



PERSONAL FINANCE TRACKER

CS-232



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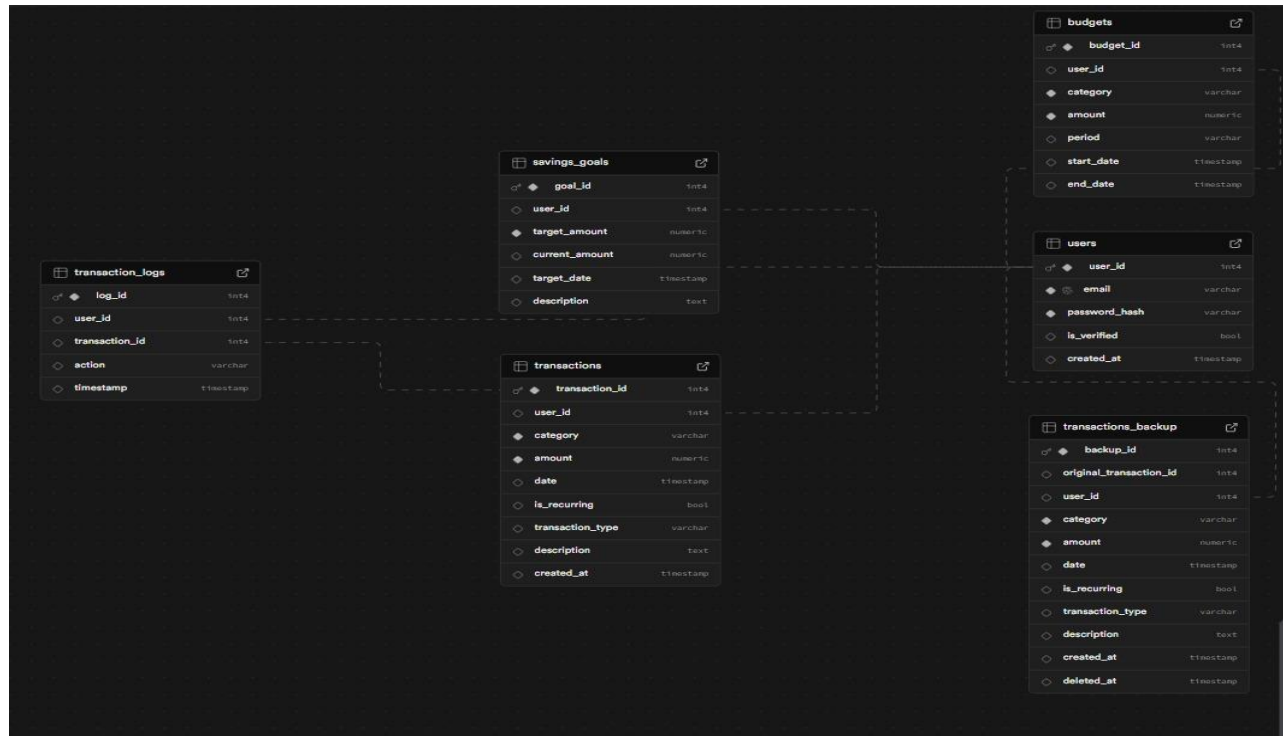
FEATURES

1. User Registration & Login - Secure login system using hashed passwords.
2. Add Transactions - Supports income and expenses with date and category.
3. Monthly Budgeting - Users can set budgets per category.
4. Savings Goals - Track and manage goals with progress monitoring.
5. Dashboard Overview - Real-time stats and graphs on income/expenses.
6. Financial Reports - Exportable reports by week/month/year.
7. PDF Report Download - Full report including insights and transactions.
8. GUI with Mobile App - Developed using Flutter.
9. Backend in Flask, PostgreSQL on Supabase.

