M.KUMARASAMY
COLLEGE OF ENGINEERING
NAAC Accredited Autonomous Institution
Approved by AICTE & Affiliated to Anna University
ISO 9001:2015 & ISO 14001:2015 Certified Institution
Thalavapalayam, Karur – 639 113.

Banking Application

Team Members:

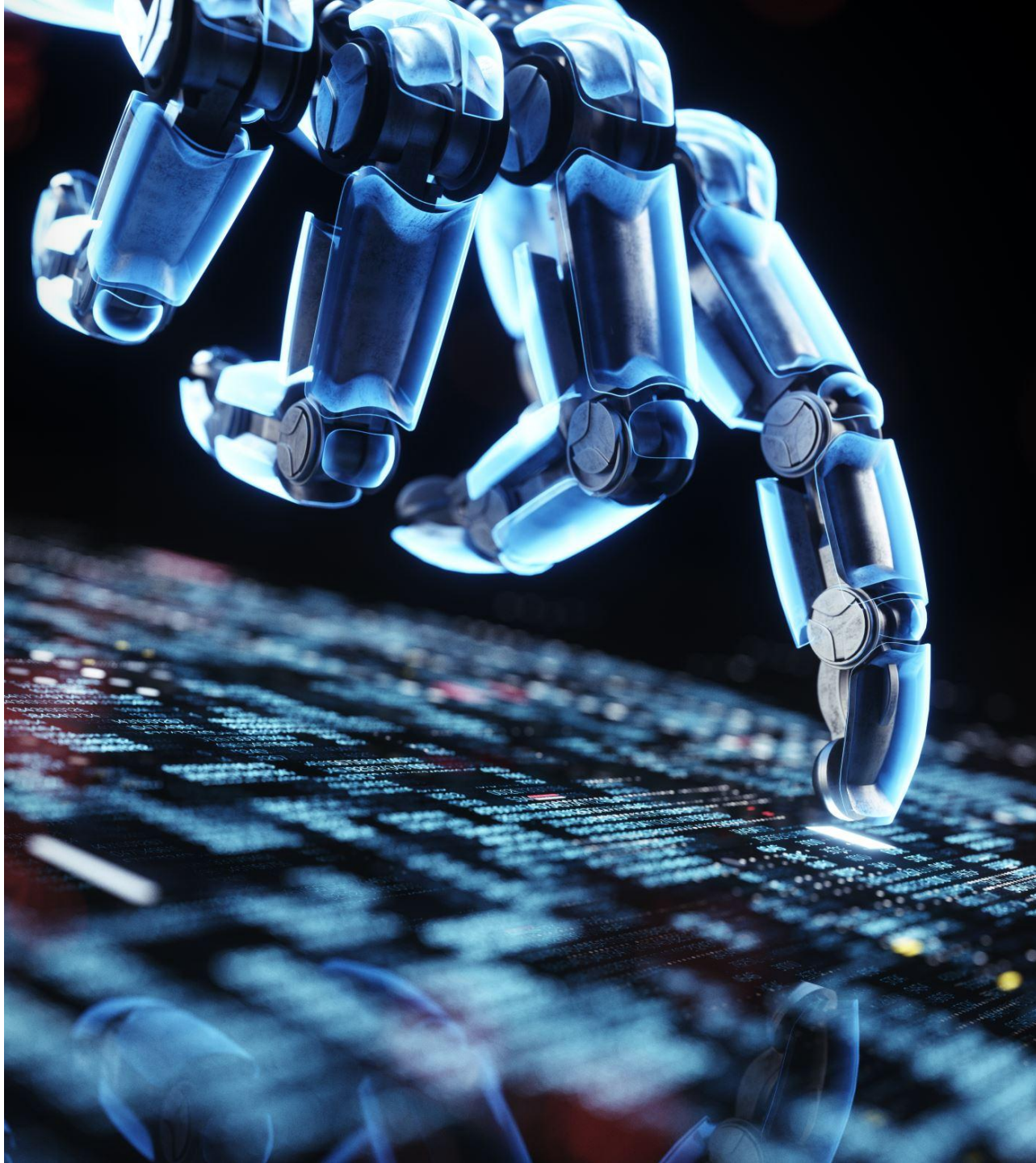
KIRUTHIKA T -927622BAD031
KISHAN KUMAR S -927622BAD032
MANISHA N -927622BAD033

Problem Statement

- Current banking applications face challenges in providing robust fraud detection, efficient transaction support, user-friendly interfaces for older users, and enhanced security measures such as biometric authentication.

