

# PHOTO EDITING - Development

CSE 611 – MS Project Development

Professor – Jinjun Xiong



# TEAM MEMBERS

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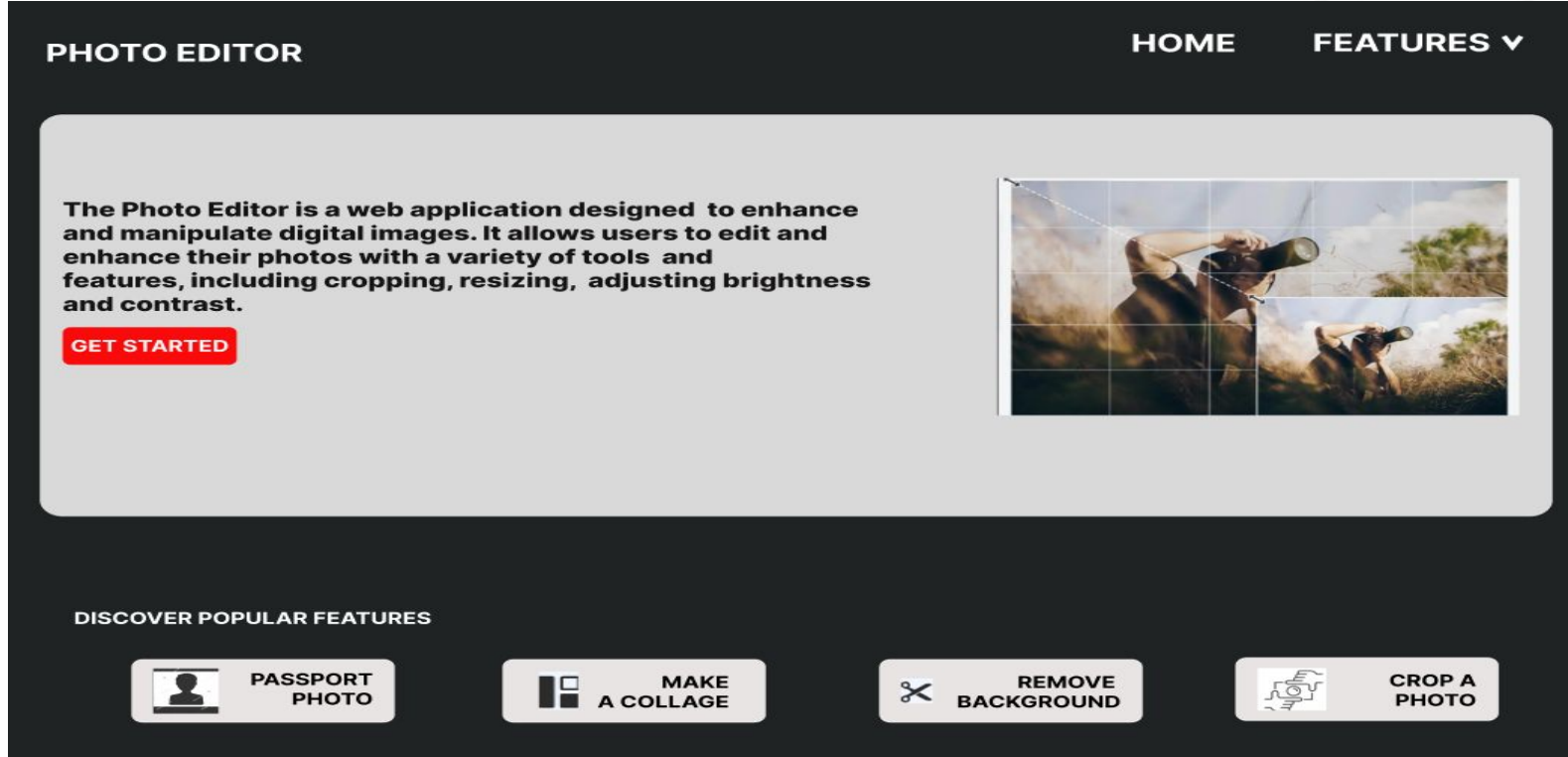
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# Wireframe Home Page



# Circle Crop

Choose Ratio

px

 x 

px

Apply

**Circle Crop** clips the image into circular shape keeping the

1. Input Image: Start by drag & drop or upload the image file.
2. Choose Ratio: Select the desired aspect ratio from the left panel.
3. Set Custom Ratio by entering values.
4. Preview and Download: Preview and download the cropped photo.

+

Drag or upload images

Preview

Download

# Image Compression

Choose Quality

Apply

Lower Percentage values gives better compression

**Image Compression:** Compress the image based on image quality selected

1. Input Image: Start by drag & drop or upload the image file.
2. Choose Quality: Lower values give better compression. (Cost of Image Quality)
3. Slide the quality selector to set quality as percentage
4. Preview and Download: Preview and download the compressed photo. Image size after compression is displayed.

