

SmartNotes AI – Task Tracking Document

Project Goal: Build a self-learning web app that converts student notes into summaries, short notes, exam-oriented questions, weak area analysis, and a personalized study roadmap.

PHASE 0 – Project Setup

- [] Create GitHub repository
- [] Setup Python virtual environment
- [] Backend folder structure
- [] Initialize React frontend

PHASE 1 – Notes Input (Frontend)

- [] Image upload support
- [] PDF upload support
- [] Drag & drop UI
- [] Image/PDF preview

PHASE 2 – OCR Engine

- [] Install PaddleOCR
- [] Image preprocessing
- [] OCR FastAPI endpoint

PHASE 3 – Text Cleaning & Structuring

- [] Remove OCR noise
- [] Detect headings and bullets
- [] Paragraph segmentation

PHASE 4 – Summary Generator

- [] LLM integration
- [] Short summary
- [] Medium summary
- [] Long summary

PHASE 5 – Question Generator

- [] MCQ generation
- [] Short answer questions
- [] Long answer questions

PHASE 6 – Short Notes Generator

- [] Keyword extraction
- [] Bullet-based short notes

PHASE 7 – Weak Area Detection

- [] Topic frequency analysis
- [] Weak topic identification

PHASE 8 – Roadmap Generator

- [] Input parameter handling
- [] Day-wise roadmap generation

PHASE 9 – Backend Integration

- [] Pipeline orchestration
- [] Database integration

FINAL PHASE – Deployment & Polish

- [] UI polish
- [] Performance optimization
- [] Deployment
- [] Documentation and demo