

CSE 4508

PROJECT PROPOSAL

...

ABOUT US

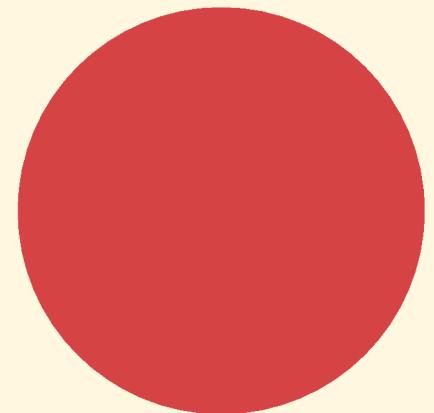
Juhan Ahmed Jarif
220041214

Aakash Abdullah Siddhartha
220041221

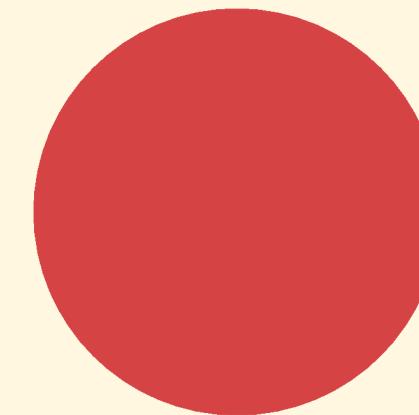
Tanvir Mahmud Hossain
220041253

...

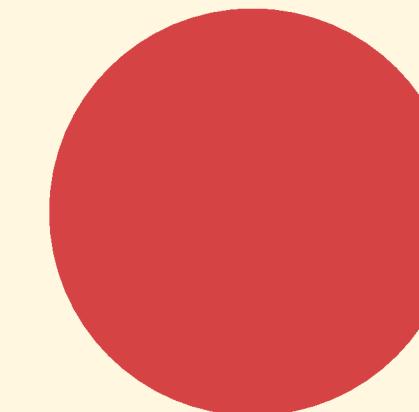
PROBLEM DOMAIN



Rising prices of daily necessities



Hard to keep track of multiple balances



Manual tracking often results in errors

...

