

🔗 **Personal Finance Tracker – Project Summary Document**

🔗🔗 **Developed By**

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🔗 **Project Description**

The Personal Finance Tracker is a mobile application built using React Native with a Node.js backend and MongoDB database. It allows users to manage their finances efficiently by tracking income, expenses, and budgets in real-time.

🔗 **Technology Stack**

- Frontend: React Native, Axios, React Navigation, React Native Chart Kit
- Backend: Node.js, Express.js
- Database: MongoDB (Cloud - MongoDB Atlas)
- Deployment: Render for backend hosting
- Version Control: Git & GitHub

🔗 **Core Functionalities**

🔗 **User Authentication**

- Register and login using JWT-based authentication
- Passwords securely hashed
- Input validation for user credentials

🔗 **Transaction Management**

- Create, Read, Update, Delete (CRUD) operations for transactions
- Fields: Description, Amount, Type (Income/Expense), Category, Date
- Optional support for recurring transactions

🔗 **Budget Management**

- Set monthly budgets
- Track budget usage with alerts
- Visual feedback on overspending

🔗 **Graphs & Data Visualization**

- Display income and expense summaries
- Category-wise chart visualizations
- Real-time updates for better financial insights

🔗 **Repositories & Deployment**

🔗 Frontend Repository

<https://github.com/vamshipenti/Finance-Tracker-Frontend>

🔗 Backend Repository

<https://github.com/vamshipenti/Finance-Tracker>

🔗 Live Backend (Render)

<https://finance-tracker-m0n1.onrender.com>

🔗 **Test Cases**

Functionality	Input	Expected Result
Register User	Valid credentials	User created successfully
Login	Valid credentials	JWT token generated
Add Transaction	Valid data	Transaction added
Update Transaction	Existing ID	Data updated
Delete Transaction	Existing ID	Deleted from DB
Fetch Transactions	User token	List returned

🔗 **Challenges Faced**

- Integrating JWT authentication securely
- Resolving CORS issues between mobile app and backend
- Handling merge conflicts while pushing to GitHub

- APK build process and deployment
- React Native chart rendering and responsiveness

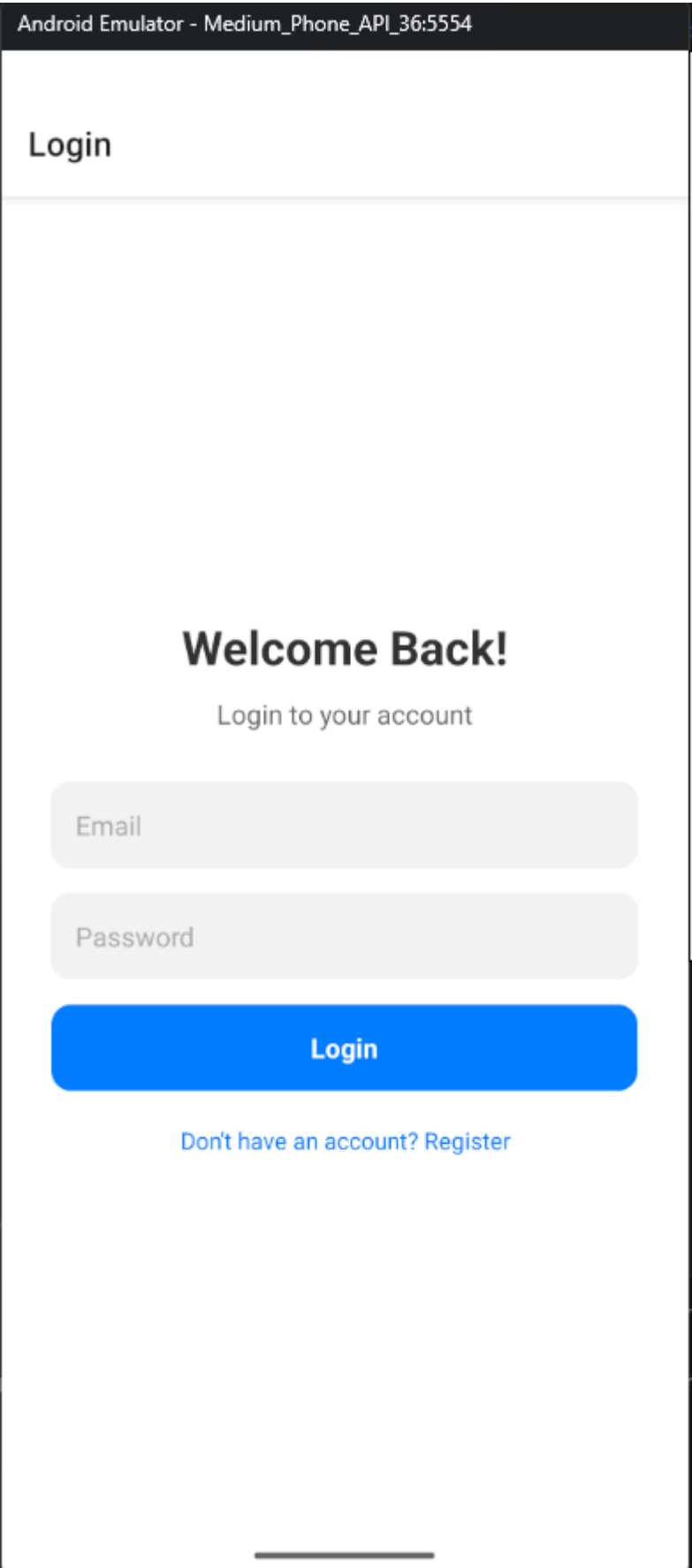
[📄 License](#)