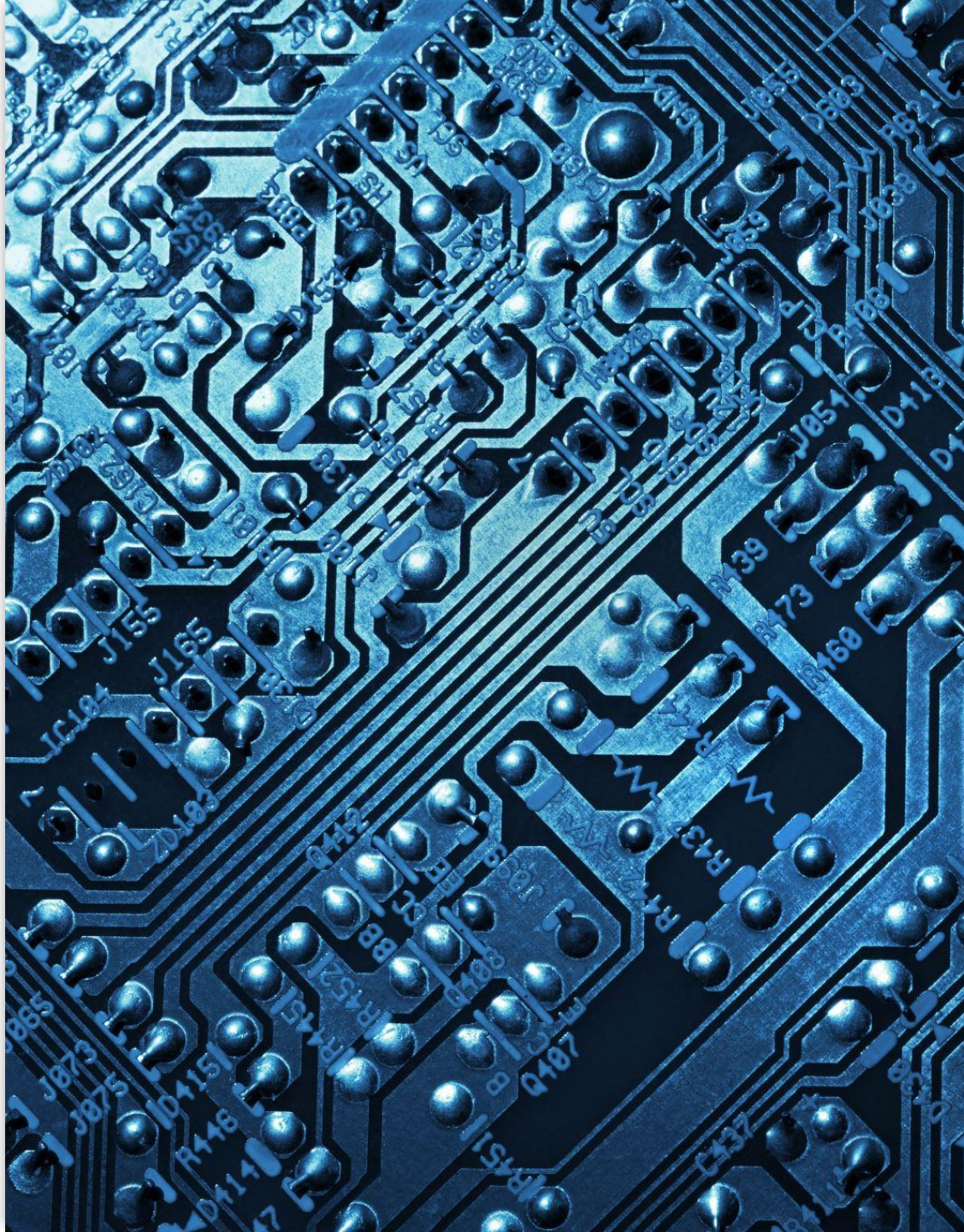
Abstract

- This project aims to develop an advanced banking application integrating chatbots for user assistance, machine learning models for fraud detection, personalized financial advice, real-time currency exchange, multilingual support, and biometric authentication.
- These features will improve user experience, enhance security, and provide comprehensive financial services.



