الجامعة الإسلامية العالمية شيتاغونغ
International Islamic University Chittagong

PROJECT REPORT

ON

CRYPTOCURRENCY TRADING PLATFORM BY TEAM "FLEX"

SUBMITTED TO:

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Adjunct Lecturer,CSE

Course Code:CSE -3532

Course Name: Tools

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SEMESTER:
5TH

Remarks:

Contents:

Project name:

Cryptocurrency Trading Platform

Abstract:

Cryptocurrency is a revolutionary form of digital currency that operates on decentralized blockchain technology, eliminating the need for traditional intermediaries like banks. This project explores the fundamentals of cryptocurrency, focusing on its architecture, transaction methods, and security protocols. It highlights the role of blockchain in ensuring transparency, immutability, and decentralization. Various cryptocurrencies such as Bitcoin and Ethereum are discussed to showcase their unique features and market impact. The project also addresses real-world applications including cross-border payments, smart contracts, and decentralized finance (DeFi). Security concerns like hacking, wallet protection, and regulatory challenges are examined. A comparative analysis with fiat currency is provided to highlight benefits and drawbacks. The future potential of cryptocurrencies in transforming the global economy is critically analyzed. Technical implementation in this project simulates a simple crypto exchange interface. Overall, the project offers a comprehensive understanding of the cryptocurrency ecosystem and its evolving significance in digital finance.

Objectives:

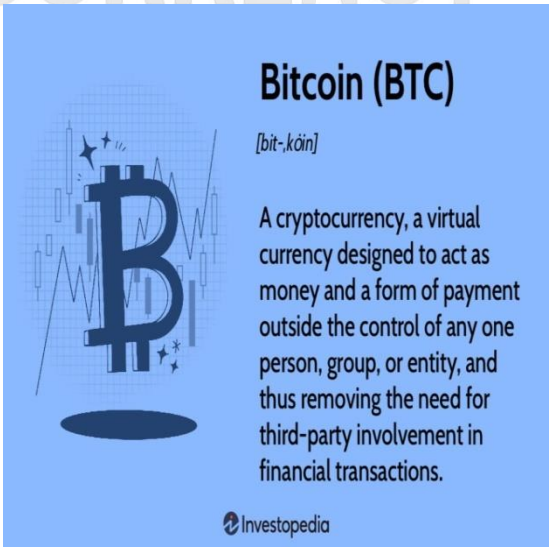
1. To understand the fundamental principles of cryptocurrency and blockchain technology.

2. To analyze the working mechanism of popular cryptocurrencies like Bitcoin and Ethereum.

3. To develop a simple crypto exchange interface using HTML, CSS, and JavaScript.

4. To explore the advantages, challenges, and future potential of digital currencies in global finance.

5. To evaluate security features and regulatory aspects associated with cryptocurrency transactions



Used Tools:

For Frontend:

- **HTML** provides the structure and content of our web page. It defines elements like headings, paragraphs, images, links, tables, and forms.It's the skeleton of our website.
- **CSS** controls the appearance and layout of the **HTML** content. It styles elements with colors, fonts, spacing, alignment, and responsiveness. Think of it as the clothing and design that make the skeleton look attractive.
- **JavaScript (JS)** is used to make web pages interactive and dynamic.It made our website more efficient because it fetches real-time updates, form handling, handles buy/sell actions, shows charts, validates forms, and communicates with APIs.

For Backend:

PHP is used for smooth database.

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Listing Structure:

.vscode/

├── (settings or extensions folder)

beloved/

├── (contents not shown)

HTML Files:

├── index.html

├── about.html

├── contact.html

├── features.html

├── market.html

├── login.html

├── logout.html

PHP Files:

├── index.php

├── sign.php

├── signup.html

JS (JavaScript) Files:

├── dashboard.js

├── logout.js

├── non.js

├── script.js

├── script 1.js

CSS (Stylesheets):

├── dashboard.css

├── settings.css

├── styles 1.css ← (linked in `index.html`)

Image Files:

