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FinGen



Smart Finance Management Application

Your Personal Companion for Smarter Spending & Better Planning



Presented by

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Your Smart Financial Companion

–

Where Every Rupee Finds Its Purpose.

Problem Statement

People often lose track of their expenses and struggle with budgeting — leading to overspending and poor financial planning.

Objective

To develop a smart, user-friendly finance management application that lets users record, analyze, and monitor their income and expenses — ensuring better financial control and peace of mind.



- ✓ Tracks income & expenses in one place
- ✓ Identifies unnecessary spending
- ✓ Sets and monitors daily spending limits
- ✓ Provides insightful visual reports



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Project features

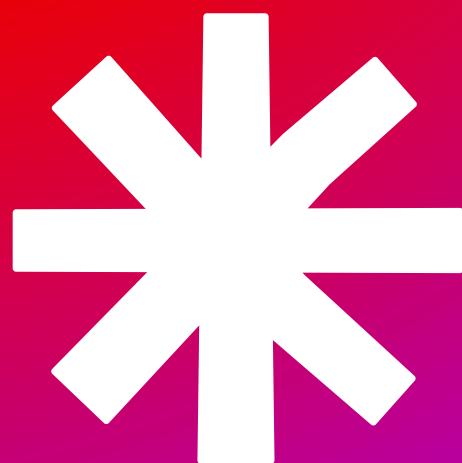


◆ Feature	✦ Description
✦ Add / Update / Delete Transactions	Seamlessly record, edit, or remove income and expenses in real-time.
📅 Daily Spending Limit (Smart Auto-Adjust)	Set a daily limit; if exceeded, the extra amount is deducted from the next day's limit — keeping your budget balanced.
🔍 Transaction Tracking	Instantly view, search, and filter your transactions by date, category, or amount.
📁 Expense Categorization	Group expenses into categories like Food, Travel, Bills, Shopping, etc., for better clarity.
📊 Reports & Summaries	Generates easy-to-read visual reports and charts for category-wise analysis and monthly spending overview.
🔒 Secure Data Storage (MySQL)	All user and transaction data safely stored in a structured MySQL database with instant retrieval.

✦ Each feature was designed with simplicity, speed, and user experience in mind.

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Technologies Used



🔧 The power behind FINGEN's smooth, smart, and seamless performance.

⚙️ Component	💡 Technology Used	🧠 Purpose
🐍 Programming Language	Python	Core logic, backend processing, and integration of all modules
🌐 Framework	Flask (Web Framework)	Connects frontend ↔ backend ↔ database smoothly
🎨 Frontend Stack	HTML, CSS, JavaScript, Bootstrap	Builds an interactive, responsive, and modern-looking web interface
🗄️ Database	MySQL	Stores user profiles, transactions, limits, and reports securely
📊 Data Processing / Prediction Library	Scikit-Learn	Powers analytical & forecasting modules (expense trends)
💻 UI Type	Web Application	Accessible from any browser — desktop or mobile

Flow / Architecture

 User →  Flask Web App →  MySQL Database →  Processing & Visualization →  UI Display (Reports + Charts)

Modules Implemented

- User Module – Handles registration, login, and logout
- Transaction Module – Adds, edits, deletes income/expenses
- Category Module – Organizes expenses into types (food, travel, bills, etc.)
- Limit Module – Sets and tracks daily expenditure limits, auto-adjusts next day's limit
- Payment Module – Tracks payments automatically
- Report Module – Generates category-wise reports and charts



Current
Progress *

- ✓ Fully functional UI pages – login, dashboard, reports etc
- ✓ Flask backend connected with MySQL
- ✓ Successfully integrated all the modules
- ✓ Implemented daily limit logic
- ✓ Successfully running demo on localhost

