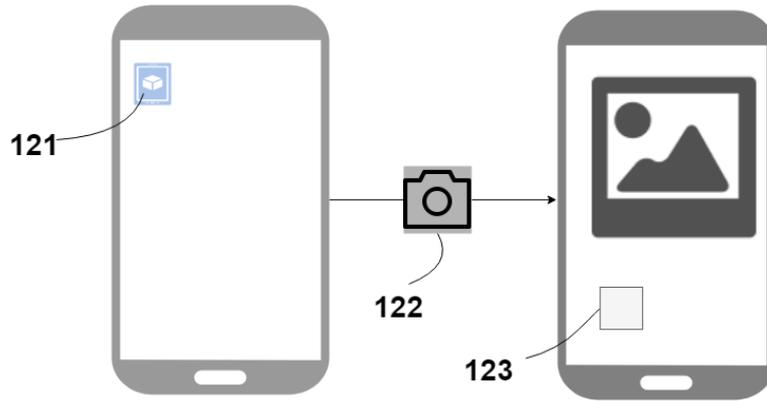


FIG. 1A: User interface for capture modes and smart filter/frame

The user interface of the built-in camera feature in the application is illustrated in FIG. 1B. The application 121 provides a clean, simple, easy to use capture mode to enable users to share images or videos of themselves. As shown, the application 121 provides an image capturing mode, such as a selfie mode, integrated with image tools. The selfie mode may be consistently presented to the user on opening the built-in camera in the application associated with the social networking platform. The selfie mode enables the users to easily create and capture high quality selfies.

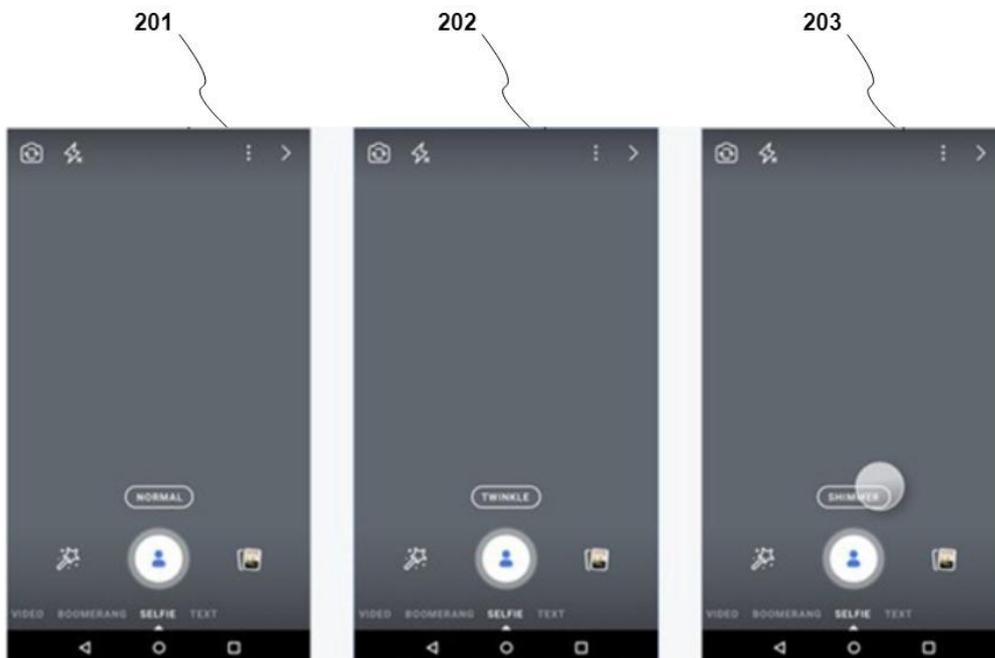


FIG. 1B: A user interface for selfie-mode with different style effects

The image capture tools integrated with the selfie mode may include a post-capture transformation and/or other tools to customize the photographs such as filters, masks, frames and effects modules. The transformation and/or other tools may allow the user to enhance or transform the photograph and/or specifically faces presented in the photograph. For example, popular mask elements including sunglasses, noir, lighting, crown, lipstick, etc., may be available for user selection in the selfie mode. The selfie mode further includes a plurality of portrait style effects, such as normal style effect 201, twinkle style effect 202, and shimmer style effect 203 as illustrated in FIG. 1B, for example. In some aspects, various enhancement elements such as, portrait bokeh, lighting backgrounds, warming, skin smoothing, lens distortion correction, sparkle with skin smoothing and color filters, makeup, lipsticks, and the like may be available for user selection. The tools and effects from the image capture tools may be selected before capturing the image or after capturing the image.

