CuitePics

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**About the app:**

CuitePics is a powerful app to edit photos in order to make them more interesting, funny, meaningful or special. Photos can be uploaded from a user’s gallery or captured using default camera. Then users can add stickers or use multiple tools to edit the targeted photo.

To differentiate from other photo editing apps, CuitePics mainly focuses on adding stickers. A number of stickers are gathered, widely ranging from commonly used emojis to self-designed stickers. Moreover, seasonal qualified stickers are offered based on holidays and special events for limited time, which encourages people getting update CuitePics from app store. Other than stickers, CuitePics also supports various frames, photo blending, and multiple layout options.

CutiePics makes sense in a mobile device for several reasons. First, people normally use phones to take and save photos nowadays. CuitePics can assist users in photo editing with no restrictions on devices, locations and even network. Also, the main usage of edited pictures is within social media, and some of the social media are only working on mobile devices, for example, snapchat. In this case, the photo editor on mobile phone such as CuitePics can take advantages to achieve this functionality.

**Functional Properties:**

1. users can choose a photo/photos from gallery or use camera to capture a photo to edit
2. users can add stickers to an existing photo. Wide ranging themes of stickers are offered, including:
   1. emojis
   2. cute facial stickers, such as bunny ears, moustache, tie, etc.
   3. tags
   4. text box with self-defined input
   5. seasonal limited additional stickers
3. users can add a frame to a photo. Frames have multiple shapes with adjustable thickness and colors.
4. users can overlay two photos by adjusting exposures
5. users can use several layouts for collaging photos together, ranging from two to four photos

When the app starts, an interface with two buttons: gallery and camera with show up. User can upload a photo from gallery or to capture a picture using default camera. Then users will be asked for a permission to access gallery or camera depending on the user’s decision.

Once the user chooses a photo, the app goes to a tool page which contains four buttons: stickers, frame, layout, and blend. Each button has its name on it. The user will be directed to different activities when the corresponding button is pressed. In this page, the user can see all the functionalities of CutiePics and choose whether to proceed or not.

If the sticker button is pressed, the user is directed to the sticker page. The sticker page contains the chosen photo and a bottom navigation bar. The bar shows all categories of stickers. By clicking on a category, the bottom bar pops up and shows all stickers belonging to that category. The user can scroll hotizontally to choose a desired one. Once a sticker is chosen, it can be scaled, rotated and dragged around to match the photo. In this way, the user can feel how a sticker looks on the photo and adjust it immediately.

If the frame button is pressed, the user is directed to the frame page. The frame page contains the chosen photo and a bottom navigation bar. The bottom bar contain a frame icon, thickness icon and color icon. When the user presses the frame icon, the bottom bar pops up and shows available frames. The user can scroll horizontally to choose a desired one. If the user press the thickness icon, the bottom bar shows a slider used for adjusting the thickness of the the frame. Similar to adjusting thickness, the bottom bar shows three slides used for adjusting the color of the frame. These three sliders controls red, green, and blue.

If the blend button is pressed, the user is asked to choose another picture. Once the user is done choosing an image, he/she is directed to the blend page. The user can focus on an image and adjust exposure by dragging a slider at the button.

If the layout button is pressed, the user is directed to the layout page. The user first choose a layout at the bottom bar, then he/she chooses up to three more images to fit in the layout. The user can adjust each image’s size in the layout.

In each page, there is a save button at the top right corner. If the save button is pressed in any page, the user is directed to the save page, which contains an instruction saying that your photo is save to gallery, and the whole journey of editing a photo is done.

**Non-functional Properties:**

CutiePics supports usability, extensibility, testability and etc. Here, usability and extensibility will be explained in details.

Usability is one of the most essential non-functional properties of CutiePics. As an photo editing software, it should at least be usable. Thus, users are capable of beautifying their photos through the app. Also, different from most existing photo editors, CutiePics strongly focuses on adding stickers rather than offering a mass of beautifying and editing functionalities; therefore, CutiePics should provide intuitive interface so that it is easy to learn and user can choose what they want quickly. In addition, users’ responses are especially significant to CutiePics: 1. how satisfy they are with existing stickers? 2. what kind of stickers they expect in the future? Usability should be highly considered in this app to make it improvable and updatable to increase customers’ satisfaction.

Extensibility, therefore, should be aroused as an important non-functional properties as well. Extensible and updatable sticker library is required to meet users’ expectation. Since the design concept of CutiePics is to realize quick search and simple utility of stickers, the uploaded stickers should satisfy as many people as possible. Additionally, because of this monotonous functionality, we could be prepared to augment other functionalities. CutiePics needs to support extensibility so that developers can add more options for users to choose, independently from existing features.