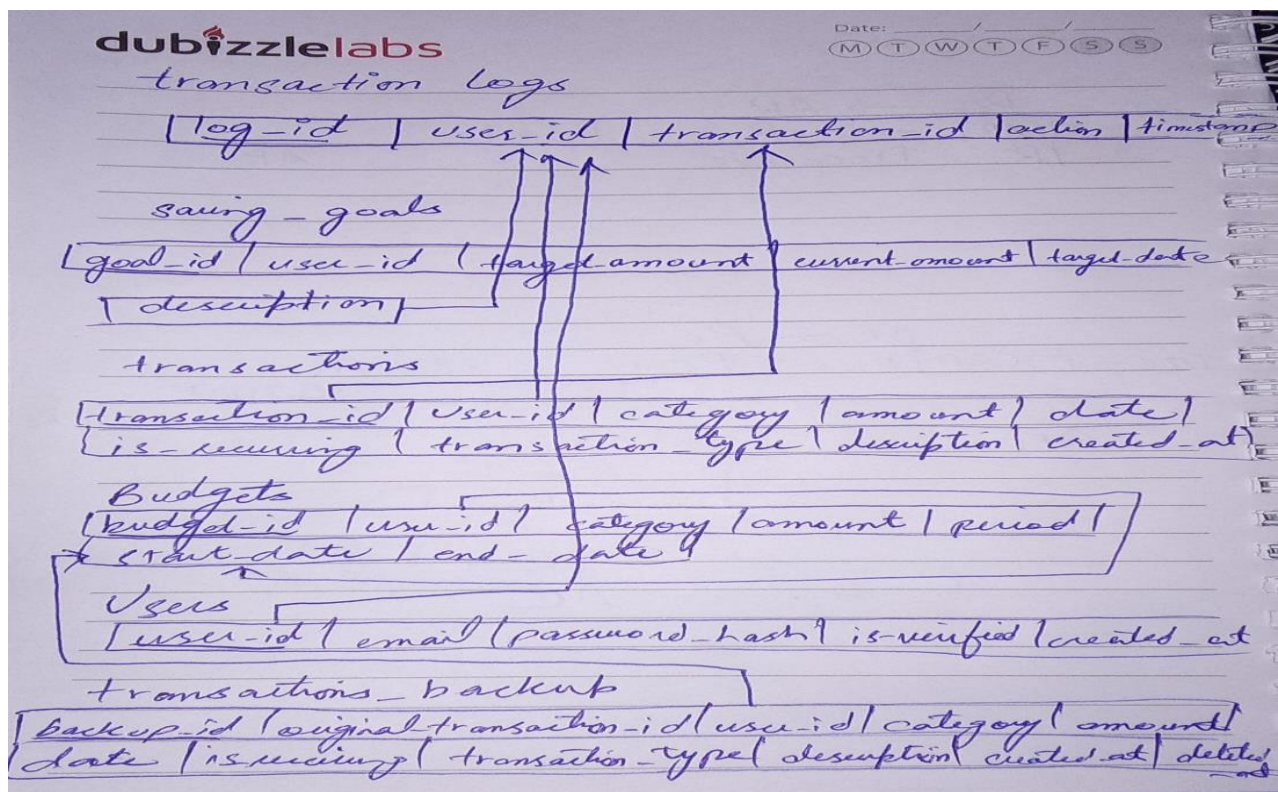
DESCRIPTION

- The Personal Finance Tracker app allows users to track their income, expenses, budgets, and savings in a centralized and user-friendly way.
- Built with Flutter for mobile and Flask as the backend, it connects to a PostgreSQL database hosted on Supabase.
- The app aims to simplify personal finance management by providing a real-time dashboard, goal setting, and intelligent reporting.

ER DIAGRAMME

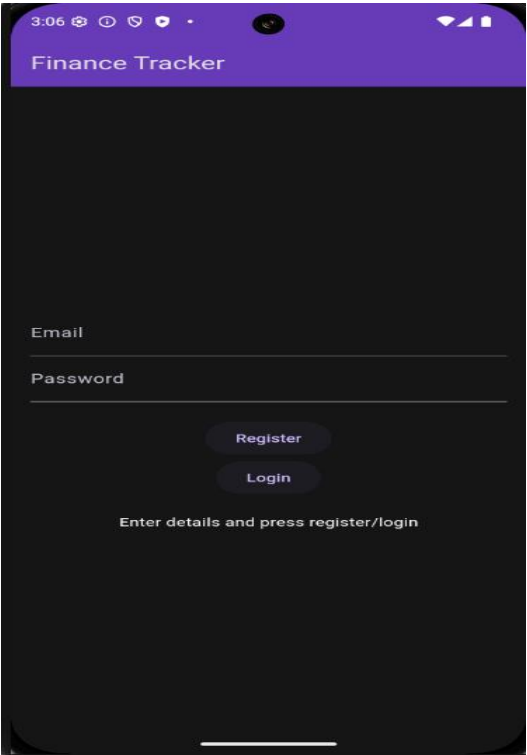


SCHEMA MAPPINGS



SCREENSHOTS(GULTABLES)

