

PaySa

Problem Statement Title: **CBDC and E-Rupee bridging the gap between innovation and adoption**

Team Name: **Engine**

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Institute Name: **Siliguri Institute of Technology, Sukna**

Theme Name: **Miscellaneous**

Problem:

In FYI22 over 8.5 Crores rupees of fake currency notes were seized by RBI. And this number is still projected to increase by 4.45% each year.



Counterfeit Money seized from multiple cities in india.

Problem:

According to a recent moneycontrol report, despite increased internet usage, approx. 190 million Indians are still unbanked.

A large part of Indians are still unreachable to digital payment services, which ultimately affects India's growth potential and GDP.



Problem:

Even after so much of digitalization and innovation, almost all of the people face problems with cross-country currency conversion and payments. Especially, taxes as high as 18% on forex exchange.



Tech Stack:

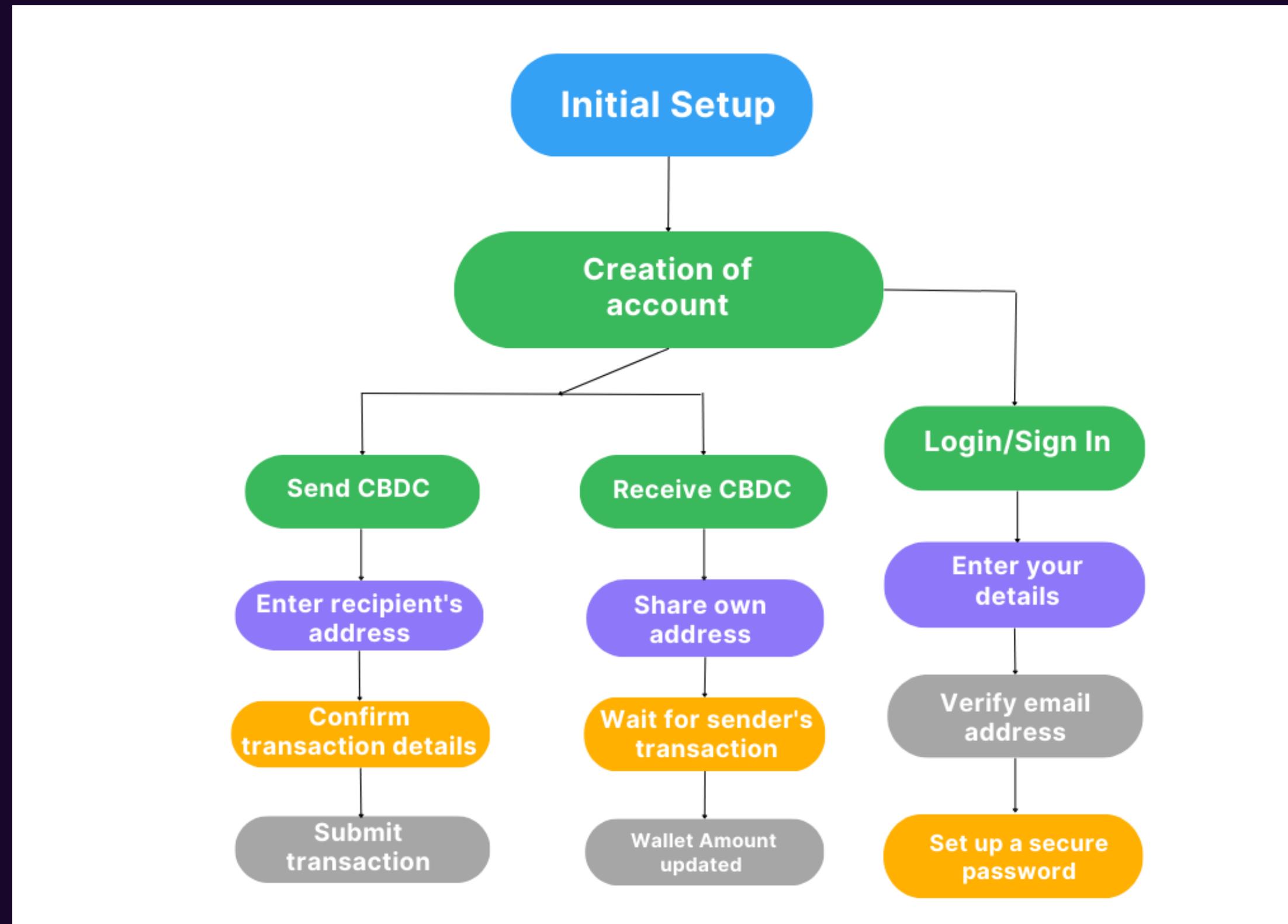
Front-end: HTML, CSS, JavaScript

Back-end: Nodejs, Expressjs

Database: Mongodb, firebase

Framework: Reactjs

Flow Chart:



Solution:

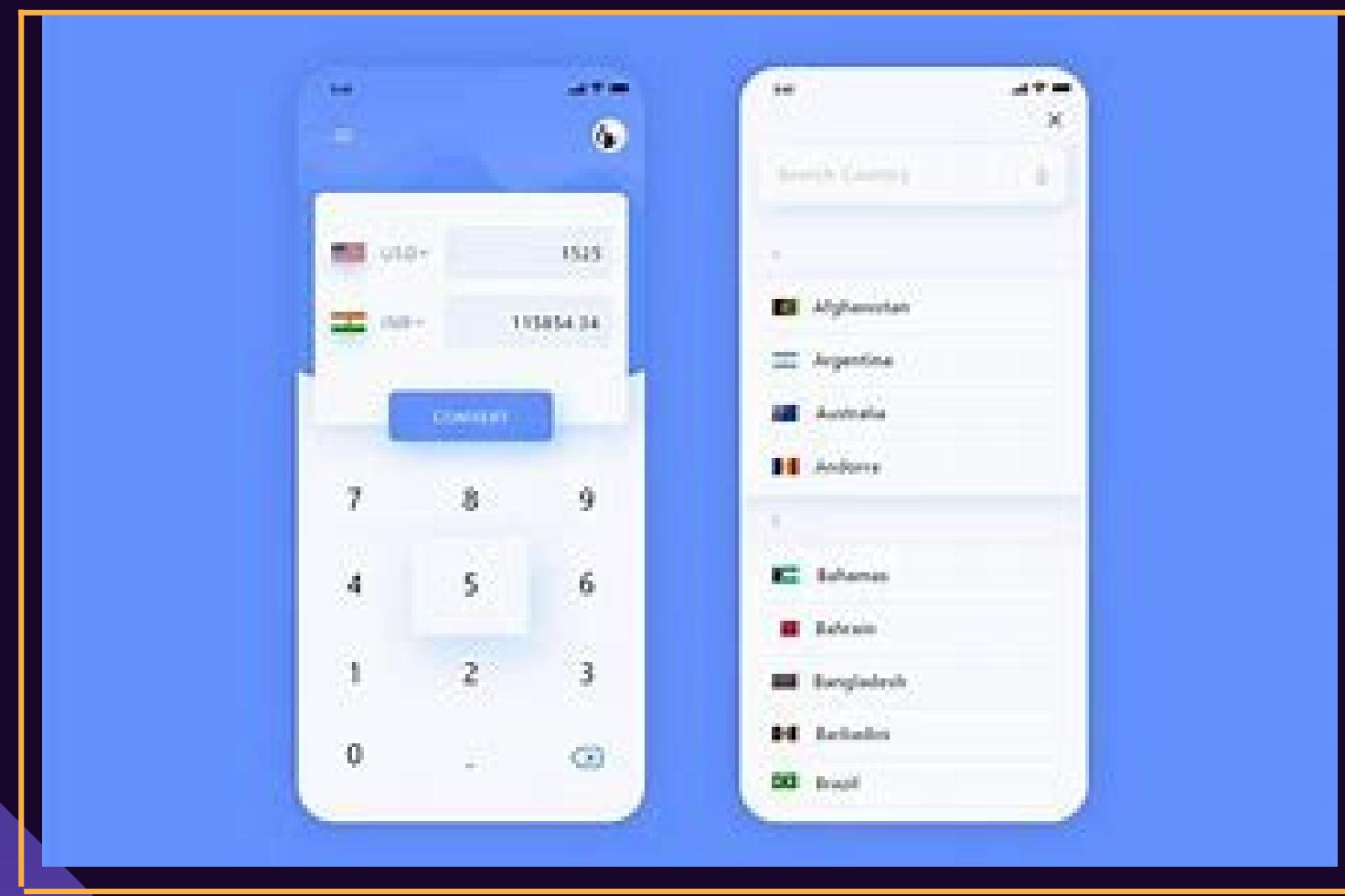
PaySa is a common platform built on CBDC payments approved and provided by RBI. The technology is based on Blockchain ledger. This allows the RBI to track and monitor where the e-rupees are getting transferred and to whom.

It also allows users to use digital payment solutions without the need for a bank account.



Idea & Solution:

Creating an Interface that provides a mode of seamless money conversion from digital currency to physical currency.



