Automated Print Kiosk Platform

This project proposes the design and implementation of an automated print kiosk system, similar to an ATM or vending machine, where users can upload documents online and print them from a nearby kiosk machine. This system is designed to modernize traditional photocopy/Xerox shops and provide self-service printing in public areas such as colleges, libraries, and transport stations.

Key Features

- QR Code Based Access: Each kiosk displays a unique QR code that users can scan to connect to that specific machine.
- Cloud-based Document Upload: Users can upload their documents (PDF, Word, Images, etc.) via a portal after scanning the QR code.
- Preprocessing Options: Users can select print settings such as color/black & white, number of copies, paper size (A4, A3), and double/single sided printing.
- Payment Integration: Secure digital payment support (UPI, Debit/Credit Card, Mobile Wallets) before printing.
- Automated Printing: After payment, the machine prints and dispenses the documents automatically.
- User-friendly Web Portal: Mobile and desktop-friendly portal for document upload and order tracking.
- Kiosk Hardware Integration: The kiosk functions like a vending machine with printer hardware, a QR code display, and internet connectivity.
- Scalability: Multiple kiosks can be deployed in different locations under the same system.
- Usage Logs & Analytics: Admin can track usage, revenue, and machine performance from the backend system.
- Security: Encrypted document transfer, temporary storage, and automatic file deletion after printing.

Objectives

- To develop a self-service printing solution for students and professionals.
- To eliminate the dependency on traditional photocopy shops.
- To integrate modern payment systems for a seamless user experience.
- To create a scalable platform that can manage multiple kiosks in different locations.
- To ensure secure, fast, and reliable printing services.

This automated print kiosk system brings convenience and accessibility to printing services by combining cloud technology, IoT, and secure payment gateways. It has the potential to transform how document printing is accessed in colleges, offices, and public areas.