The device application may provide a plurality of subtle filters and/or frames for easy post-capture use with a swipe. The plurality of filters and/or frames may be a smart filter and/or smart frame customized for the user and presented in a consistent order that allows users to access auto-generated or their preferred options easily based on the attributes of the device. For example, such attributes may include geolocation collected from GPS, objects depicted in the photograph, physical environment, etc. to augment the photo based on the image setting or may be based on prior use patterns. Alternatively, the filters may be filters available in the public domain or proprietary filters available at a cost or through an auction mechanism.

The filters and/or frames may be customized based on geographic location or nationality. For instance, certain color filters may be suggested to users by the smart feature if those color filters are favored by users at similar locations. Similarly, certain frames, such as location frames with concepts of “sunset” or “sunrise” may be suggested to users by the

smart feature where such frames are popular. “Sunday Funday” frames may be suggested to users on Sundays. The displayed filter or frame options may be limited to one or two for easy and quick sharing of the captured image based on minimal swipe motions from the original picture. The swiping operation may be performed in any suitable preset direction, such as horizontally and/or vertically. Overlays such as time and/or date overlays may also be provided in the application. On selection of a filter (s) and/or frame (s), the application may allow the enhanced photo to be saved.

An exemplary user interface for filter selection performed on a captured image using two swipes is illustrated in FIG. 1C. The filters may include subtle filters. Subtle filters enhance image quality and/or user experience as compared to unfiltered media or other effects such as heavy filters, masks and frames. If a face is detected in a captured image, the subtle filters may further include skin smoothing or improved lighting. Further, the subtle filters may include a boost filter that adds pop with a bit of contrast, brightness or saturation without much color shift. The swipe filters may offer a more opinionated visual mood, such as sparkles or effects related to a camcorder or a rainbow mood filter. Various filters that are generally used for videos may also be included for photos.

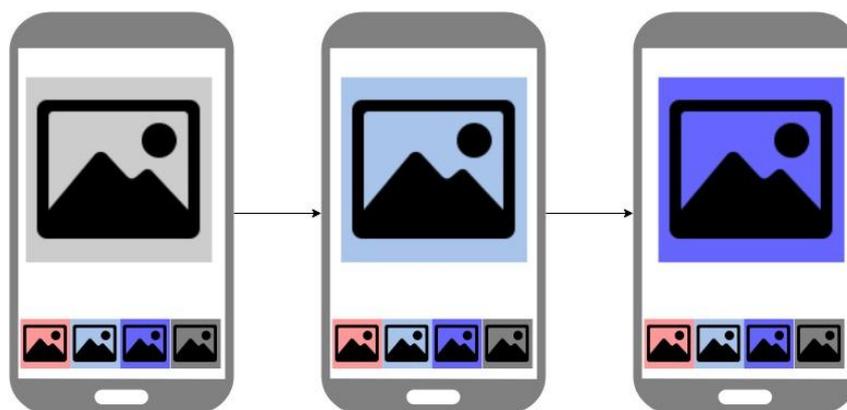


FIG. 1C: Swipe selection of filters

An exemplary user interface for frame selection performed on a captured image using two swipes is illustrated in FIG. 1D. The application may provide swipe frames to quickly

add visual context to their content with a couple of swipes before sharing. The swipe frames may include a location or city frame, and a day of week or time of day or relevant holiday frame.

