

RASAYANS 2K25

CODE KINETICS



OPTIMIZERS

TEAM MEMBERS

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CODE KINETICS

TECH STACK

FRONTEND

REACT, TAILWIND CSS

BACKEND

NODE JS, EXPRESS JS

DATABASE

MONGO DB





SPLITZ

In shared living situations, travel groups, or social gatherings, managing joint finances and tracking "who owes whom" is a persistent challenge often plagued by manual calculation errors and lack of transparency.

This project presents the design and implementation of a Web-Based Group Finance Tracker, a full-stack application developed to automate expense splitting and settle debts efficiently.





WORKFLOW AND FEATURES

- SECURE ENTRY: USERS AUTHENTICATE VIA A SECURE JWT-BASED LOGIN SYSTEM TO ACCESS THEIR PERSONALIZED, PROTECTED DASHBOARD.
- GROUP DYNAMICS: COLLABORATION INITIATES BY CREATING SPECIFIC GROUPS AND ONBOARDING PEERS INSTANTLY USING UNIQUE SHAREABLE INVITE LINKS.
- TRANSACTION LOGGING: MEMBERS RECORD FINANCIAL TRANSACTIONS BY SPECIFYING THE AMOUNT, PAYER, AND EXPENSE CATEGORY IN THE CENTRAL LEDGER.
- AUTOMATED CALCULATION: THE BACKEND ALGORITHM IMMEDIATELY EXECUTES THE SPLIT LOGIC, AUTOMATICALLY DIVIDING COSTS EQUALLY AMONG GROUP MEMBERS.
- REAL-TIME ALERTS: THE SYSTEM TRIGGERS INSTANT NOTIFICATIONS TO ALERT SPECIFIC MEMBERS OF THEIR NEWLY ACCRUED DEBTS.
- VISUAL ANALYTICS: THE DASHBOARD UPDATES DYNAMICALLY TO VISUALIZE SPENDING HABITS VIA PIE CHARTS AND TRACK REAL-TIME SETTLEMENT STATUS.
- SCALABLE ARCHITECTURE: THE SYSTEM IS STRUCTURED TO SUPPORT FUTURE EXPANSIONS, INCLUDING AI-DRIVEN SPENDING INSIGHTS AND OCR-BASED RECEIPT SCANNING FOR AUTOMATED DATA ENTRY.