├── ar.jpeg

├── back 1.webp

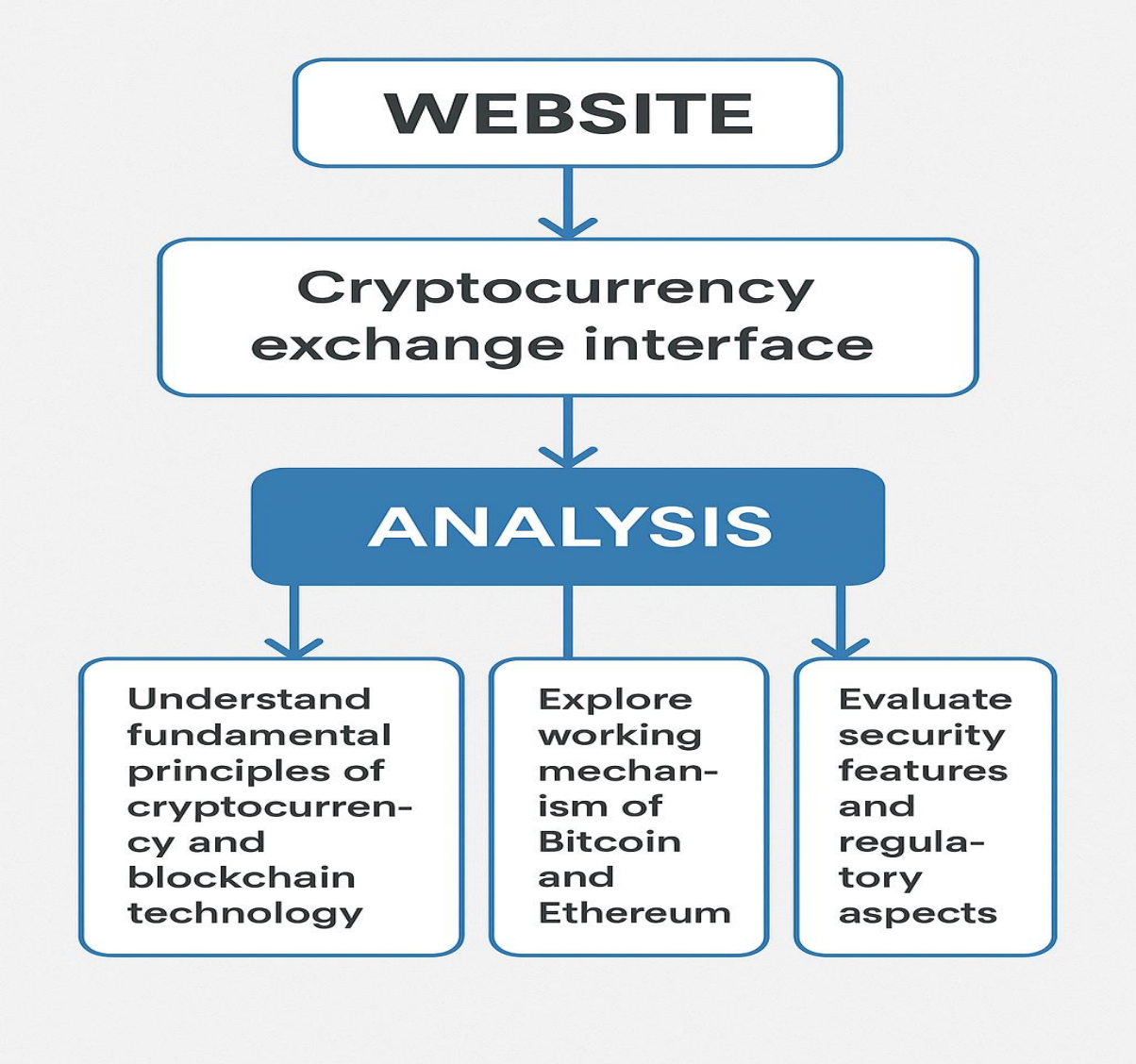
├── back 2.jpeg

├── images.jpg

├── jutihe.jpeg

├── index 2.avif

Flow chart:



Code Output:

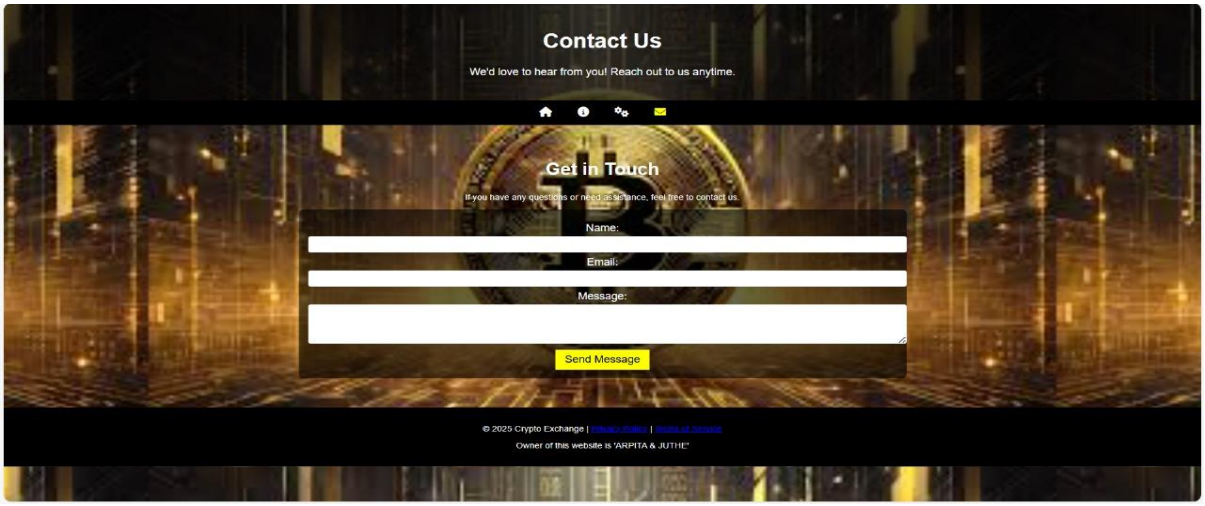
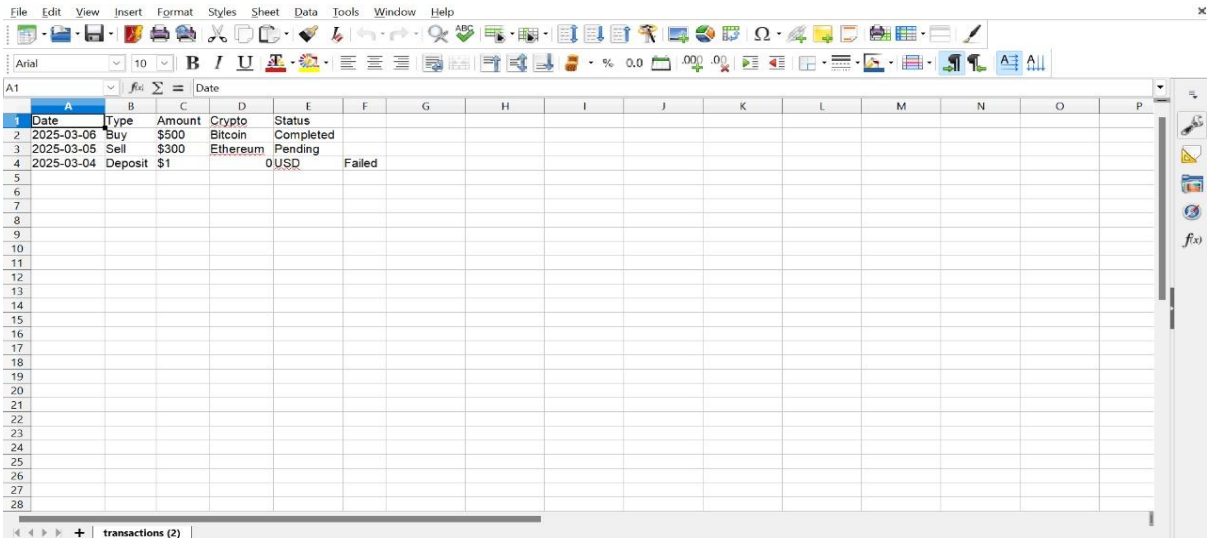