PROJECT OVERVIEW

PERSONANCE

A Personal Finance Tracker

PROJECT SCOPE

● Account Management

- Multiple account types with real-time updates

● Transaction Management

- Fund transfers between accounts
- Expense tracking

● Budgets & Goals

- Set & track budgets, rent & loan payments

● Notifications

- Notify when budget exceeded or payment missed

● Analytics

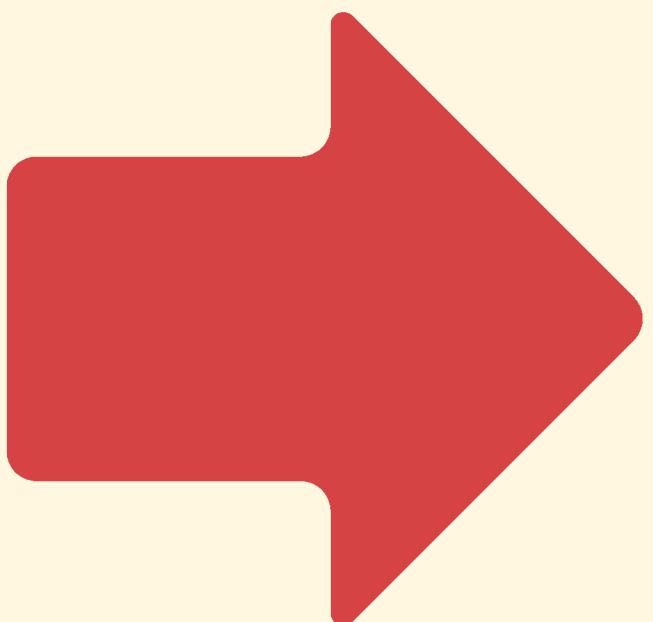
- Monthly financial summary

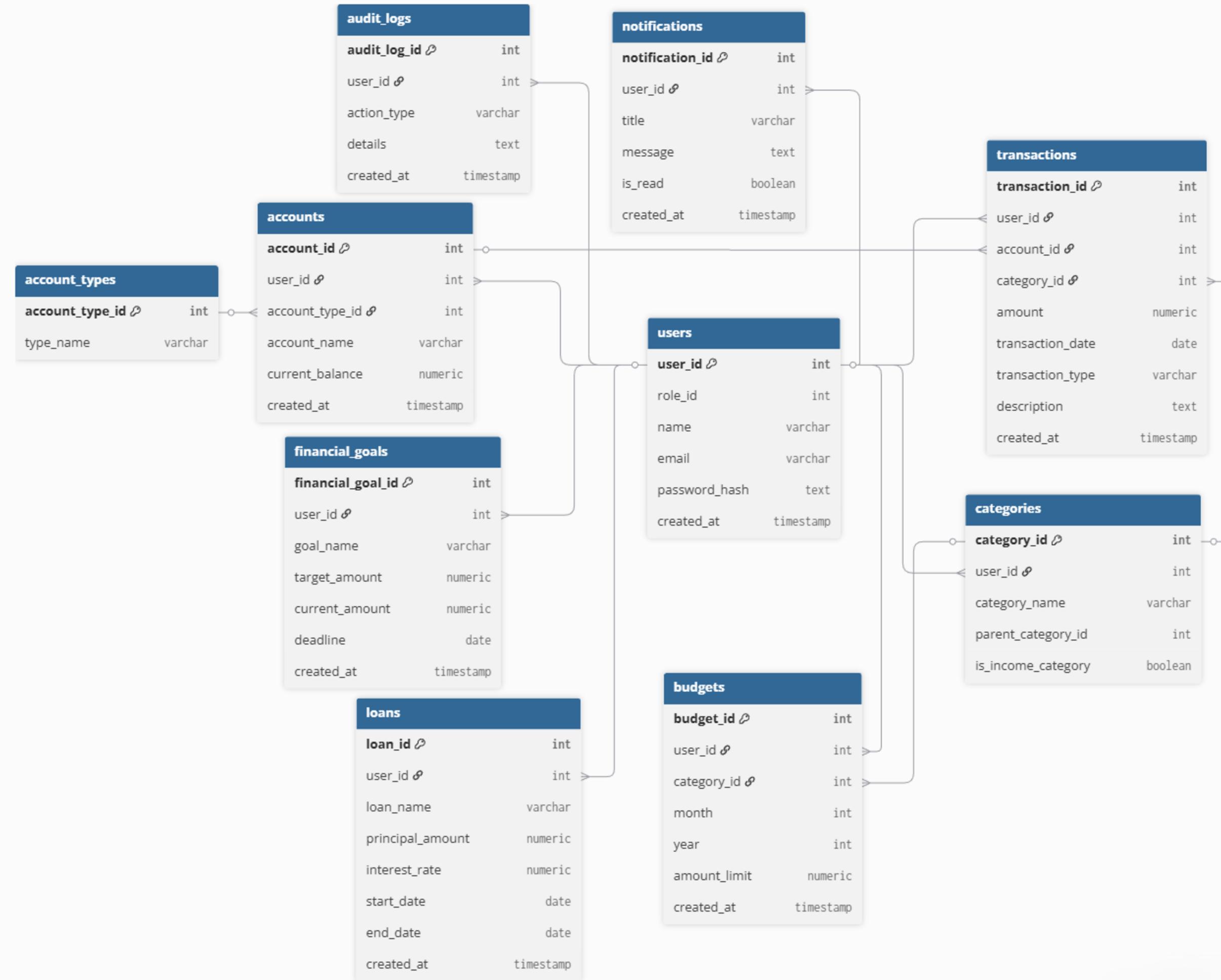
...

ROLE OF RDB

- Automation of business logic using triggers & procedures
- Role-based access control
- Maintain data integrity
- Optimize performance

ER
DIAGRAM
WITH
SCHEMA





INITIAL PROCEDURES

- **Transaction Procedure**
 - Automatically update account balance(s) after income/expense/fund transfer
- **Fund Transfer Procedure**
 - Modify both accounts' balances at the same time
 - In case of an error, changes are rolled back

INITIAL TRIGGERS

- **Transaction Validation**
 - Automatically check if transaction amount and date are valid before inserting/updating
- **Balance Update**
 - Update respective account balances after a transaction after inserting/updating
- **Audit Log**
 - Record whenever a valid change is made to account(s)

INITIAL SQL QUERIES

- **Categorised Expenditure**
 - Show the total amount spent for each category
- **Income vs Expense**
 - Show time-based patterns as a summary
- **Loan Calculations**
 - Show loan amount to be repaid after calculating and adding interest to the principal amount

TEAM ROLES

Database
Design

Juhan Ahmed
Jarif

PL/SQL
Logic

Tanvir Mahmud
Hossain

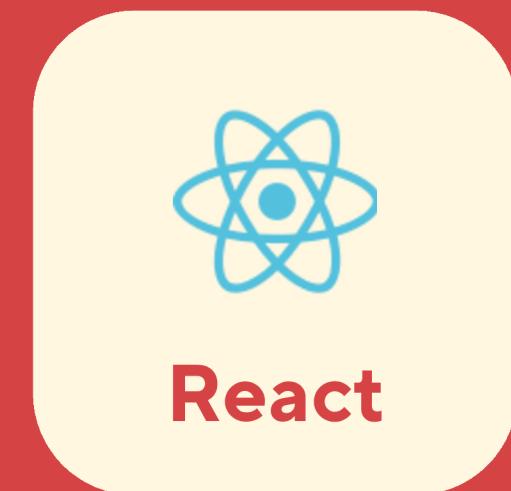
Backend
Integration

Aakash Abdullah
Siddhartha

...

TECH STACK

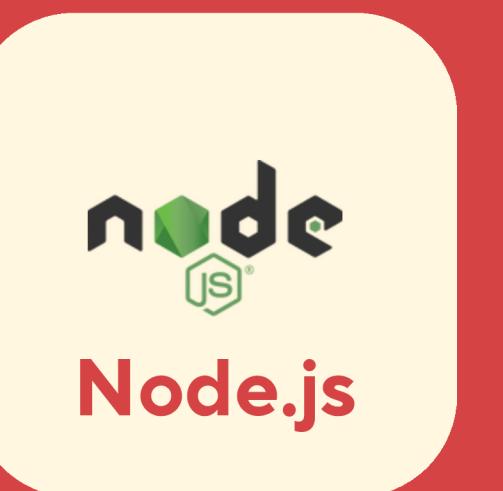
■ FRONTEND



■ DATABASE



■ BACKEND



■ COLLABORATION



THANK
YOU