Existing System

- Traditional banking applications often lack advanced fraud detection capabilities, leaving them vulnerable to sophisticated cyber-attacks and financial fraud.
- These systems typically rely on outdated rule-based mechanisms that fail to detect emerging fraud patterns and adapt to new threats.
- Additionally, they do not offer personalized financial advice tailored to individual users' financial situations, goals, and behavior.
- This absence of personalization limits the user's ability to make informed financial decisions and optimize their financial health.



- Furthermore, these applications generally provide limited support for diverse user needs, such as offering interfaces only in a single language, which can be a significant barrier for non-native speakers.
- The lack of multilingual interfaces makes it difficult for users from different linguistic backgrounds to effectively use banking services.
- Moreover, traditional banking apps often do not integrate biometric authentication methods like fingerprint or facial recognition, which are crucial for enhancing security and ensuring that only authorized users can access sensitive financial information.
- The combination of these shortcomings results in a suboptimal user experience and increased security risks.

Proposed Solution

- The proposed banking application will incorporate a chatbot for real-time user assistance, providing immediate help and guidance to users.
- Advanced fraud detection using machine learning will be implemented to identify and prevent fraudulent activities effectively.
- Personalized financial advice will be offered based on individual user data and financial behavior, helping users make better financial decisions.
- Real-time currency exchange services will enable seamless international transactions with up-to-date exchange rates

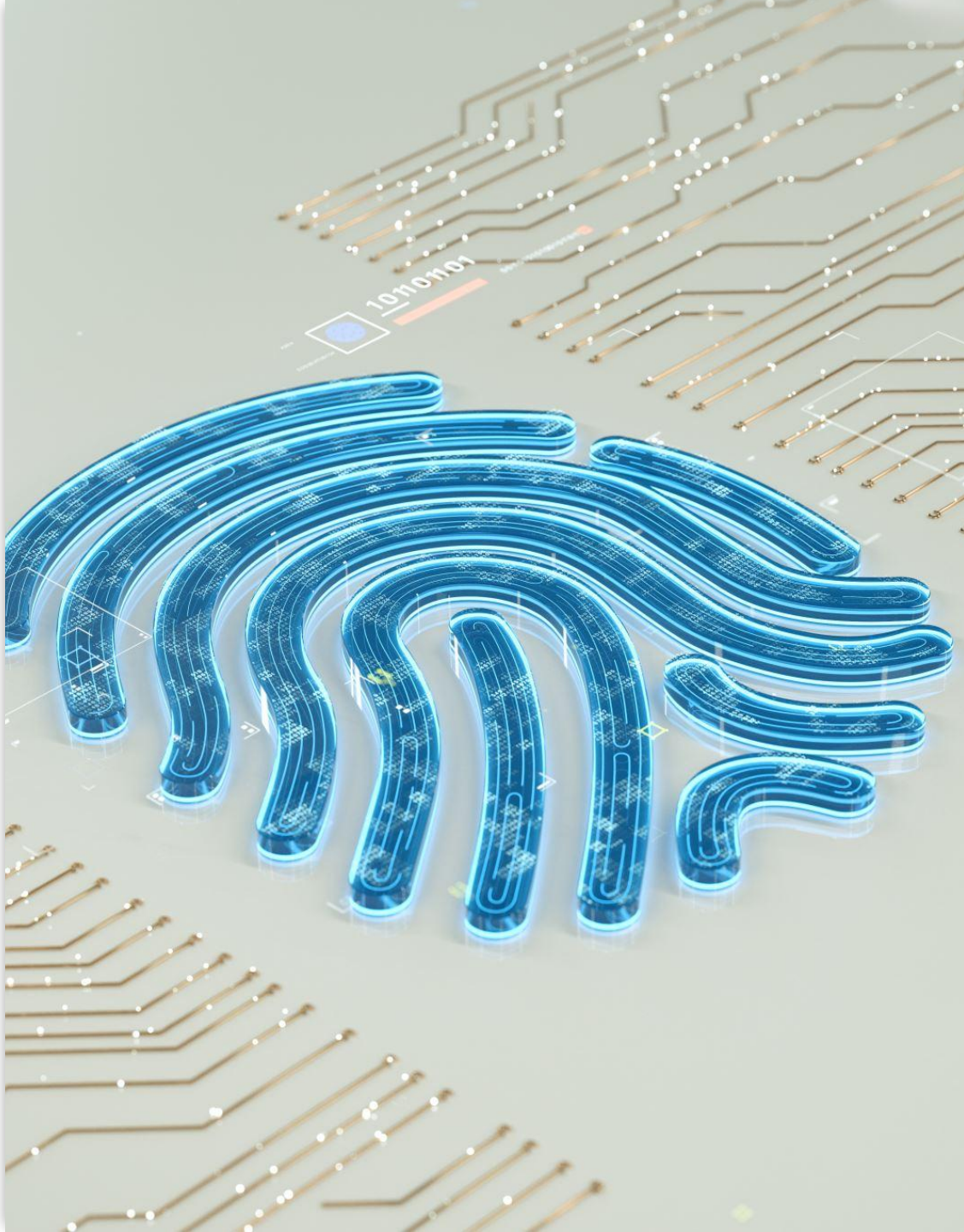
- Multilingual support will ensure that users can interact with the application in their preferred language, enhancing accessibility. Enhanced security through biometric authentication, such as fingerprint and facial recognition, will provide robust protection against unauthorized access.
- This comprehensive approach aims to address current shortcomings and deliver a superior user experience.

