

Name : Vyom Pathak

ID: 17CEUON038

Roll No. : CE099

Batch: D2

Photo Editor Management System

Users:

- Admin
- Client

INTRODUCTION:

This application is used for editing photos. User can upload the photo to the system and edit according to their needs. The software provides functionalities like image cropping, image RGB value modification, image styling, image flipping along the axis, image rotation. User can then save the edited image in his/her account on the server. Admin can remove user and can add new filters.

FUNCTIONAL REQUIREMENTS:

→ Admin

R1. Manage User:

DESCRIPTION: Admin can view all users, remove users according to his/her desire.

R1.1 Remove User:

INPUT: Admin selects the user.

OUTPUT: Selected user will be removed.

R1.2 View Users:

INPUT: Admin selects view option.

OUTPUT: User list will be shown

R2 Manage Filters:

DESCRIPTION: Admin can add and delete any filter he/she desires.

R2.1 Add Filter:

Input: Filter code .

Output: Confirmation Status Message will be shown.

R2.2 Remove Filter:

Input: Select Filter Code.

Output: Confirmation Status Message will be shown.

→ Client

R1. Manage Images:

Description: This functionality allows user to upload images on the editor using the local file manager. It also allows user to save the uploaded image in the server after all the processing has been completed. It also allows user to remove image from the editor. User can also download his/her images from his/her account.

R1.1 Upload Image:

INPUT: User selection from file manager for his/her desired image.

OUTPUT: Confirmation message.

PROCESS: The selected image will be validated i.e. checked if the image uploaded is of the correct format or not.

NEXT: The user will make his/her desired changes on the image.

EXCEPTION FLOW: If the selected image is not in correct format error will be thrown.

R1.2 Save Image:

INPUT: User selects the save option.

OUTPUT: Confirmation message.

PROCESS: The specified the new image will be validated.

EXCEPTION FLOW: If the image is not valid error will be thrown.

R1.3 Remove Image:

DESCRIPTION: User selected image will be removed.

INPUT: User selection.

OUTPUT: Confirmation message.

R1.4 Download Image:

DESCRIPTION: User selected image will be downloaded.

INPUT: User selection.

OUTPUT: Confirmation message.

EXCEPTION FLOW: If the file path is not valid error will be thrown.

R2. Manage Filters:

DESCRIPTION: This functionality will allow user to use various type of filter according to his/her desire. It includes: image cropping, brightness adjustment, apply different styles, image flipping, image rotation and image RGB value modification.

R2.1 Manage Crop Filter:

INPUT: User selects the area to be cropped.

OUTPUT: Image transformation will be shown.

R2.2 Manage Rotation Filter:

DESCRIPTION: User selects which type of rotation to perform and selects the value of rotation.

INPUT: User gives degree of rotation and type of rotation.

OUTPUT: Image transformation will be shown.

R2.3 Manage Flipping Filter:

DESCRIPTION: User will select which type of flip to perform horizontal or vertical.

INPUT: User selects type of flip.

OUTPUT: Image transformation will be shown.

R2.4 Manage Color Filter:

DESCRIPTION: User will select the appropriate color value for red, green and blue from range 0-255.

INPUT: User type of color and give the appropriate color level.

OUTPUT: Image transformation will be shown.

R2.5 Manage Brightness Filter:

INPUT: User selects appropriate level of brightness.

OUTPUT: Image transformation will be shown.

R2.6: Manage Style Filter:

DESCRIPTION: User can select from a range of different styles like greyscale, negative effect and Arctic effect.

INPUT: User selects appropriate styling for the image.

OUTPUT: Image transformation will be shown.

R3. Error Handling:

DESCRIPTION: If during any process error occurs appropriate error message will be displayed. For upload image, saving image, download image or applying filter error handling is done.

R3.1 Upload Error:

DESCRIPTION: If any type of error occurs during upload user will be prompted with a dialog-box.

INPUT: User selects an image from his/her local machine.

OUTPUT: Message will be prompted to the user.

R3.2 Saving Error:

DESCRIPTION: If any kind of error occurs during the saving stage of an image, error will be shown to the user.

INPUT: User selects the save option.

OUTPUT: Message will be prompted to the user.

R3.3 Downloading Error:

DESCRIPTION: If any kind of error occurs during the downloading stage of an image, error will be shown to the user.

INPUT: User selects the download option.

OUTPUT: Message will be prompted to the user.

R4. Manage User:

DESCRIPTION: User can create new account , login to existing account and remove his/her account.

R4.1 Sign-Up User:

DESCRIPTION: User enters his/her details and will be validated from the database .

INPUT: User details.

OUTPUT: Confirmation Message.

R4.2 Login User:

DESCRIPTION: User will enter his/her details and will be saved in the database.

INPUT: User details.

OUTPUT: Confirmation Message.

R4.3 Remove User:

DESCRIPTION: User can delete his/her account from the application using the remove option.

INPUT: User selects the remove option.

OUTPUT: Confirmation Message.