Drag or upload images

Preview

Download

# Video Compression

## Source Selection

Open a video file

**Video Compression:** Compress the video.

1. Input Video: Start by drag & drop or upload the video file.
2. You will be able to see a preview of the video.
3. Start Compression



**Drag or upload video**

Format

MP4

Preview



Sart Conversion



Format MP4

## Preview



In progress



Format MP4



Download

## Background change - Before Fix

[HOME](#)[PASSPORT-PHOTO](#)[CROP](#)[COLLAGE](#)[NOISE-REMOVAL](#)[FORMAT-CONVERSION](#)[BACKGROUND-CHANGE](#)[BRIGHTNESS & CONTRAST](#)[RESIZE](#)[PDF](#)[MOSAIC](#)

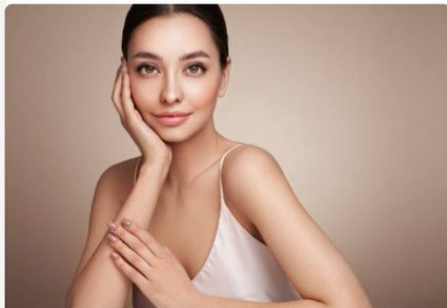
Choose  
BackgroundColor:



#F80606

HEX

Uploaded Image and Result



Click or drag Photo to this area to upload

Clear Photo

Preview Photo


Download Photo

## Background change - After Fix

SE-GII

HOME PASSPORT-PHOTO CROP COLLAGE NOISE-REMOVAL FORMAT-CONVERSION BACKGROUND-CHANGE BRIGHTNESS & CONTRAST RESIZE PDF MOSAIC


Choose BackgroundColor:



#FFFFFF

HEX

Uploaded Image and Result



Click or drag Photo to this area to upload

Clear Photo Preview Photo Download Photo

[HOME](#)[PASSPORT-PHOTO](#)[CROP](#)[COLLAGE](#)[NOISE-REMOVAL](#)[FORMAT-CONVERSION](#)[BACKGROUND-CHANGE](#)[BRIGHTNESS & CONTRAST](#)[RESIZE](#)[PDF](#)[MOSAIC](#)

Choose  
BackgroundColor:



#6AA6D4

HEX

Uploaded Image and Result



Click or drag Photo to this area to upload

[Clear Photo](#)[Preview Photo](#)[Download Photo](#)

# Wireframe Review & Direction

## Wireframe Overview

- Presents a skeletal visualization of our User Interface (UI).
- Previously shown wireframes showcase the layout for both the home page and feature pages of our Photo Editor.

## Main Page Highlights

### a. Feature Cards

- Multiple cards detailing each feature.
- Each card is accompanied by a concise explanation of its functionality.

### b. Navigation & Flow

- Clicking on any feature card leads to its respective feature page.
- Intuitive layout ensures easy user navigation.

# Wireframe Review & Direction

## Feature Page Layout

### a. Options Panel

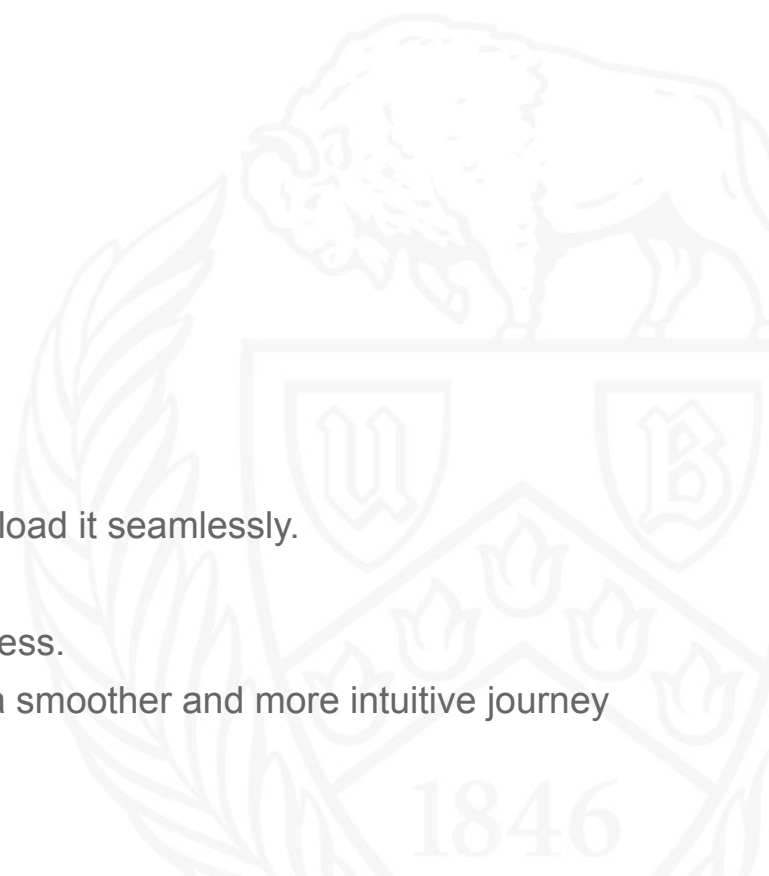
- Positioned to the left.
- Contains specific controls related to the chosen feature.