Real Life Application

- This application will enable users to securely manage their finances through robust security measures and intuitive interfaces.
- Users will receive personalized financial advice tailored to their unique financial situations and goals, helping them make informed decisions.
- The application will support transactions in multiple currencies, facilitating seamless international dealings. With multilingual support, users can interact with the application in their preferred language, making it accessible to a diverse user base.

- Biometric authentication methods, such as fingerprint and facial recognition, will provide an additional layer of security, ensuring that only authorized users can access sensitive information.

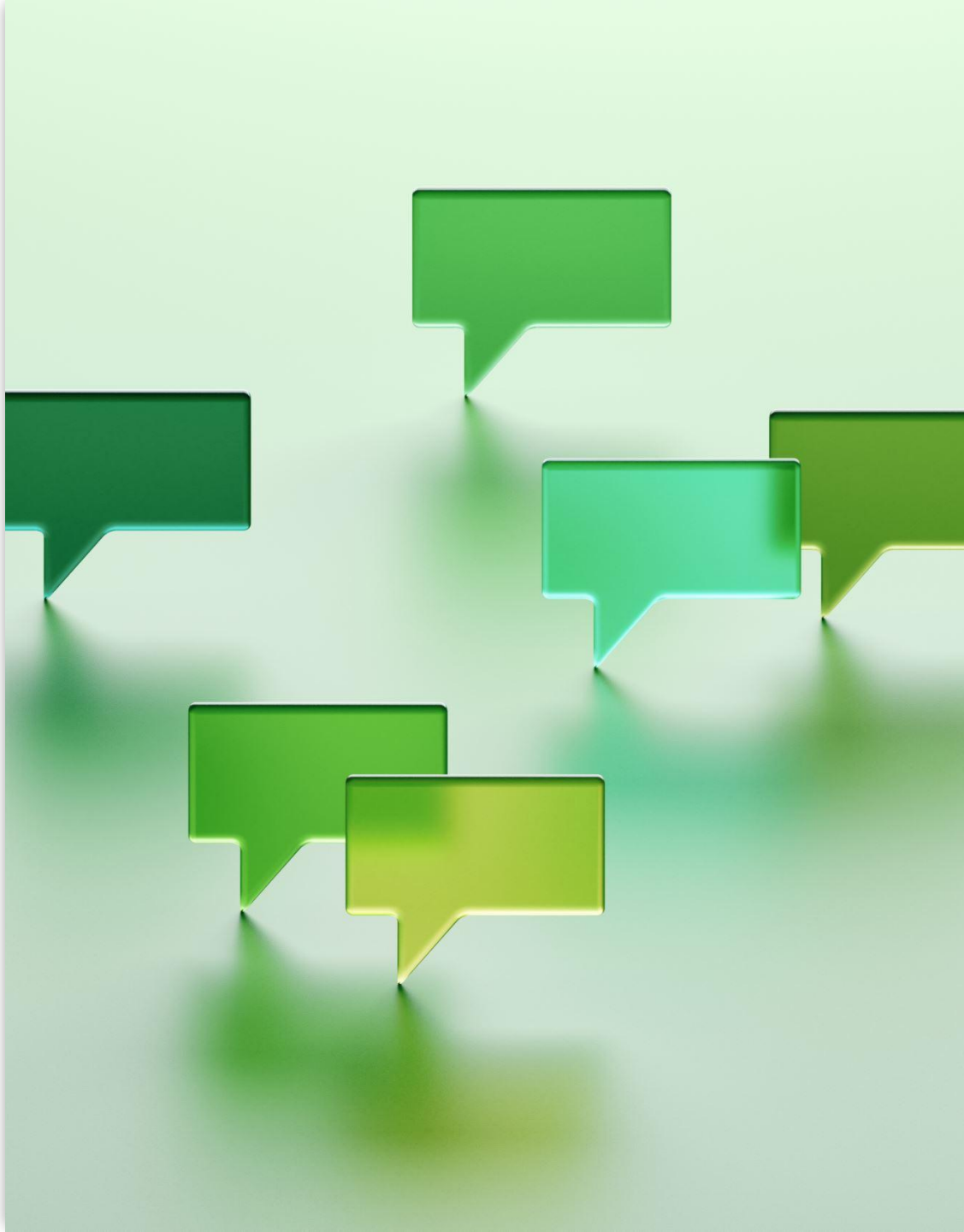
- This comprehensive suite of features will cater to a wide range of users, including older adults, enhancing their overall banking experience and confidence in managing their finances digitally.



