

Task & Guidelines

1. Implement File Uploads

Objective: Allow users to upload image and document files.

- The system should support file uploads via a web interface.
- Accepted file formats: JPEG, PNG, PDF, DOCX.
- Validate Uploaded Files (File Type, Size Type).
- Store Uploaded Files in a Dedicated Folder or Database.

Deliverables:

- A functional file upload feature that stores files securely.
- Basic validation to prevent unsupported or malicious uploads.

2. Extract Text Using OCR

Objective: Extract text from uploaded images or scanned documents.

- Use an OCR library to recognize and extract text from images and PDFs.
- Convert scanned documents into machine-readable text.
- Ensure accuracy by handling different font styles, sizes, and image qualities.

Deliverables:

- A working OCR extraction module.
- Extracted text stored in a structured format (e.g., database or JSON).

3. Preprocess Image Data

Objective: Enhance image quality to improve OCR accuracy.

- Convert images to grayscale.
- Apply noise reduction techniques.
- Use thresholding to enhance text clarity.