MIT License

[📄 Screenshots](#)

Sample Screenshots for References

1. Login Page:



2. Registration Page:

Android Emulator - Medium_Phone_API_36:5554

← Register

Register

Username

Email

Password

Register

Already have an account? [Login](#)

← Register



Register

vamshipenti02

vamshipenti02@gmail.com

....|

Register

Already have an account? [Login](#)

12:18

← Login

Welcome Back!

Success

Registration Successful! Please login.

OK


Login


Don't have an account? [Register](#)


12:19


← Home

Achieve Financial Goals


Income
₹0


Expense
₹0


Balance
₹0


Current Budget
₹0

 View Budget vs Expense

 View Charts

Success

Login Successful!

OK

Manage Budget

Manage Transactions

Logout


← Home

Achieve Financial Goals


Income
₹0


Expense
₹0


Balance
₹0


Current Budget
₹0

 View Budget vs Expense

 View Charts

Recent Transactions

Manage Budget

Manage Transactions

Logout

← Manage Transactions

Total Income: ₹0
Total Expenses: ₹0
Budget: ₹0

Title

Amount

Select Category

Description

Transaction Type

Expense

ADD TRANSACTION

Filter by Type:

All

Filter by Date (YYYY-MM-DD):

Enter Date

12:20

← Manage Transactions

Total Income: ₹0
Total Expenses: ₹0
Budget: ₹0

Salary

Select Category

Food

Transport

Shopping

Entertainment

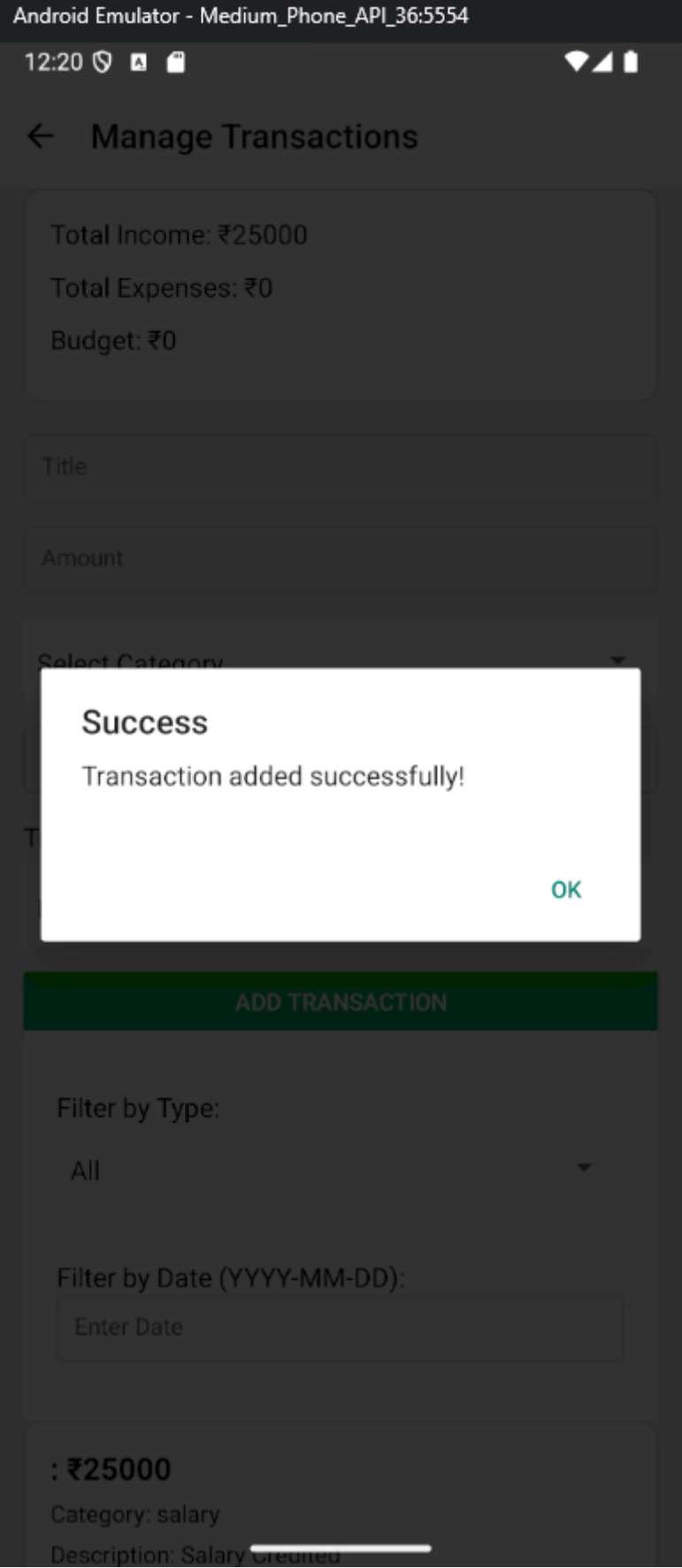
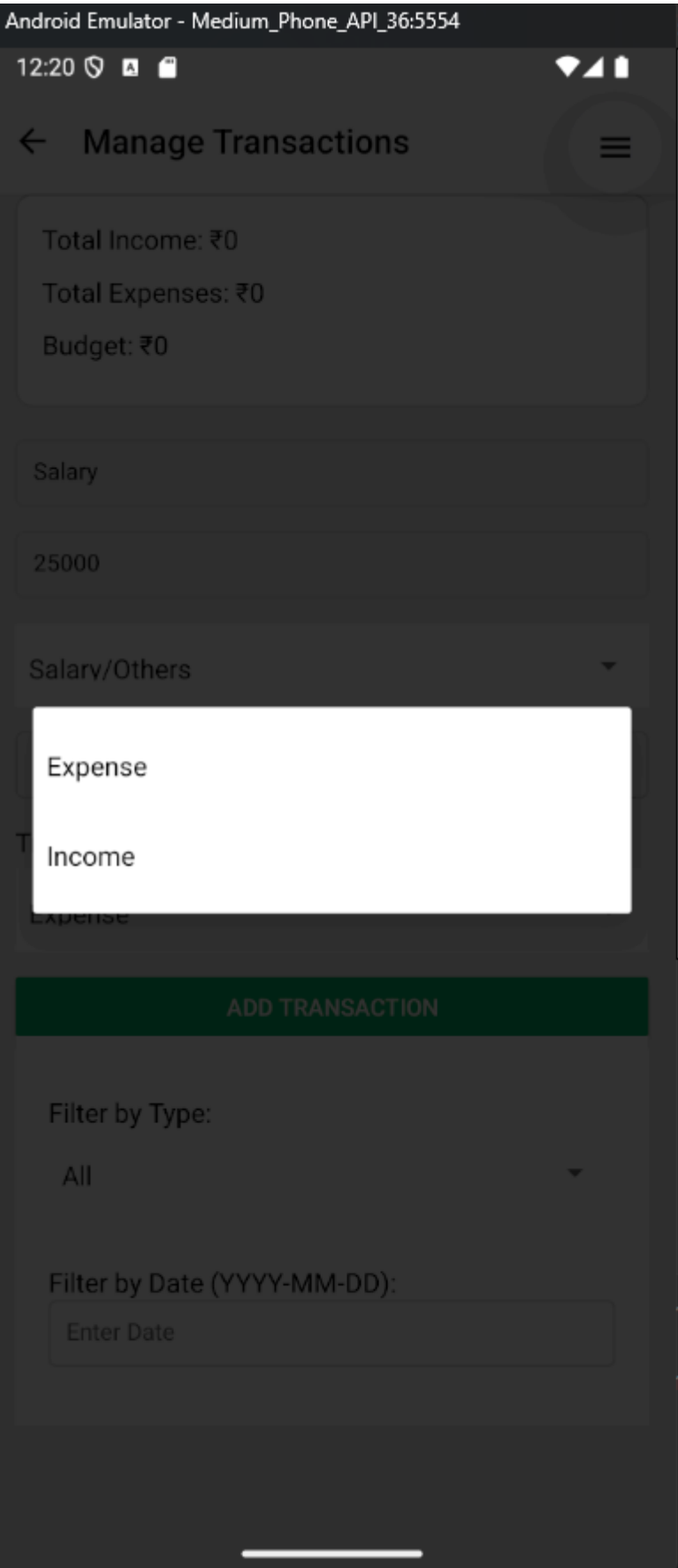
Health