Hardware/Software Requirements

- Hardware: The system will require modern smartphones capable of running advanced applications, biometric scanners for secure user authentication, and robust servers for backend processing to handle transactions and data storage efficiently.

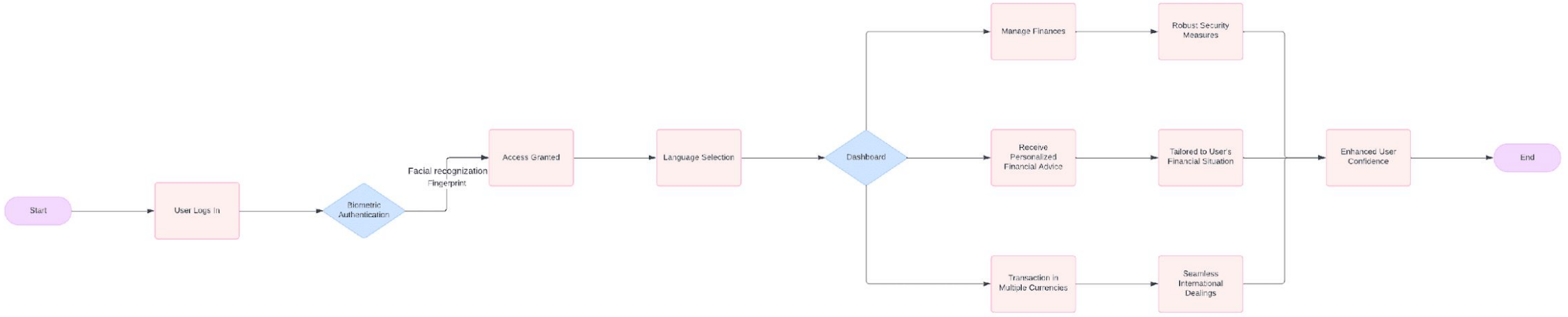
- Software: On the software side, the application will need to be compatible with mobile operating systems such as iOS and Android.
- It will utilize machine learning frameworks like TensorFlow and scikit-learn for fraud detection and financial advice personalization.
- Chatbot frameworks such as Dialogflow will be employed for real-time user assistance.
- Additionally, the application will integrate security protocols to protect user data and use APIs for real-time currency exchange.



