

Software Requirement Analysis

for Software “Even Up”

Feb 16, 2025

Group 5

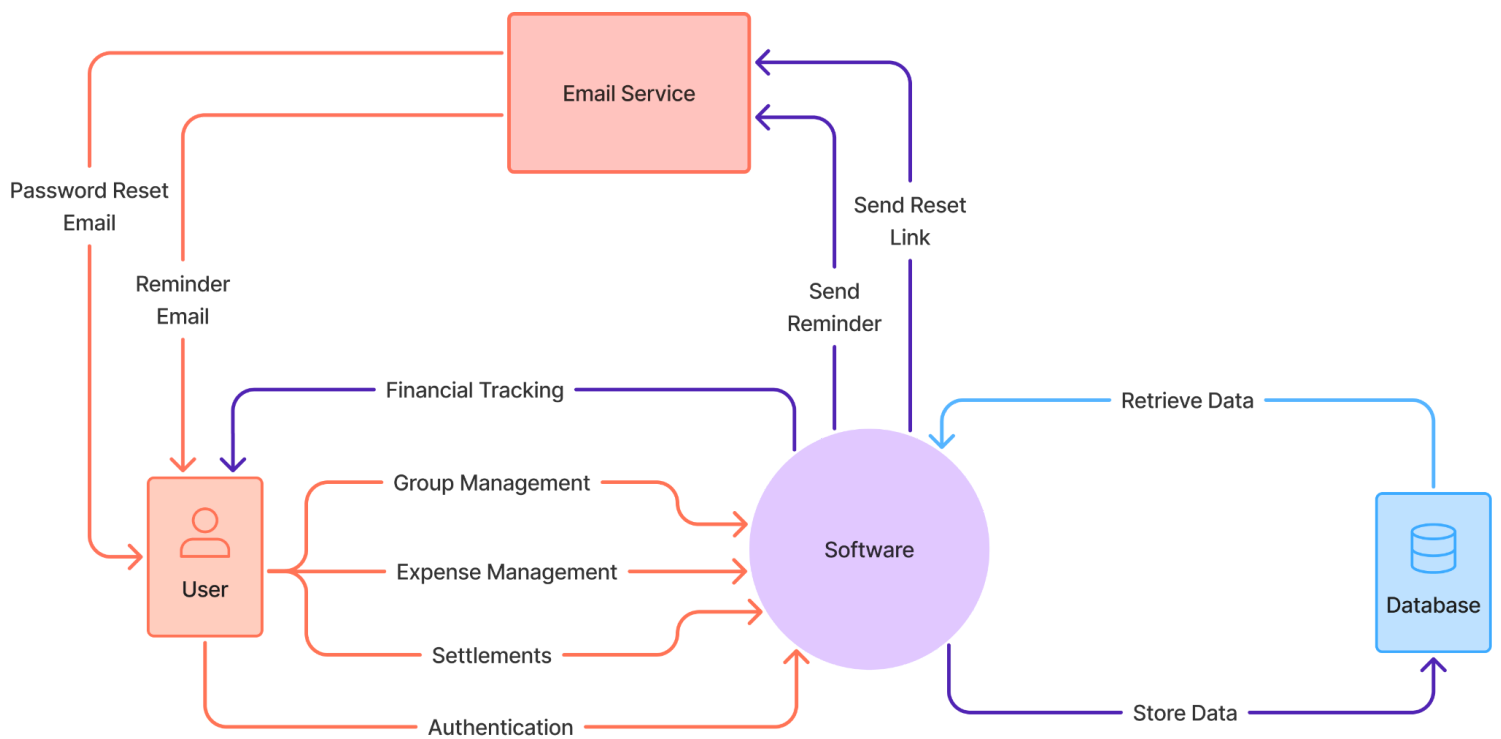
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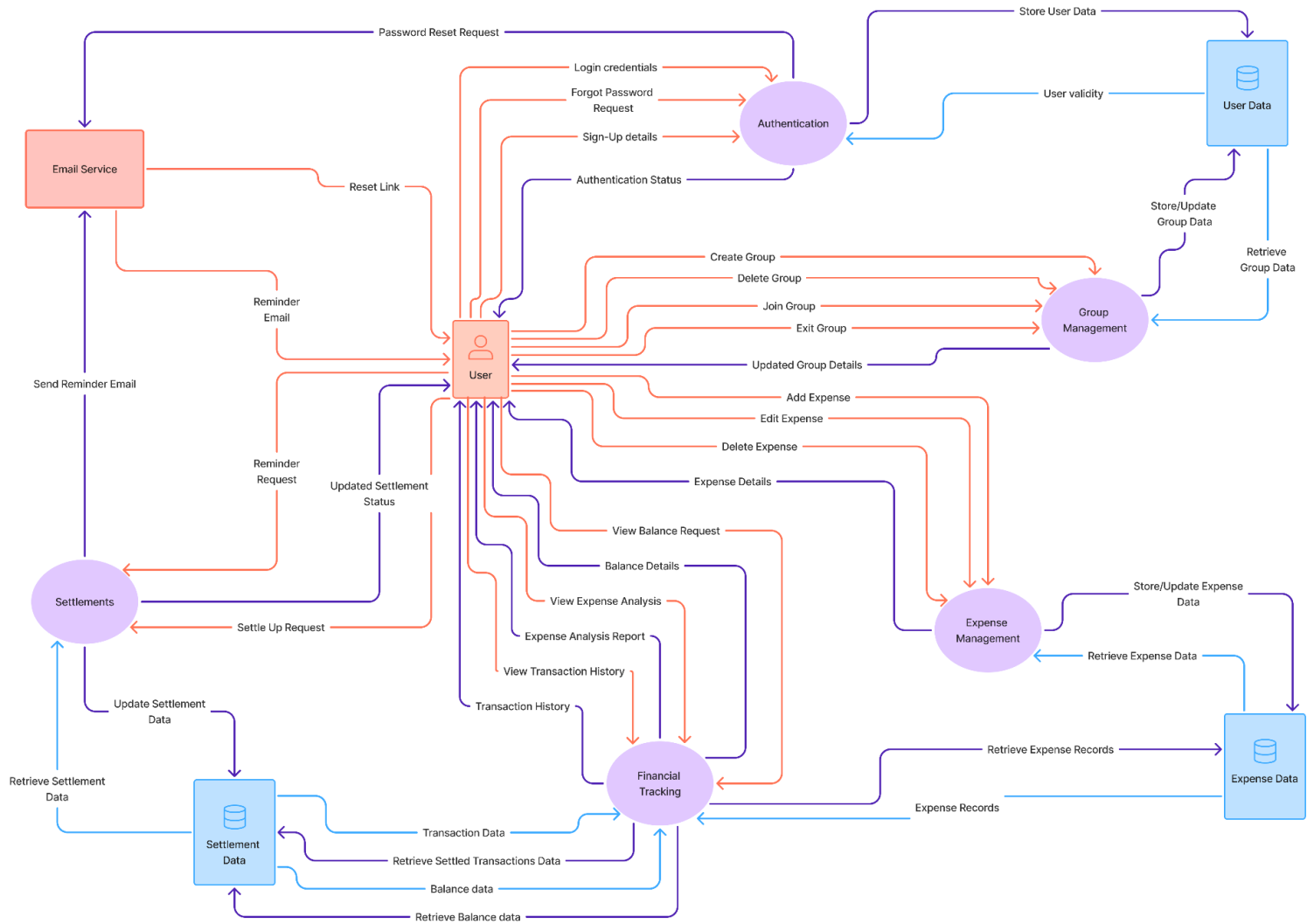
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a) Context Diagram



b) Data Flow Diagram



DFD's Brief Description

Core Processing Components

- Authentication module handles user login and signup operations, managing the user verification flow
- The Financial Tracking module maintains transaction records and generates balance details and expense analysis, providing an overview of all financial activities
- Expense Management module processes expense creation, updates, and deletions while supporting expense analysis reports and balance inquiries
- The Group Management module handles group operations and member interactions, allowing users to create, join, and manage group memberships

System Architecture

- The user interface connects to all primary modules through authentication
- The system stores and manages different types of data:
 - User data
 - Expense records and transaction histories
 - Settlement information
- Integrated Email Service handles reminder notifications for settlements

System Interactions

- Modules communicate through defined interfaces ensuring proper data exchange
- User actions trigger appropriate module responses with necessary data updates
- Email notifications are generated based on settlement states and reminder requirements
- Financial data is processed with proper tracking of group contexts and user associations

Each module performs specific operations while sharing necessary data through defined pathways, ensuring reliable expense tracking and settlement management.