### b. Image Interaction

- Located to the right.
- Allows users to upload, preview the edited image, and download it seamlessly.

## Direction Forward

- Upholding the existing UI design due to its proven effectiveness.
- Prioritizing User Experience (UX) enhancements to ensure a smoother and more intuitive journey for our users.



# Progress on Image Compression

## Image Compression Research & Implementation

### Research Overview

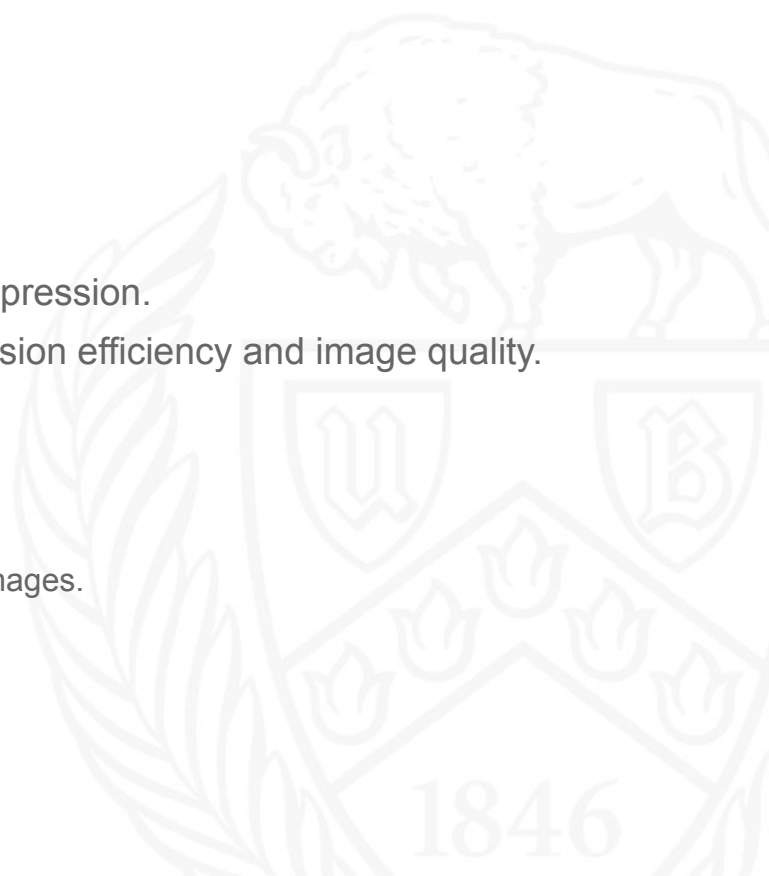
- Investigated various methodologies for efficient image compression.
- Prioritized methods that strike a balance between compression efficiency and image quality.

### Identified Techniques

#### a. Pillow Library

Simple and straightforward method using the quality parameter for JPEG images.

Suitable for a wide variety of image file formats.





# Progress on Image Compression

## Identified Techniques

### a. Pillow Library

Simple and straightforward method using the quality parameter for JPEG images.  
Suitable for a wide variety of image file formats.