Salary/Others

All

Filter by Date (YYYY-MM-DD):

Enter Date



← Manage Transactions

Title

Amount

Select Category

▼

Description

Transaction Type

Expense

▼

ADD TRANSACTION

Filter by Type:

All

▼

Filter by Date (YYYY-MM-DD):

Enter Date

: ₹25000

Category: salary

Description: Salary Credited

Type: Income

EDIT

DELETE

← BudgetMonthScreen

Set Your Monthly Budget

2025 - 4

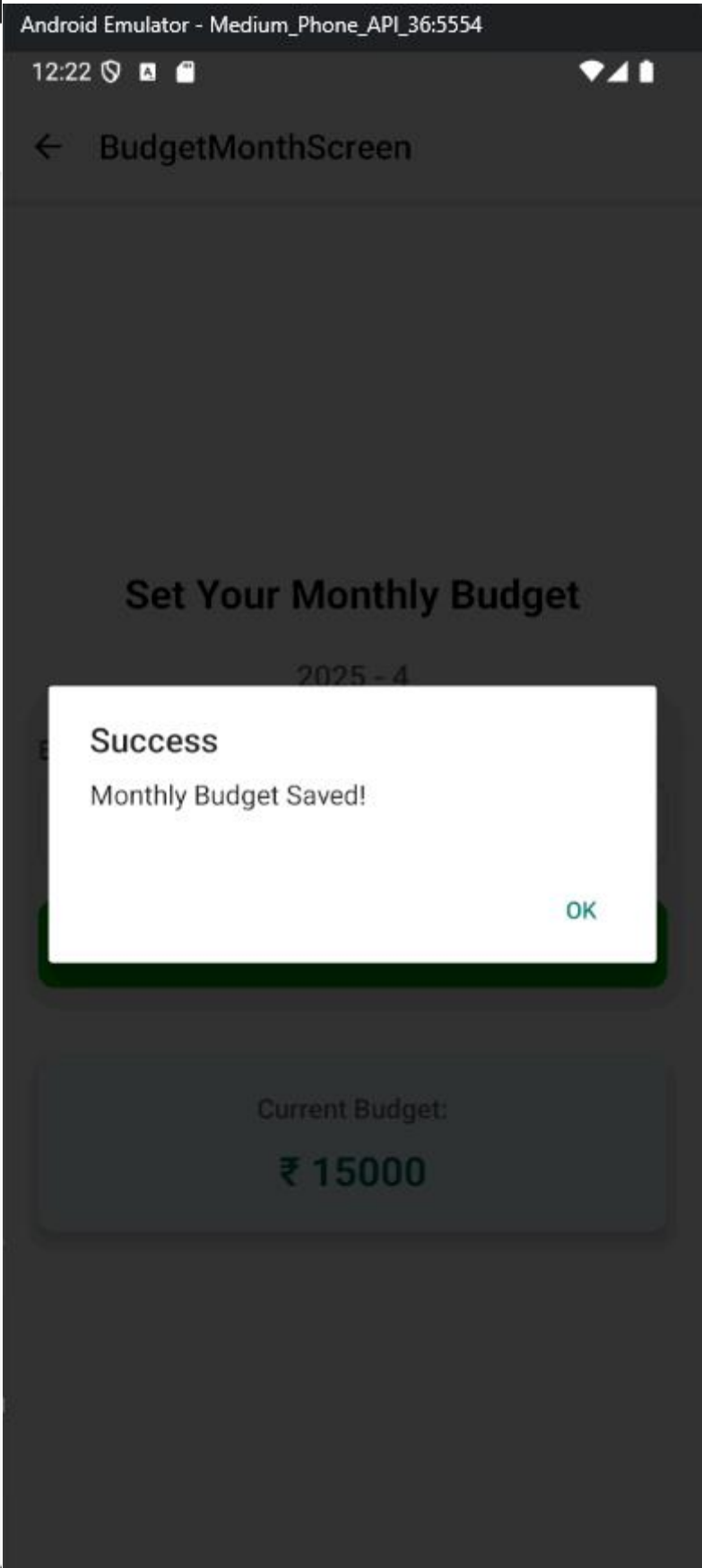
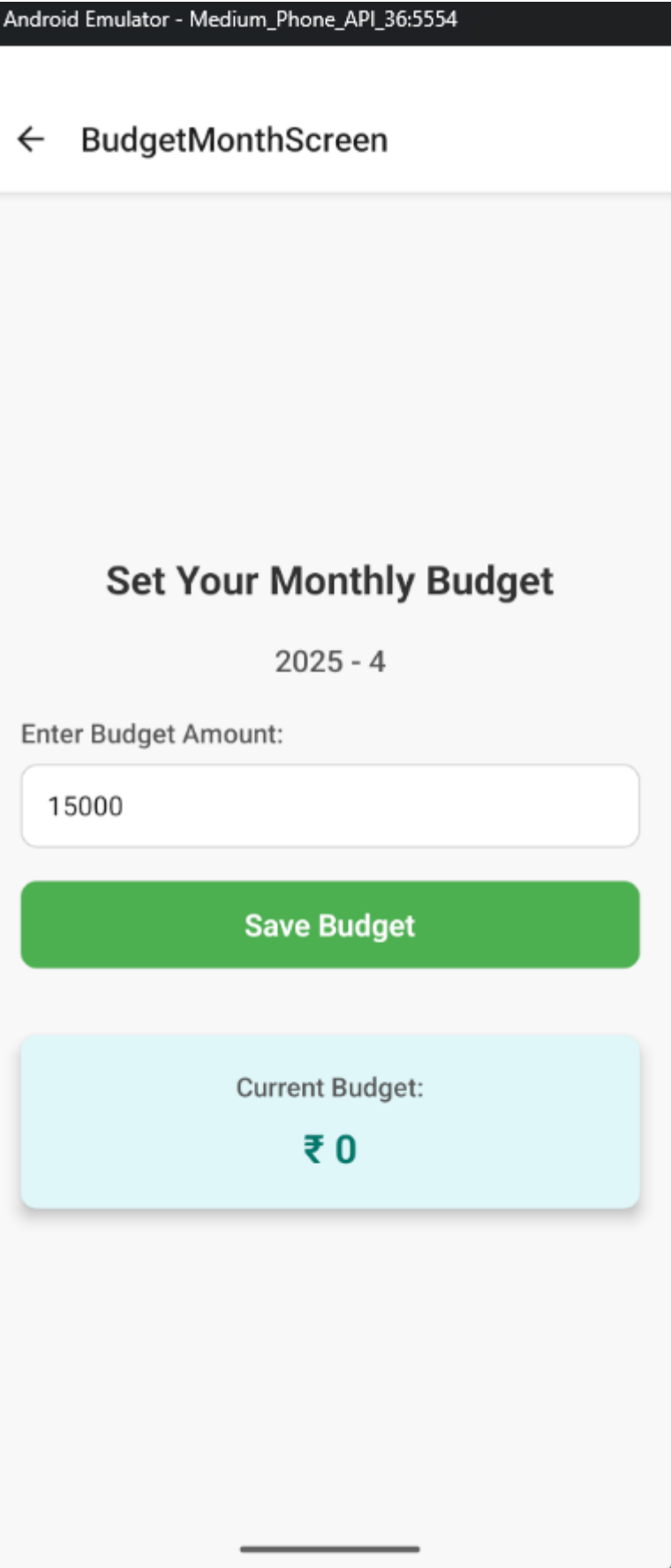
Enter Budget Amount:

₹ Enter amount

Save Budget

Current Budget:

₹ 0



Set Your Monthly Budget


2025 - 4

Enter Budget Amount:


Save Budget

Current Budget:
₹ 15000


Achieve Financial Goals




Income
₹25000



Expense
₹0



Balance
₹25000



Current Budget
₹15000

View Budget vs Expense

View Charts

Recent Transactions

Salary Credited

+₹25000

Manage Budget

Manage Transactions

Logout

← Manage Transactions



Total Income: ₹25000

Total Expenses: ₹0

Budget: ₹15000

Shopping

10000

Select Category

Groceries and Shopping

Transaction Type

Expense

ADD TRANSACTION

Filter by Type:

All

Filter by Date (YYYY-MM-DD):

Enter Date

: ₹25000

Category: salary

Description: Salary Credited

12:24



← Manage Transactions

Total Income: ₹25000

Total Expenses: ₹10000

Budget: ₹15000

Title

Amount

Select Category

Success

Transaction added successfully!

OK

ADD TRANSACTION

Filter by Type:

All

Filter by Date (YYYY-MM-DD):

Enter Date

: ₹10000

Category: shopping

Description: Groceries and shopping

← Manage Transactions

Total Income: ₹25000
Total Expenses: ₹10000
Budget: ₹15000

Title

Amount

Select Category

Description

Transaction Type

Expense

ADD TRANSACTION

Filter by Type:

All

Filter by Date (YYYY-MM-DD):

Enter Date


: ₹10000

Category: shopping


Description: Groceries and Shopping


← Home

Achieve Financial Goals


Income
₹25000


Expense
₹10000


Balance
₹15000


Current
Budget
₹15000

 View Budget vs Expense

 View Charts

Recent Transactions

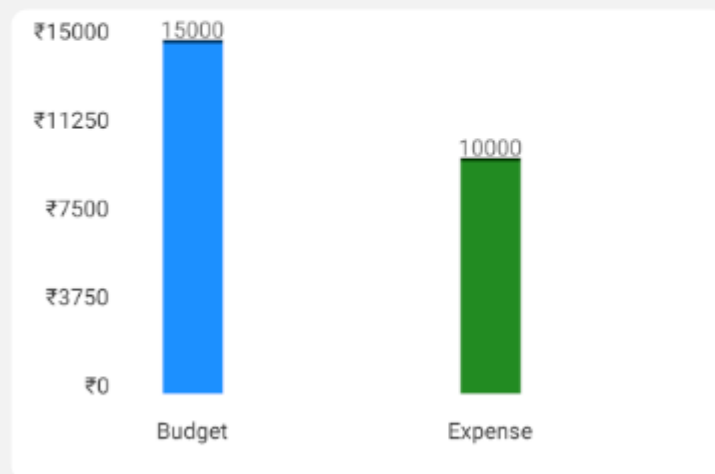
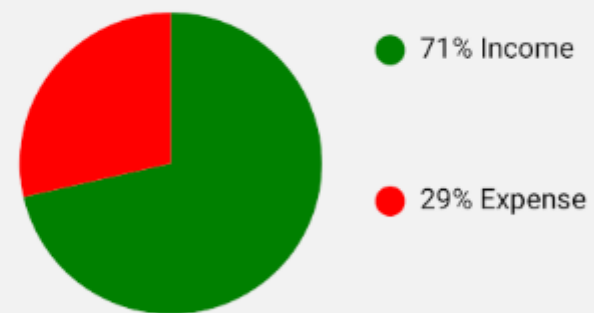
Groceries and Shopping -₹10000

Salary Credited +₹25000

Manage Budget

Manage Transactions

Logout

[← BudgetVsExpenseChart](#)**Budget vs Expense**[← ChartScreen](#)**Income vs Expense Chart**

Android Emulator - Medium_Phone_API_36:5554

← Manage Transactions

☰

Total Income: ₹25000

Total Expenses: ₹10000

Budget: ₹15000

Restaurant

10000

Food

▼

Restaurant

Transaction Type

Expense

▼

ADD TRANSACTION

Filter by Type:

All

▼

Filter by Date (YYYY-MM-DD):

Enter Date

: ₹10000

Category: shopping

Description: Groceries and Shopping

Android Emulator - Medium_Phone_API_36:5554

12:26

← Manage Transactions

Total Income: ₹25000

Total Expenses: ₹10000

Budget: ₹15000

Restaurant

10000

Food

▼

Budget Limit Exceeded

This expense exceeds your monthly budget!

OK

ADD TRANSACTION

Filter by Type:

All

▼

Filter by Date (YYYY-MM-DD):

Enter Date

: ₹10000

Category: shopping

Description: Groceries and Shopping