Fig:Contact



Date	Type	Amount	Crypto	Status
2025-03-06	Buy	$500	Bitcoin	Completed
2025-03-05	Sell	$300	Ethereum	Pending
2025-03-04	Deposit	$1	0USD	Failed

Fig:DataBase For Transaction

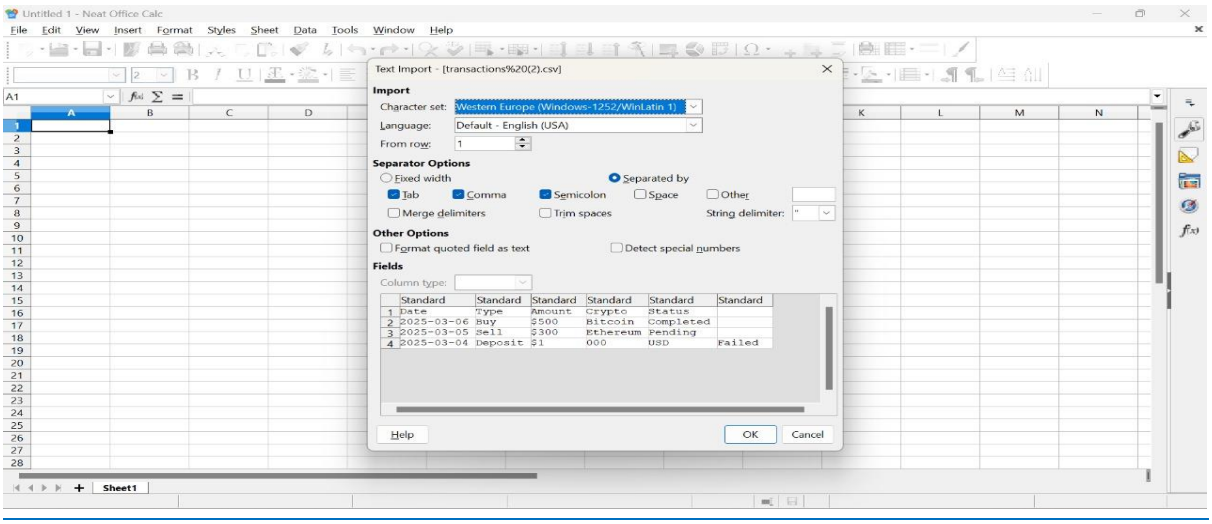


Fig: Dynamic Database

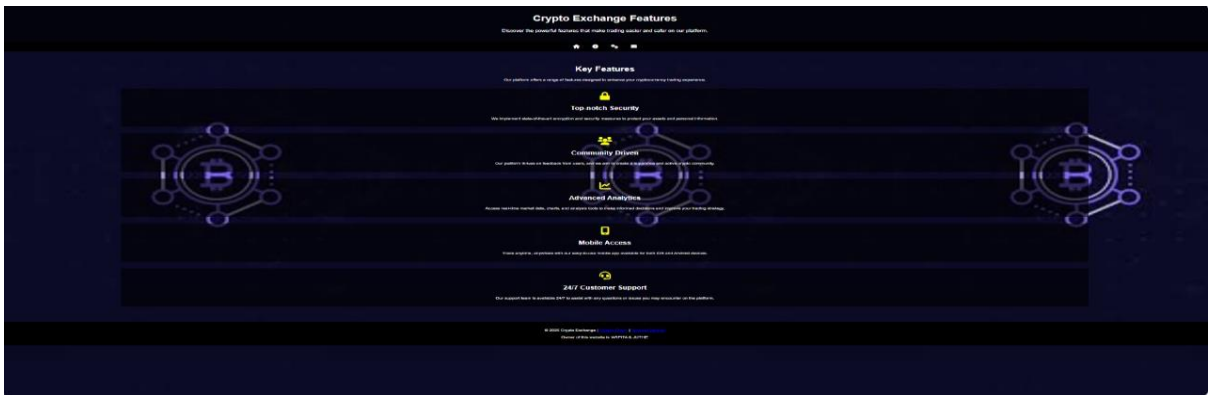


Fig: Features

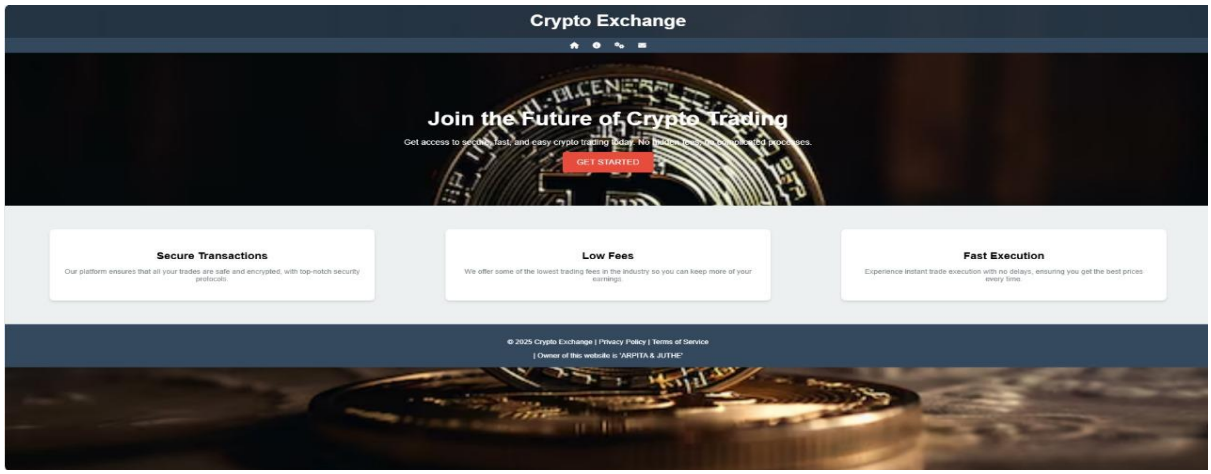


Fig: Front page

Fig: Live Trading Price

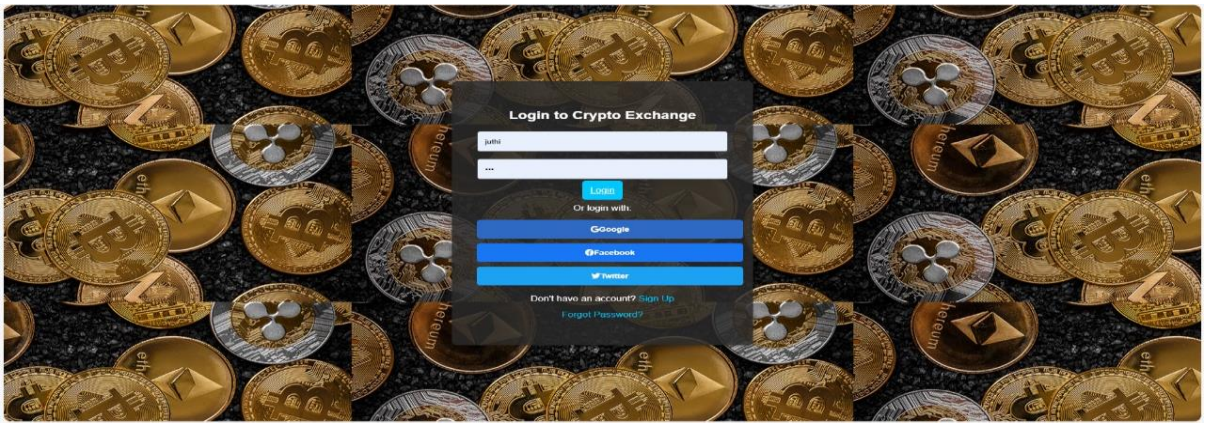


Fig: Log in Page

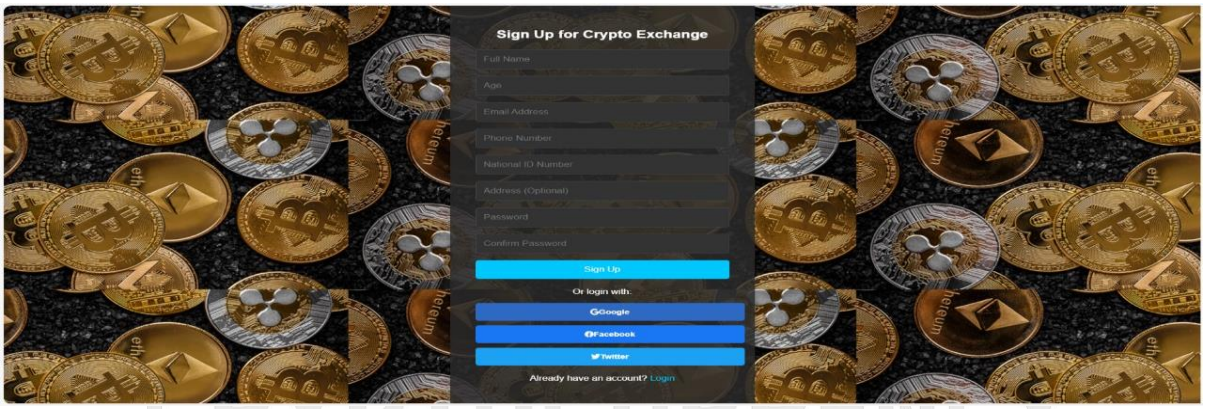


Fig: Sign up Page

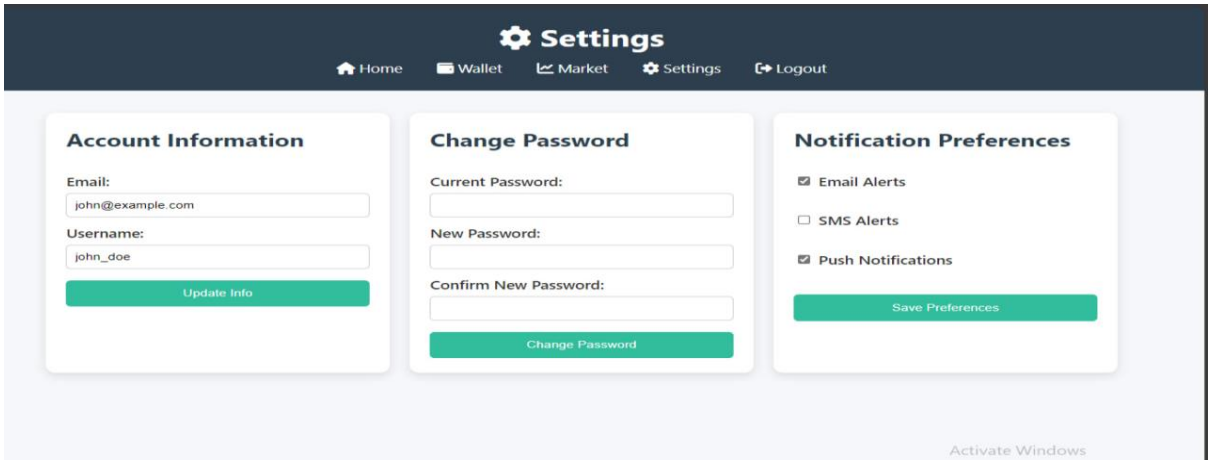


Fig: Settings

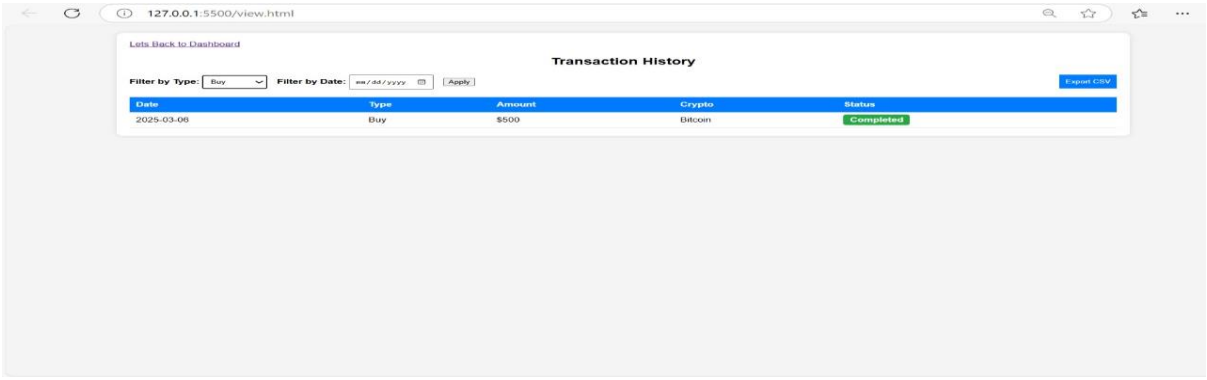


Fig: Transaction