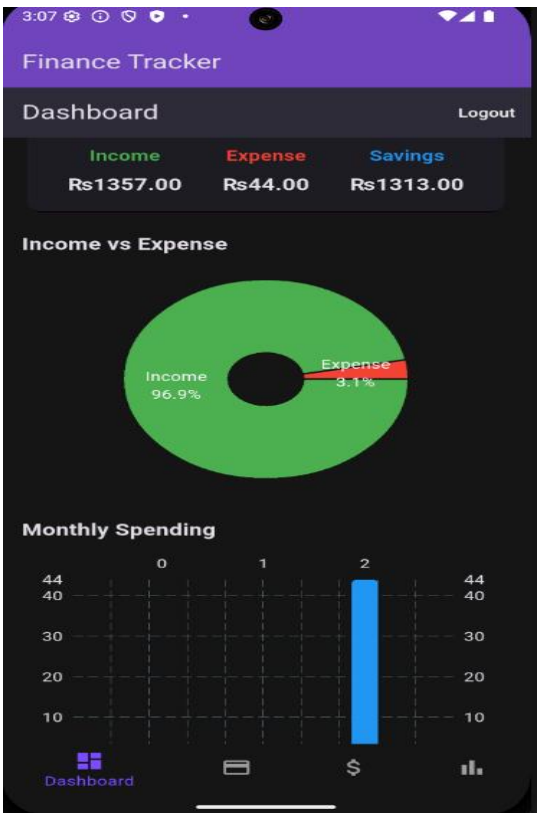
Login Register Page



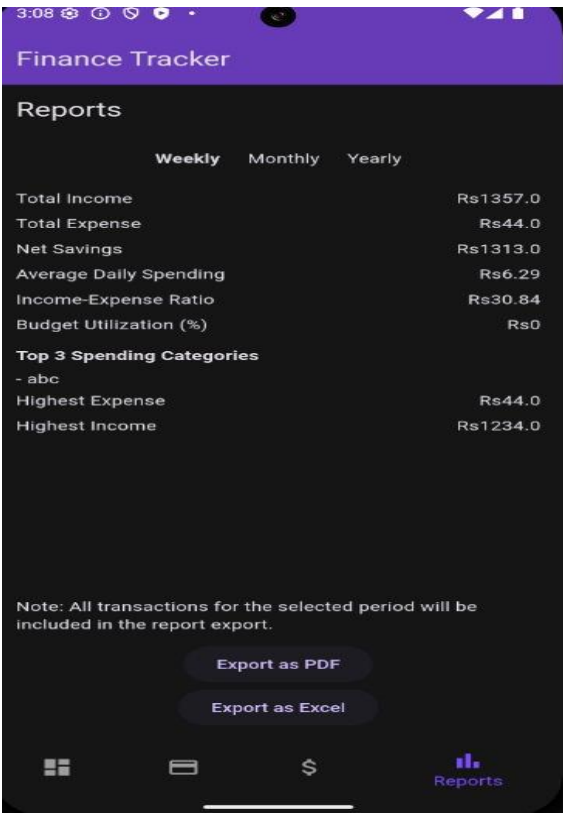
Budgets Page



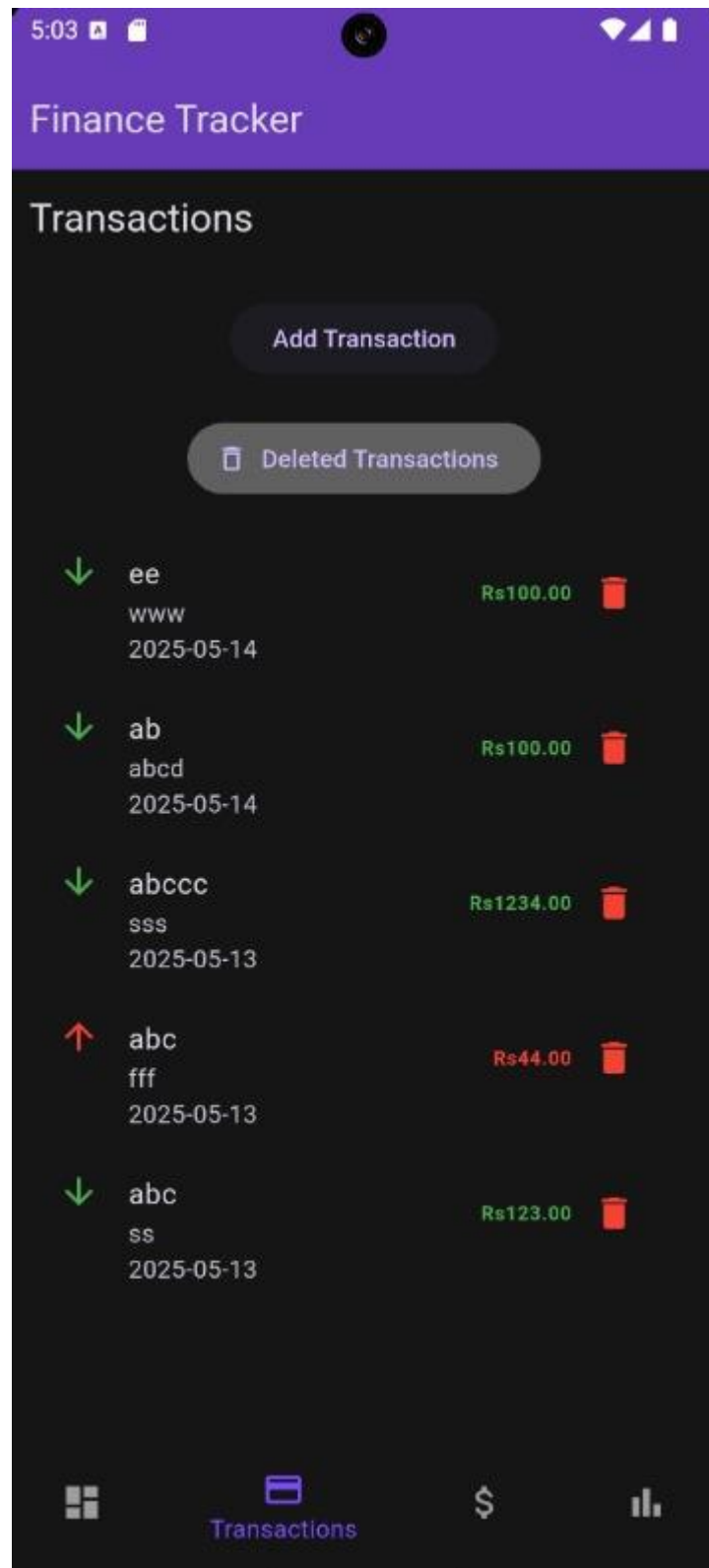
Dashboards Page



Reports Page



Transactions Page



```

1 CREATE TABLE users (
2     user_id SERIAL PRIMARY KEY,
3     email VARCHAR(255) UNIQUE NOT NULL,
4     password_hash VARCHAR(255) NOT NULL,
5     is_verified BOOLEAN DEFAULT FALSE,
6     created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
7 );
8
9 CREATE TABLE transactions (
10     transaction_id SERIAL PRIMARY KEY,
11     user_id INT REFERENCES users(user_id),
12     category VARCHAR(255) NOT NULL,
13     amount DECIMAL(10,2) NOT NULL,
14     date TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
15     is_recurring BOOLEAN DEFAULT FALSE,
16     transaction_type VARCHAR(50) CHECK (transaction_type IN ('income', 'expense')),
17     description TEXT
18 );
19
20 CREATE TABLE budgets (
21     budget_id SERIAL PRIMARY KEY,
22     user_id INT REFERENCES users(user_id),
23     category VARCHAR(255) NOT NULL,
24     amount DECIMAL(10,2) NOT NULL,
25     period VARCHAR(50) CHECK (period IN ('monthly', 'yearly')),
26     start_date TIMESTAMP,
27     end_date TIMESTAMP
28 );
29
30 CREATE TABLE savings_goals (
31     goal_id SERIAL PRIMARY KEY,
32     user_id INT REFERENCES users(user_id),
