

KONGU ENGINEERING COLLEGE PERUNDURAI ERODE-638060 DEPARTMENT OF CSD

Smartprint Hub

PROJECT GUIDE

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PROJECT MEMBERS

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OBJECTIVE

- To develop a fast and efficient file-sharing system for photocopy shops.
- To eliminate dependency on Gmail, WhatsApp, and other apps.
- To enable offline file transfer, reducing network costs.
- To provide better file management for shop owners.
- To track Xerox count and revenue efficiently.
- To ensure a secure and hassle-free file-sharing experience.

TECHNOLOGIES

Frontend:

React.js – For building the interactive and user-friendly customer and shop UI.

Backend:

Node.js – Server-side logic and file handling.

Express.js – Routing and API management.

Real-time Communication:

WebSocket (Socket.IO) – For instant file transfers and live queue updates.

Desktop App Packaging:

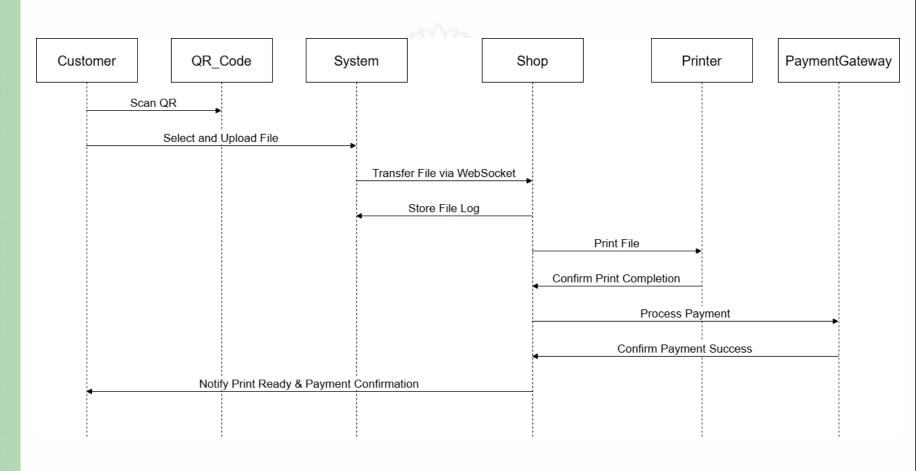
Electron.js – For bundling the system into a cross-platform desktop application for shop owners.

Networking:

Local Wi-Fi (No Internet Needed)

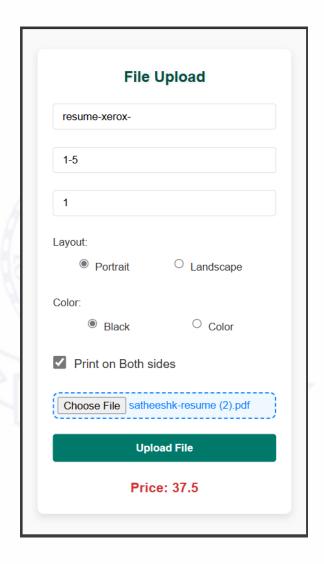
– Enables file transfer and communication over LAN.