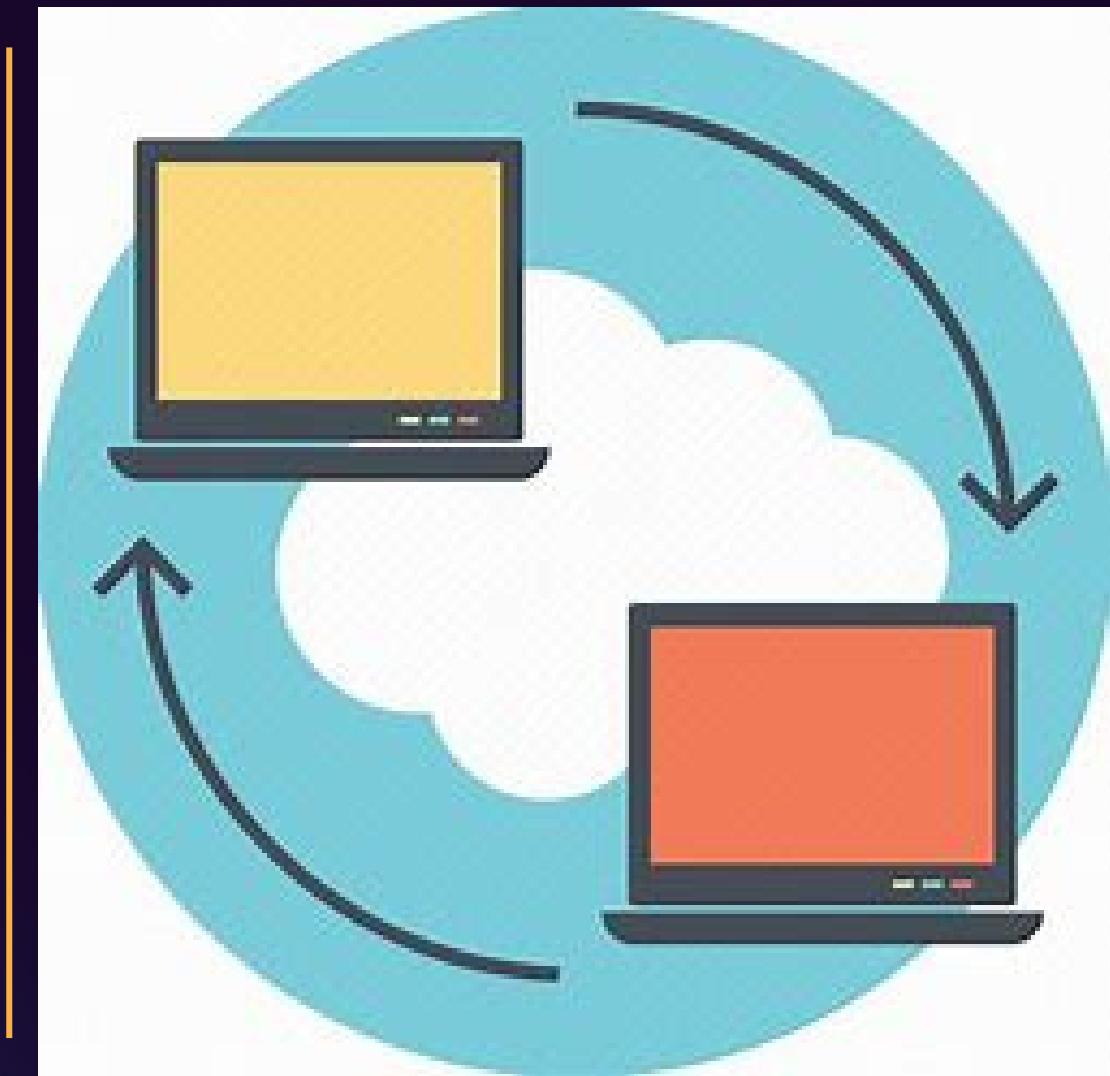
Idea & Solution:

Integrating CBDC provided by RBI as the backend of the platform , it verifies the digital currency "e-rupee" and allows cross wallet transections without the need to have a registered bank account.



Idea & Solution:

Every Digital transfer has a unique serial no. And its user has a unique transaction id and wallet address. Thus, minimizing fraudulent activity.



Idea & Solution:

The user can convert his digital currency in the wallet to his bank account through the platform easily.

Idea & Solution:

The platform allows simple exchange of digital foreign currencies, eliminating high conversion charges.



Use Cases:

- Users without any registered bank account are also able to perform digital currency transfer directly through there wallet.
- There is no middlemen charges for Forex digital currency conversion. Since, there is no involvement of banks.

Use Cases:

- Every E-rupee is provided with a unique serial no. authorized by RBI thus, preventing counterfeit of money.
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- The platform provides simple UI integrated with CBDC provided by RBI in the backend.

Dependence>Show stopper:

- The backend is supported by CBDC provided by RBI, maintaining the authenticity and maintenance of the E-rupee.
- Tracking system for the transaction record and prevention of the mis-use of E-rupee for illegal use.
- High Forex charges is eliminated since, foreign digital currency is Directly converted into another digital currency and vice-versa through RBI.

Thank You