### b. Deep Learning Models

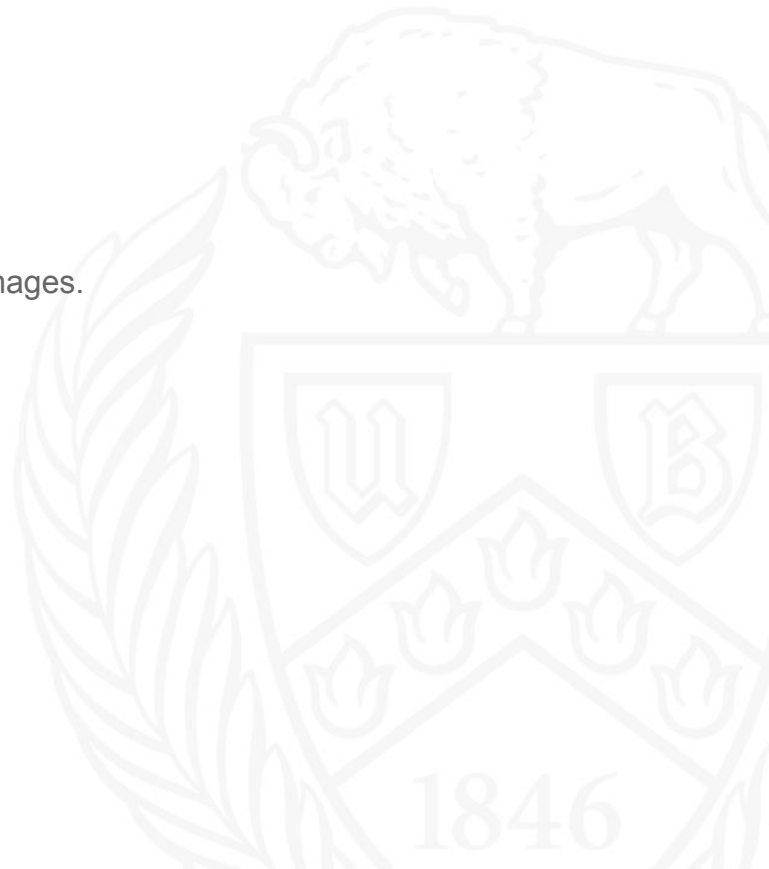
Advanced models designed for high-quality image compression.  
Preserves image quality even at higher compression rates.

### c. Specialized Compression Libraries

Tools such as imageio, opencv, and tinyPNG.  
Offer advanced compression algorithms and options.

### d. Dynamic Compression

Analyzes image content for region-specific compression.  
Maintains details in vital areas, compressing others more aggressively.

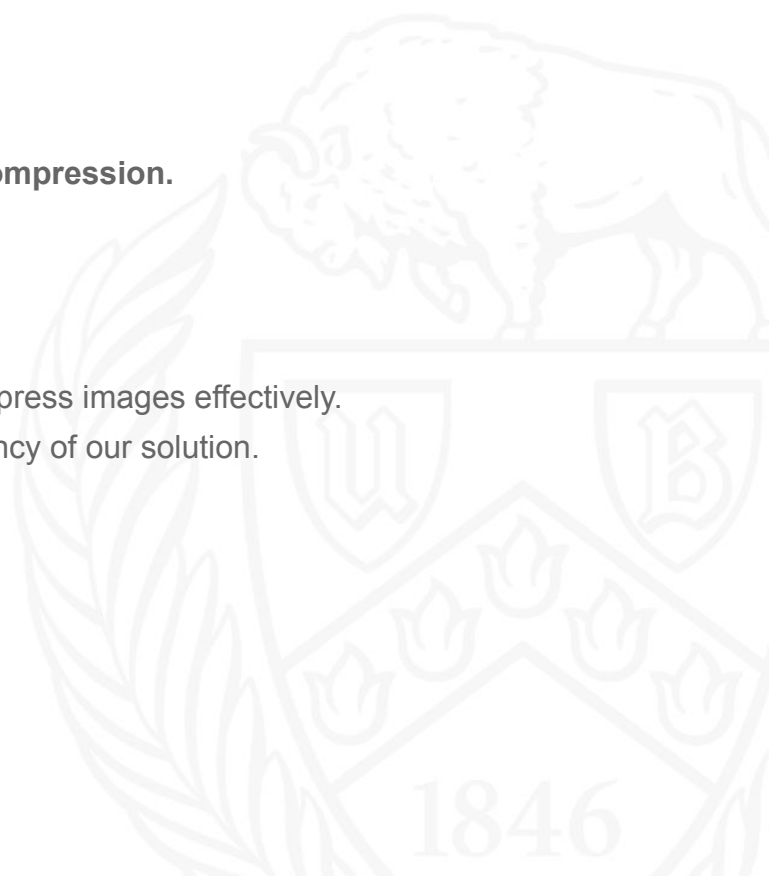


# Progress on Image Compression

Did some POC work just to understand how I can implement Image Compression.

## Next Steps

- Develop the feature within our Flask backend, allowing users to compress images effectively.
- Continuously monitor user feedback to ensure the quality and efficiency of our solution.



# Report on UI Bugs

Compile time error for Passport Photo page

- Initially, the error pointed out a missing property 'rev' within the type definitions.
- Fixed by adding a 'rev' component to fulfill the requirement of the 'Pick<AntdIconProps' type.
- Pushed the change to github.

Scroll to bottom and scroll to top arrows on home page not working.

Tested on different browsers,

- On Edge, menu-bar is not rendering properly

Slide icon on the left side of each feature page is not working as expected

Thank you

