Debit Card Tracking and Management System

Introduction:-

In conjunction with the increasing number of debit card usage, the tracking of card transactions and fraud prevention have become an issue which needs to be addressed with the urgency to prevent fraudulent activity. This integrated Debit Card Tracking Management System would be aimed at facilitating the user to track and control the usage of debit cards through an integrated platform. The features include real-time transaction monitoring, suspicious activity notifications, blocking or unblocking of cards, and card location tracking via transaction geo location data, OTPs for transaction.

Objective:-

A system that will help users track their debit cards, allow real-time monitoring of transactions, manages card security features, and alerts the user when suspicious activities are carried out using the card.

Key Features:-

1) User authentication and dashboard.
2) Login with multi-factor authentication.
3) Dashboard to display summary of active debit cards, recent transactions.
4) Real-time transaction tracking.
5) All debit card transactions are tracked in real-time.
6) A transaction detail display with user name, amount, date and time, and the location of transaction.
7) Instant alerts through SMS or email regarding suspicious transactions.

Card Security Features:-

1) Deactivate/activate the debit card by users for a specific period of time through the application.
2) Setting of limits regarding different kinds of transactions.
3) Transaction History and Reporting.
4) Provide the customers with the list of all the transactions.

5) Card Location Tracker tracks the location of the lost card based on transaction location.
6) Keep an eye on the status of card replacement requests.
7) Multi-Bank Integration i.e Integrate cards from different banks in one single platform for those users who have more than one debit card.
8) Google Maps to display the locations of transaction and to track the last-known location of card usage.

Implementation:-

1) Use of technologies like coding languages Java, HTML, etc for Front-end and Back-end developing
2) Apply machine learning to detect fraud patterns.

Notifications:-

1) Send SMS and Email alerts using services from Google, Meta,Cloud Messaging for push notifications on mobile devices.
2) Real-Time Processing: The system should process and update the transaction data in real-time so that there are no losses due to delays.

Outcomes:-

1) A debit card tracking system where a user can safely monitor the status of his card.
2) AI-based real-time fraud detection to give the assurance to the user.
3) Friendly interface for users to take immediate action if their card is lost or fraud transactions occur.
4) Adding budgeting functionality where the user will be able to set on many spending categories, and track every expense from that type as well.
5) Credit Card Support adding more functionalities in the system, like support for credit cards and other financial products.
6) Biometric Authentication: using finger scanning and face recognition for authentication.

Conclusion:-

1) The Debit Card Tracking and Management System will allow for real-time monitoring of debit card transactions for security enhancement.
2) It includes real-time transaction monitoring, AI-based fraud detection, and card security controls in order to enable user self-service on debit cards.
3) In this project, various technologies can be applied practically to user-friendly interfaces.
4) The technical skills emphasized by this capstone project are diverse, including software development, security, and data management.
5) The project itself addressed a real-world issue the security of debit card and fraud prevention and also provided chances of enhancement for the future.
6) such as budget tracking tools, biometric authentication, and more extended support towards other financial products, which all enhance the functionalities and user experience of the system.

Thank You

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