Digimark – Automated Answer Sheet Evaluation System

Project Overview
Digimark is a web-based automated system designed to evaluate handwritten answer sheets using OCR and NLP. It reduces time, effort, and errors involved in manual evaluation while ensuring fairness and accuracy.

Objectives
• Automate handwritten answer evaluation
• Reduce grading time and workload
• Ensure fair and consistent assessment
• Provide instant results with feedback

Technologies Used
Frontend: React.js
Backend: Flask (Python)
OCR: Tesseract OCR
NLP: NLTK, WordNet
Image Processing: OpenCV
PDF Tools: pdf2image, Poppler, FPDF

System Workflow
PDF Upload → Image Processing → OCR → NLP → Evaluation → PDF Report Generation

Key Features
• Automated evaluation
• Batch processing
• Per-question marks and feedback
• Secure record storage

Conclusion
Digimark demonstrates the effective use of OCR and NLP in automating handwritten answer evaluation, offering a reliable and scalable solution for modern education systems.