

1. Case Study:

You are tasked with developing a web application that allows users to upload an image and automatically process it into multiple sizes, as **300x250, 728x90, 160x600, 300x600**. The core functionality of the app should include:

1. **Image Upload:** The app should allow users to upload an image from their device.
2. **Image Resizing:** Once an image is uploaded, the app should automatically resize it into four specific dimensions (**300x250, 728x90, 160x600, 300x600**). The exact sizes will be predefined but configurable via settings.
3. **Image Publishing:** After resizing, the app should automatically private post all four resized images to the user's **X (formerly Twitter) account**. The app should handle all necessary authentication and API interactions to publish the images on the user's timeline.

Requirements:

- Implement an intuitive and responsive UI that allows users to upload images.
- Provide options for the user to specify the four required image sizes or use predefined ones.
- Use the **X API** to publish the images to the user's account.
- Ensure secure authentication for connecting with the X account.
- Handle edge cases, such as unsupported image formats, image size limits, or API errors.
- Ensure the app can work across different devices and platforms (e.g., iOS/Android/Desktop).

Submission Guidelines:

- **Platform Choice:** You are free to use any online or open-source platform to develop the app. For example, you can use **Streamlit, Flask, FastAPI**, or any other tool that you're comfortable with.
- **Deployment:** Once you have developed the application, please deploy it so that it is accessible via a shareable link.
- **Submission:** Submit your solution through the provided Google Form link. In the form, include the following:
 - The **shareable link** to your deployed app (ensure it is publicly accessible and functional).
 - A brief explanation of your approach and the tools you used to develop the solution.
 - A link to your source code repository (GitHub, GitLab, etc.) and a **README.md** file explaining how to set up, run, and test the application.

Google form- <https://forms.gle/FQiWgR5KCDvjckK26>

Please make sure the Google Form submission includes all requested information and the link to your working solution.