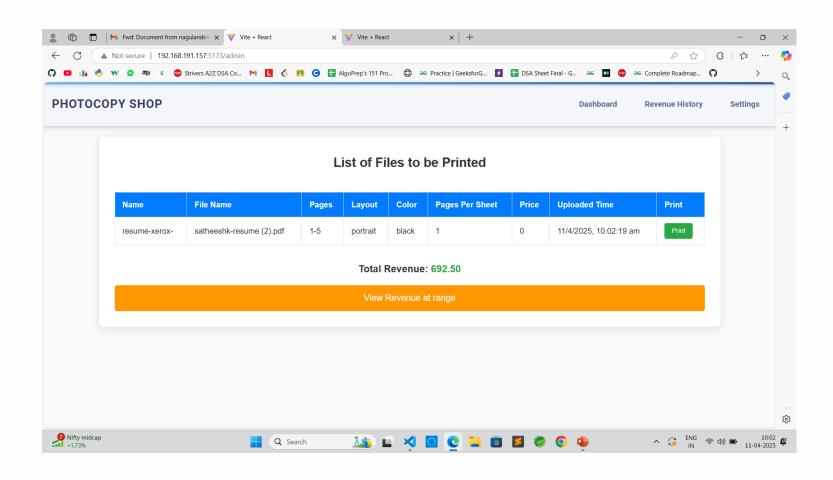
WORKFLOW

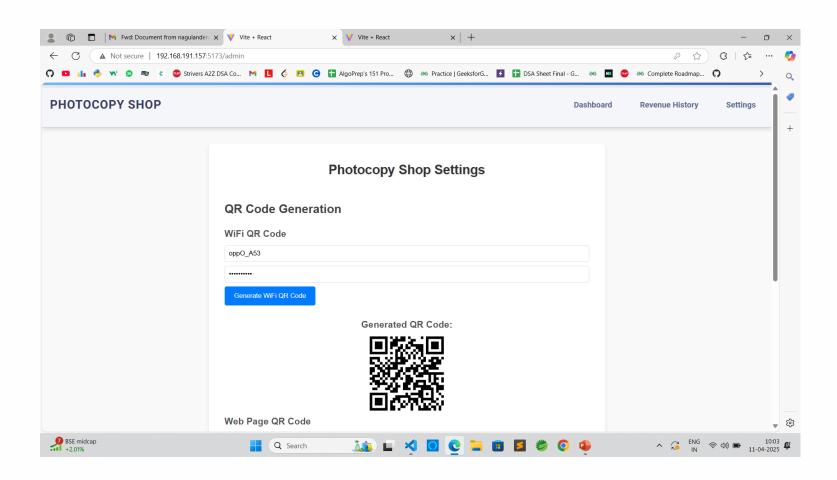


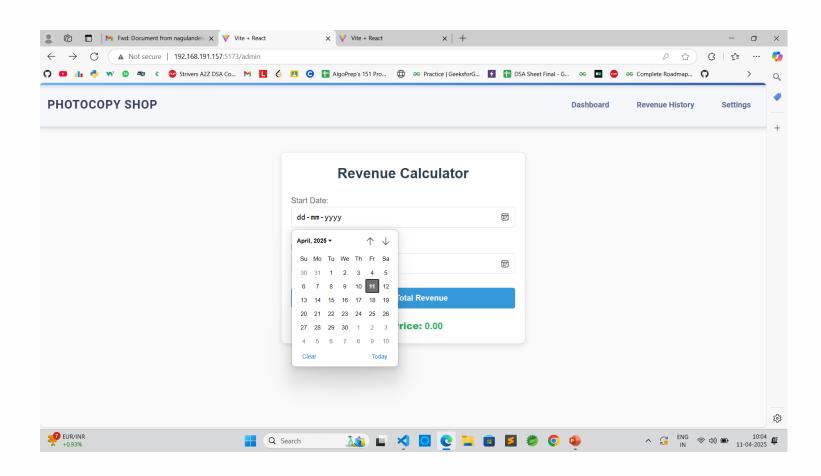
MODULE DESCRIPTION

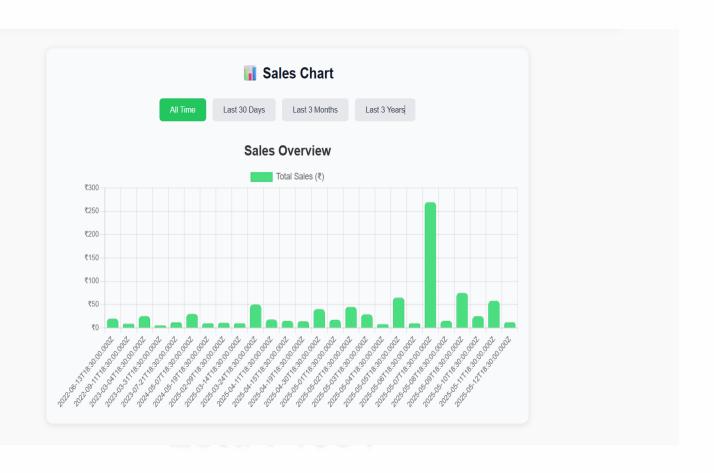
- QR Code-based Connection Module
- Instant File Transfer Module
- Offline Support Module
- Queue Management Module
- Shop Owner Control Panel
- Xerox Count & Billing Module
- File History & Reprint Module
- Easy Setup & Deployment Module
- Local Storage & Security Module

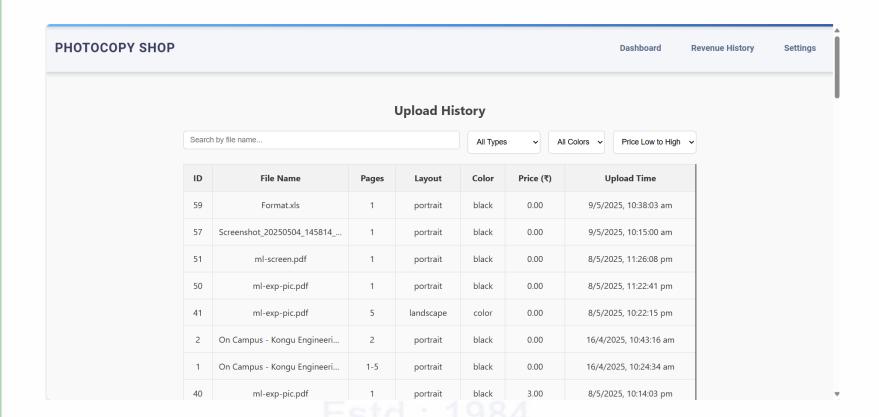












RESULTS

QR Code-based Connection Module

Successfully established secure customer-shop connection via QR code scanning.

Instant File Transfer Module

Enabled real-time file transfers between customer and shop systems without delay.

Offline Support Module

Achieved complete functionality over local network without internet dependency.

Queue Management Module

Implemented file queuing system to manage multiple customer requests efficiently.

Shop Owner Control Panel

Developed a user-friendly dashboard to manage files, print jobs, and customer queue.

Easy Setup & Deployment Module

Packaged the system into a single-click Electron app for seamless installation and use.

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