



MINI PROJECT

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PAYMENT SYSTEM

Overview:

This project aims to streamline grocery shopping by introducing a barcode-based mobile payment application. Developed using Python frameworks, the system enables users to scan product barcodes and complete payments securely and efficiently.

GitHub Repository Link: https://github.com/Chetna-Manral/Chetna_Manral_BCASectionA_PaymentApp.git

Project Video Link:

GitHub Report Link:

[Chetna Manral BCASectionA PaymentApp/Project Report.pdf at main · Chetna-Manral/Chetna_Manral_BCASectionA_PaymentApp](#)

Features

- **Barcode Scanning:** Instantly identifies products by reading barcodes.
- **Mobile-Friendly Interface:** Built with Kivy for a smooth and intuitive user experience on mobile devices.
- **Secure Payment Integration:** Supports PayPal and similar gateways for quick, secure transactions.
- **Error Reduction:** Minimizes manual entry mistakes by automating product input and payment.
- **Time and Cost Efficiency:** Speeds up the checkout process and reduces the need for additional staff or equipment.

Tech Stack

- **Frontend:** Kivy, Stripe, Pyzbar
- **Backend:** Django, Rest framework
- **Database:** SQL Lite

- **Frameworks/Libraries:** Rest framework, Django, Stripe, Kivy, Pyzbar, Requests, djangorestframework
- **API Requests:** Django Rest API endpoints

How to Install

To get the app up and running locally, follow these steps:

1. Clone the repository:
2. Navigate to the backend directory, create virtual environment and import libraries.
3. To start the backend server, run:

```
cd backend  
python manage.py makemigrations  
python manage.py migrate  
python manage.py runserver
```

4. To run the frontend (client side) run:

```
cd frontend  
python main.py
```

Backend Setup

- The backend is a ***Django*** server.
- The backend also provides an ***API endpoint*** to fetch financial data (/api/data).

How to Use

1. **Sign Up:** Create an account and choose your product.
2. **Scan:** Scan barcode of your product.
3. **Payment Options:** Select UPI/PayPal as your payment option.
4. **Confirmation:** Proceed to pay.

Contributing

We welcome contributions to make **Payment System** transaction easier in much crowded places.

To contribute:

1. Clone the repository.
2. Navigate to the backend directory.
3. Create virtual environment and import libraries.
4. Create a new branch for your feature or bug fix.

5. Push your changes to your forked repository.
6. Open a pull request for review.