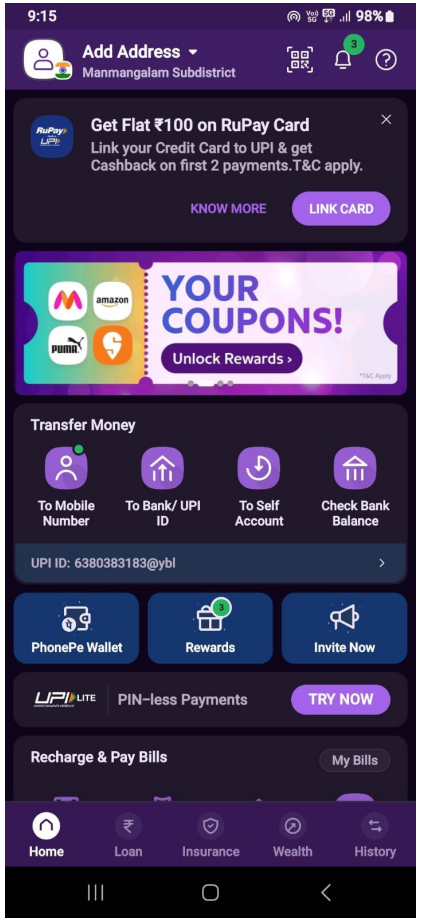
Project Modules Explanation

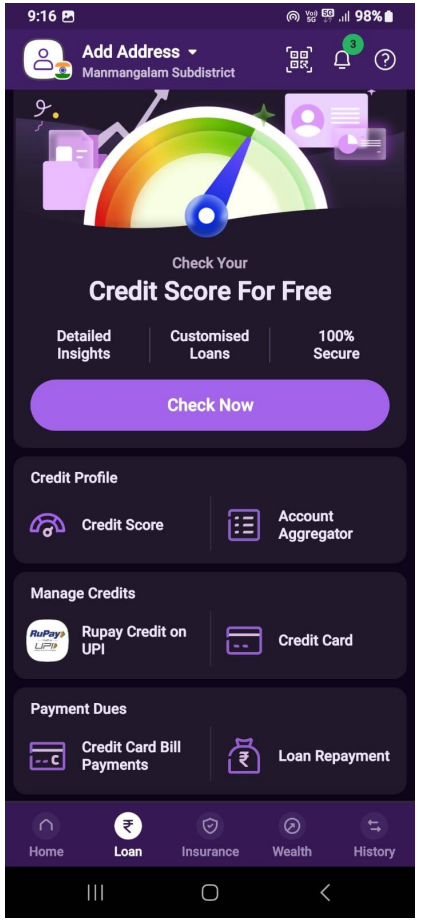
- **Chatbot Integration**: Real-time user assistance.
- **Fraud Detection**: Machine learning models for anomaly detection.
- **Financial Advice**: Personalized recommendations.
- **Currency Exchange**: Real-time rate updates and transactions.
- **Multilingual Support**: Interface and services in multiple languages.
- **Biometric Authentication**: Secure access using fingerprints and facial recognition.

WorkFlow


Start
User Logs In
Biometric Authentication
Facial recognization
Fingerprint
Access Granted
Language Selection
Dashboard
Manage Finances
Receive Personalized Financial Advice
Transaction in Multiple Currencies
Robust Security Measures
Tailored to User's Financial Situation
Seamless International Dealings
Enhanced User Confidence
End

OUTPUT


9:15
98%
Add Address
Manmangalam Subdistrict
Get Flat ₹100 on RuPay Card
Link your Credit Card to UPI & get Cashback on first 2 payments.T&C apply.
KNOW MORE
LINK CARD
YOUR COUPONS!
Unlock Rewards ›
Transfer Money
To Mobile Number
To Bank/ UPI ID
To Self Account
Check Bank Balance
UPI ID: 6380383183@ybl
PhonePe Wallet
Rewards
Invite Now
PIN-less Payments
TRY NOW
Recharge & Pay Bills
My Bills
Home
Loan
Insurance
Wealth
History


9:16
98%
Add Address
Manmangalam Subdistrict
Check Your
Credit Score For Free
Detailed Insights
Customised Loans
100% Secure
Check Now
Credit Profile
Credit Score
Account Aggregator
Manage Credits
Rupay Credit on UPI
Credit Card
Payment Dues
Credit Card Bill Payments
Loan Repayment
Home
Loan
Insurance
Wealth
History

Conclusion

- The proposed banking application aims to enhance user experience and security by integrating advanced technologies such as chatbots, machine learning for fraud detection, personalized financial advice, real-time currency exchange, multilingual support, and biometric authentication.
- This holistic approach will address current limitations and cater to a diverse user base, including older adults.

Thank you.

It’s nice to be nice!