33     target_amount DECIMAL(10,2) NOT NULL,
34     current_amount DECIMAL(10,2) DEFAULT 0,
35     target_date TIMESTAMP

```

```

30 CREATE TABLE savings_goals (
31     goal_id SERIAL PRIMARY KEY,
32     user_id INT REFERENCES users(user_id),
33     target_amount DECIMAL(10,2) NOT NULL,
34     current_amount DECIMAL(10,2) DEFAULT 0,
35     target_date TIMESTAMP,
36     description TEXT
37 );
38
39 CREATE TABLE transaction_logs (
40     log_id SERIAL PRIMARY KEY,
41     user_id INT REFERENCES users(user_id),
42     transaction_id INT REFERENCES transactions(transaction_id),
43     action VARCHAR(50) CHECK (action IN ('add', 'edit', 'delete')),
44     timestamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP
45 );
46
47 CREATE TABLE transactions_backup (
48     backup_id SERIAL PRIMARY KEY,
49     original_transaction_id INT, -- link to original transaction_id
50     user_id INT REFERENCES users(user_id),
51     category VARCHAR(255) NOT NULL,
52     amount DECIMAL(10,2) NOT NULL,
53     date TIMESTAMP,
54     is_recurring BOOLEAN DEFAULT FALSE,
55     transaction_type VARCHAR(50) CHECK (transaction_type IN ('income', 'expense')),
56     description TEXT,
57     created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
58     deleted_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP -- time of deletion
59 );

```