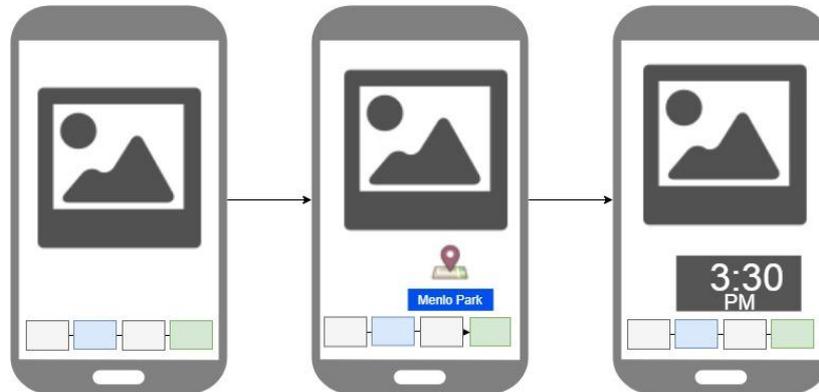


FIG. 1D: Swipe selection of frames

The system, as illustrated in FIG. 2, may include one or more user devices 120, a social networking system 100, and one or more external systems 110 configured to communicate through a network 130. The social networking system 100 may be a platform for such external systems 102 to provide services and functionalities to users accessing the system 100 using the network 130. The social networking system 100 and external system 110 may be either separate or be operated in conjunction to provide social networking services to users of the social networking system. The one or more user devices 120 may interact with the social networking system 100 through an application programming interface (API) provided by the operating system of the user device. Alternatively, the user device 120 may run through a browser application for interacting with the social networking system 100. The one or more user devices 120 may include a mobile device incorporating a built-in camera unit. The one or more user devices 120 may be connected to the system 100 through the device application 121.

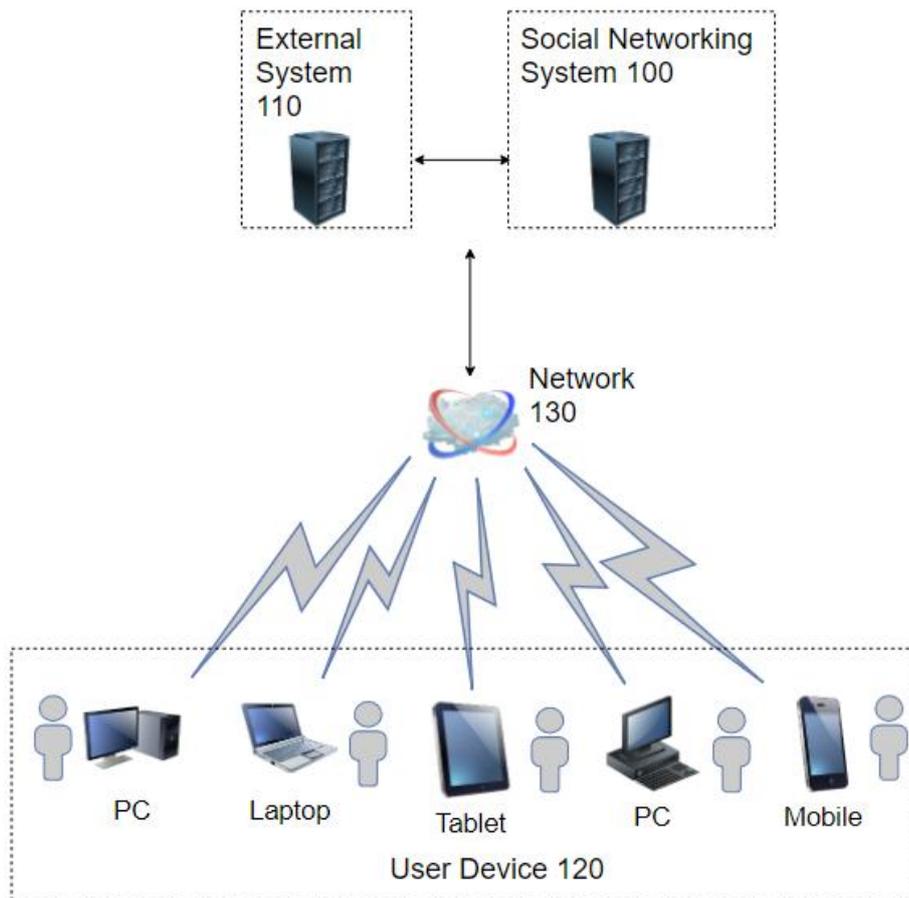


FIG. 2: A system for performing swipe operations to edit visual content

The disclosed system, method and computer readable media provides an enhanced user experience for social network users and adds value to the social networking community. The image capture tools allow users to easily and directly access the selfie-mode without having to switch operation of rear camera to front camera. Further, the selfie mode along with the various tools allows users to capture and create better selfies. Selfie mode and expressive selfie tools provide users more or better ways to capture, create, and share themselves on the social network platforms. They significantly increase share-to-capture conversion rate and share-to-impression conversion rate. The simple swipe options provide users a compelling reason to use the device application to capture and share daily moments. The addition of swipe frames provides users a quick easy way to add more context to their story easily.