Credit Card

- ## Problem Statement:-

   Credit card systems face challenges related to data security, fraud prevention, user convenience and efficient transaction processing. Traditional system are prone to data breaches, slow transaction times and fraud, leading to reduced trust from cardholders and merchants.

- ## Scope:-

1. User Registration and Account Management
2. Transaction Processing
3. Fraud Detection and Prevention
4. Billing and Payments
5. Customer Support

- ## Functional Requirements:-

1. User Account Management: Allow user to apply for a credit card, update their personal details and view their credit history.
2. Transaction Authorization and Processing: Provide real-time transaction authorization, support secure online and offline payment and manage purchase limits.
3. Fraud Detection: Implement fraud detection mechanisms by monitoring unusual spending pattern
4. Billing and Statement Generation: Generate monthly statements calculate interest and track payment due.
5. Customer Services: Provide support through multiple channels, reports lost or stolen cards & resolve disputes

- **Non-functional requirements:**
1. Security: Implement robust data encryption, secure authentication methods.
2. Performance: Ensure real-time processing of transactions with minimal latency
3. Scalebity: Support a growing number of cardholders and transactions with minimal perfomace.
4. Reliability: Provide high availability to ensure cardholder can use their cards 24/7 without interuptions
5. Usability: Ensure an easy-to-use interface for both customers & bank employees with clear navigation & multilignial support.

- **Domain:**
    - The domain for this project is Financial Services; specifically focusing on Credit Card Management. It aims to Streamline processes for cardholders, banks and merchants.

- **Interface Requirement**
    i) User Interface
    ii) Hardware Interface
    iii) Software Interface

- **Design Constraints:**
    i) Security
    ii) Data Privacy
    iii) Scalability
    iv) Technology

Budget:
    i) Software Development: $75000
    ii) Hardware: $20000
    iii) Testing: $10000
    iv) Training: $5000