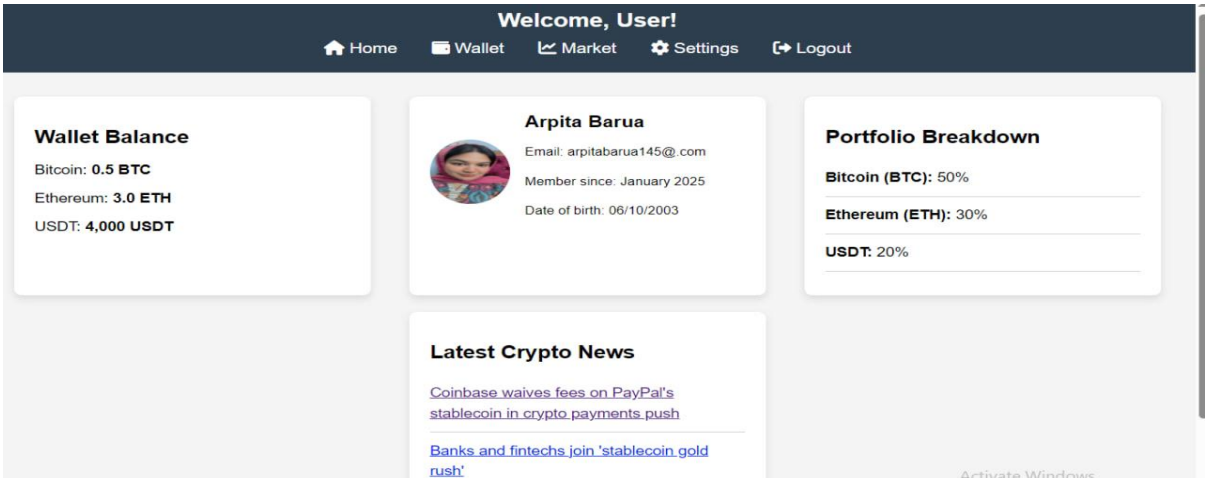


Fig: Upgraded Wallet

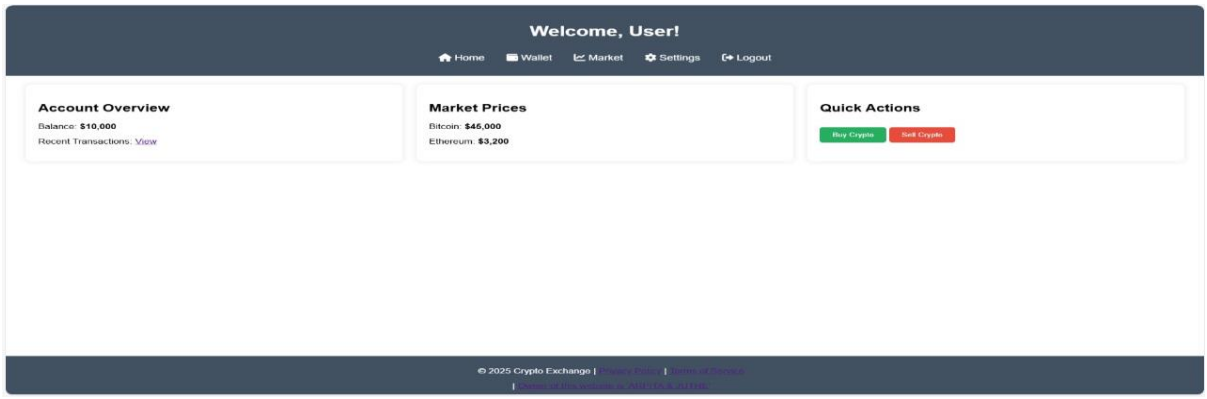


Fig: User Dashboard

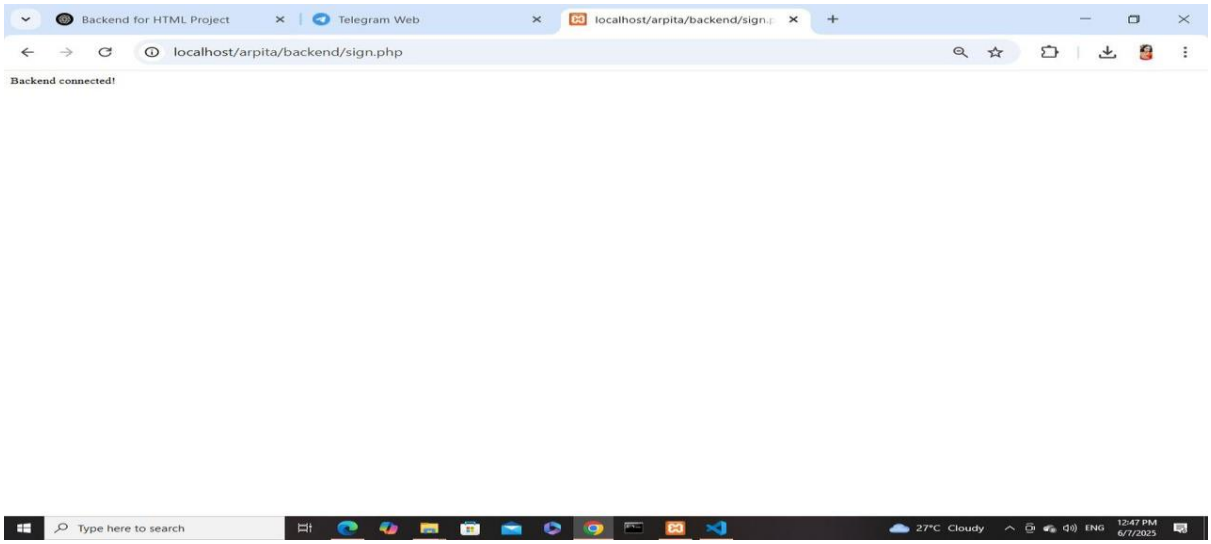


Fig: Backend connected in server

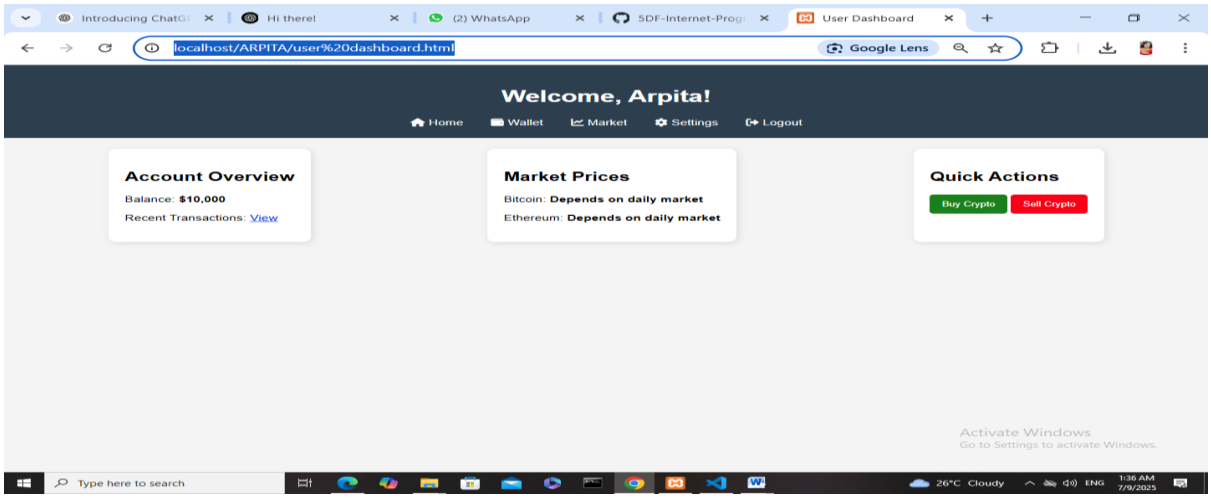


Fig:Localhost connected

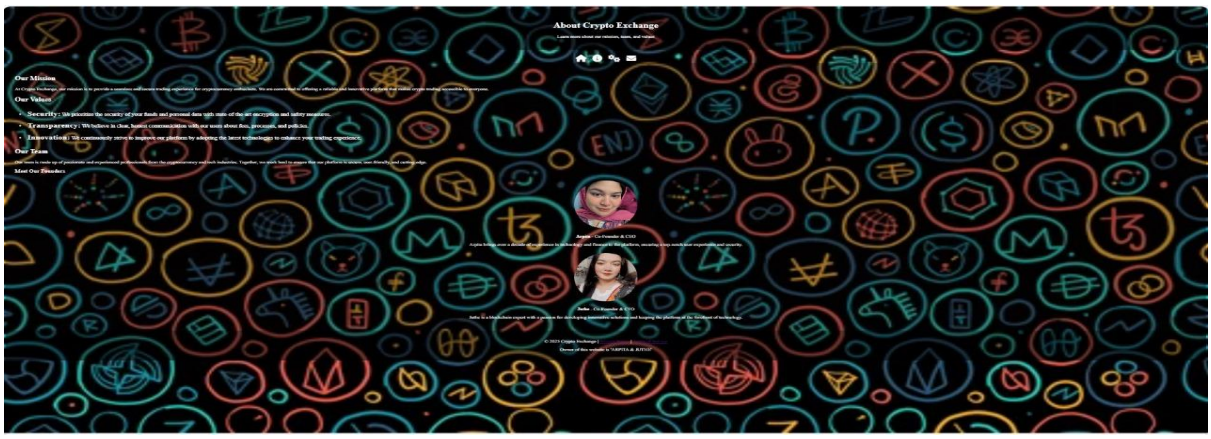


Fig:About With Found

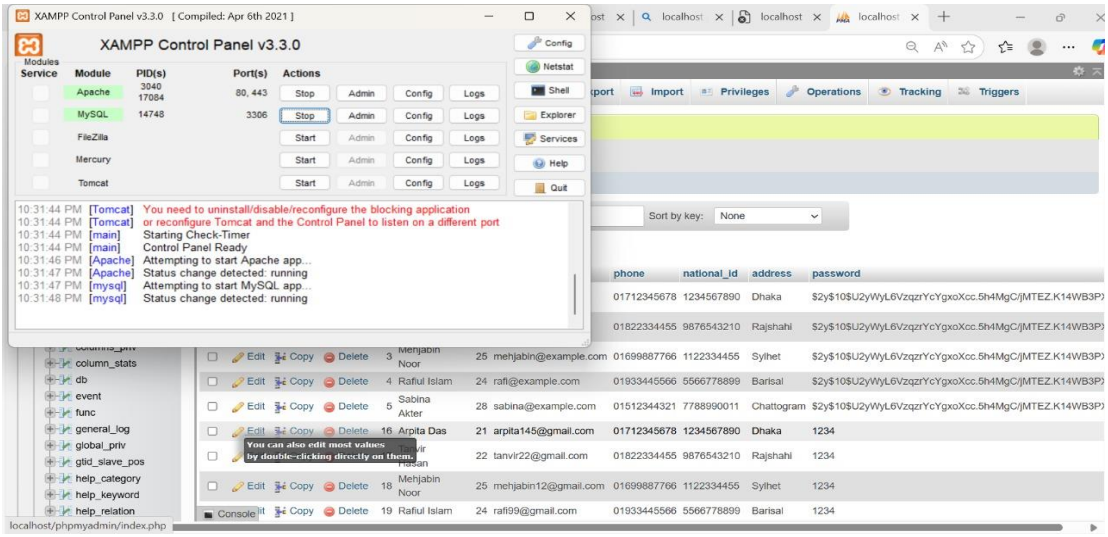


Fig: Backend Xampp Connection

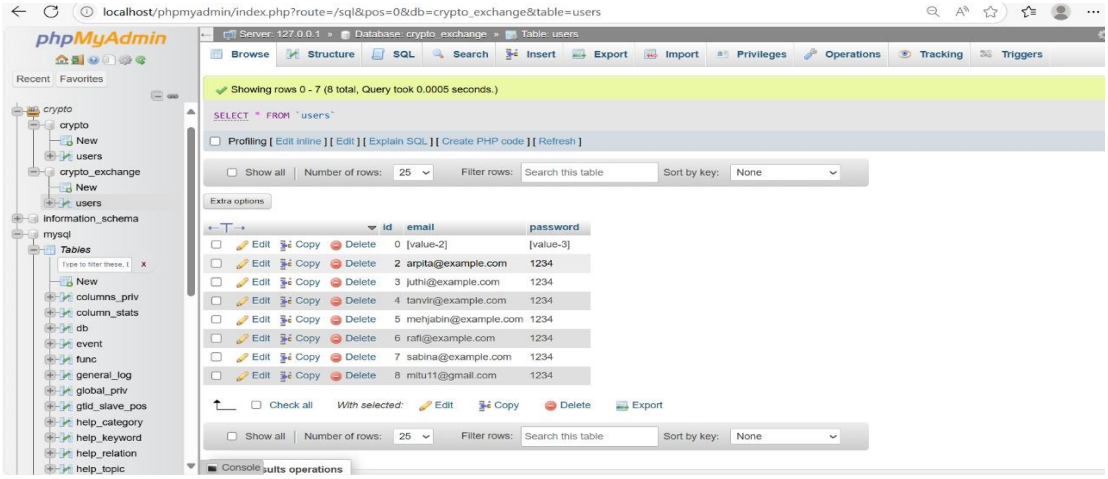


Fig: Backend Login Database

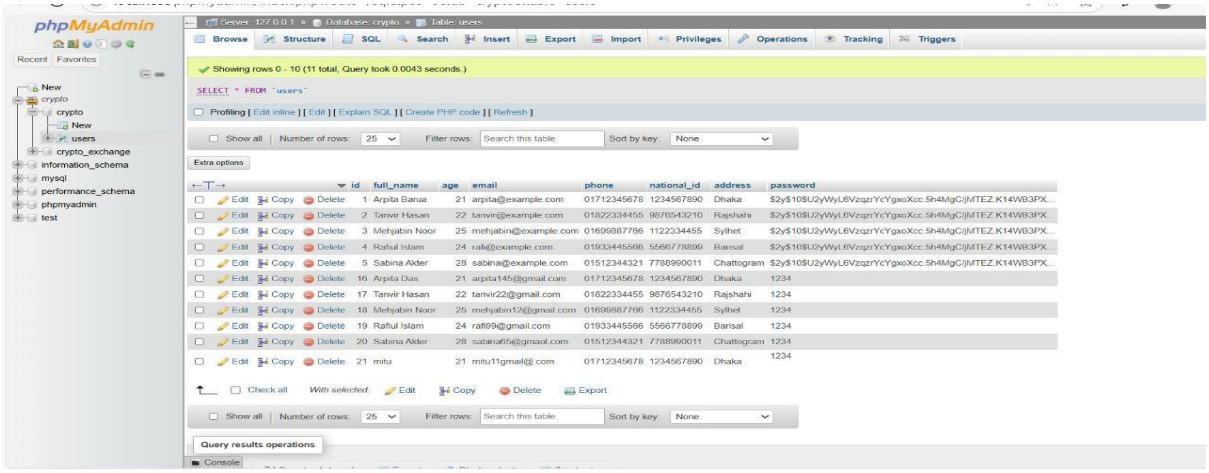


Fig: Backend Sign Database

Error:

During the development of the cryptocurrency exchange website, a major limitation was the absence of a blockchain-based backend. The platform was designed using HTML, CSS, JavaScript, and PHP for the frontend and basic server-side logic. However, the core blockchain functionality, which ensures transaction transparency, security, and decentralization, was not implemented. As a result, real-time crypto transactions and wallet validations were simulated rather than executed on a decentralized ledger. PHP was intended to manage user authentication and data handling, but lacked integration with smart contracts or blockchain nodes. This significantly affected the authenticity and scope of the project. A blockchain API or framework like Ethereum or Hyperledger could have improved backend operations. Due to time constraints and complexity, this portion remains incomplete. Implementing blockchain support in future versions would enhance trust, immutability, and security. This error has been documented for correction in the final deployment stage. As we don't have any binance premium account we can't proceed further.

Future Plans:

In the future, this project will be enhanced by integrating an actual blockchain backend using platforms like Ethereum or Binance Smart Chain. Smart contracts will be implemented to automate crypto transactions securely. Real-time wallet management and token generation features will be added for a complete trading experience. A secure login system with two-factor authentication will be developed. The UI will be improved for better mobile and desktop compatibility. Historical price charts and market analysis tools will be integrated using APIs. Admin dashboard functionality will be added to manage users and monitor transactions. Future versions will support multiple cryptocurrencies with dynamic conversion rates. Deployment on a live server with SSL and HTTPS will ensure safe data exchange. Eventually, the platform will evolve into a fully functional, decentralized crypto exchange system.

Conclution:

This project provided a foundational understanding of cryptocurrency and its web-based application. Although blockchain integration was not fully implemented, the structure for a crypto exchange platform was successfully designed. It highlighted both the technical and financial aspects of digital currencies. Future improvements will aim to enhance functionality and real-world applicability.

Reference:

1. *Let's Encrypt* (2025). Free SSL certificates for secure HTTPS deployment. https://letsencrypt.org/

2. **Binance Smart Chain Documentation**. (2023). *Binance Smart Chain: A High-Performance Blockchain for Decentralized Apps*. Binance. https://docs.bnbchain.org/docs/bsc