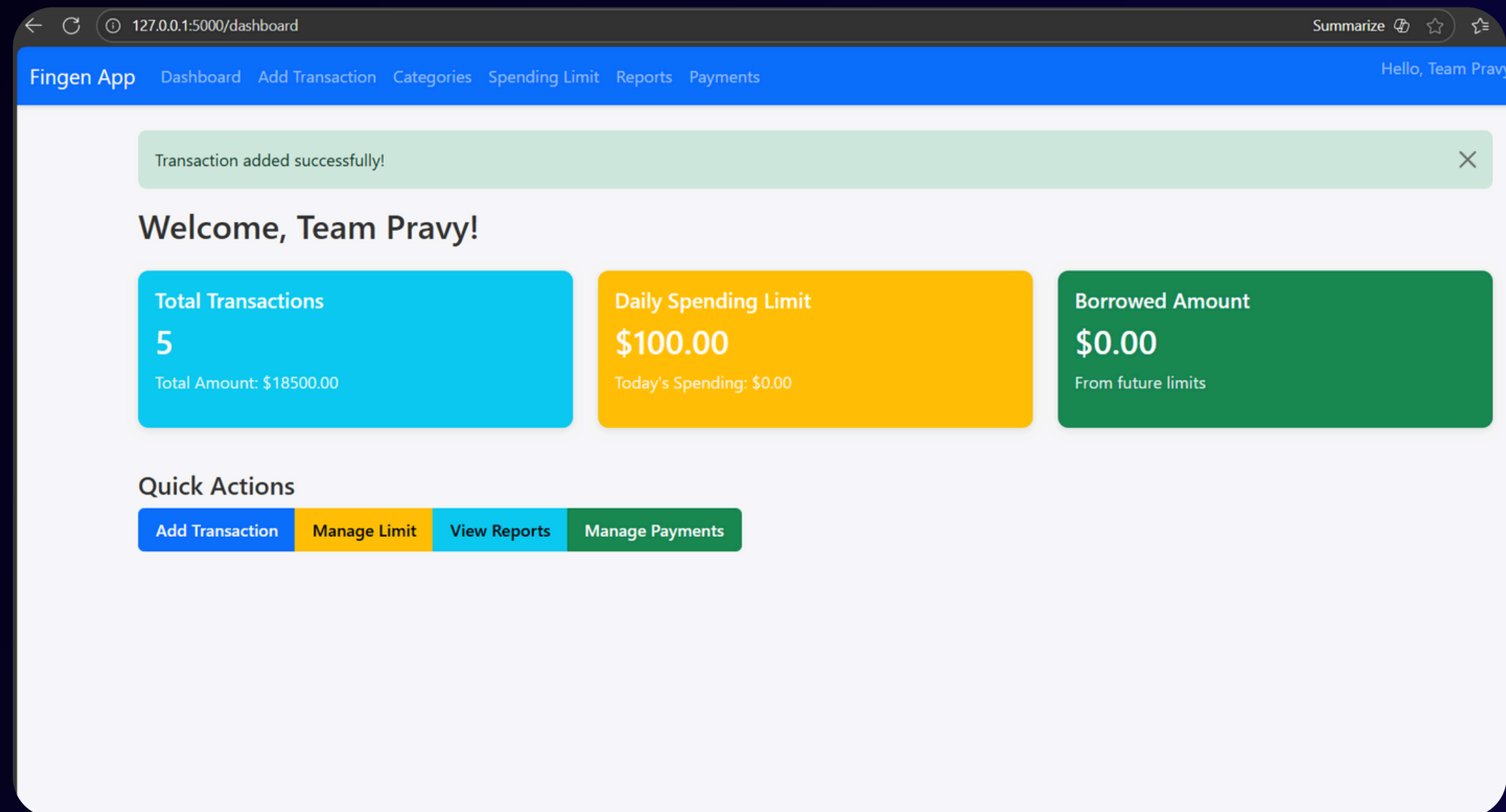
Link: <http://127.0.0.1:5000>

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Sample
Output

Register

127.0.0.1:5000/user/register

Summarize

Register for Fingen

Username

Email

Password

Register

Already have an account? [Login here](#)



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Sample
Output

Login

127.0.0.1:5000/user/login

Summarize

Login to FingerGen

Email

Team@gmail.com

Password

.....

Login

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



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Sample
Output

Dashboard

127.0.0.1:5000/dashboard

Summarize

Fingen AppDashboardAdd TransactionCategoriesSpending LimitReportsPaymentsHello, Team Pravy!Logout

Welcome, Team Pravy!

Total Transactions
0
Total Amount: \$0.00

Daily Spending Limit
\$100.00
Today's Spending: \$0.00

Borrowed Amount
\$0.00
From future limits

Quick Actions

Add Transaction

Manage Limit

View Reports

Manage Payments



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Sample
Output

Transaction

127.0.0.1:5000/transaction/add

Fingen App

Dashboard

Add Transaction

Categories

Spending Limit

Reports

Payments

Hello, Team Pravy!

Logout

Add New Transaction

Transaction Type

Expense

Category

Food (expense)

Date

11/11/2025

Amount

Description

Add Transaction

Cancel



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Sample
Output

Daily
Limit

←

↺

127.0.0.1:5000/limit/

Summarize

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🌈

Fingen App

Dashboard

Add Transaction

Categories

Spending Limit

Reports

Payments

Hello, Team Pravy!

Logout

Daily limit updated successfully!

×

Manage Spending Limit

Current Status

Daily Limit: \$100.00

Today's Spending: \$0.00

Remaining: \$100.00

Borrowed Amount: \$0.00

Update Daily Limit

New Daily Limit (\$)

100.00

Update Limit

Borrow from Future Limit

Need extra spending today? Borrow from future days' limits.

Amount to Borrow (\$)

Borrow Amount



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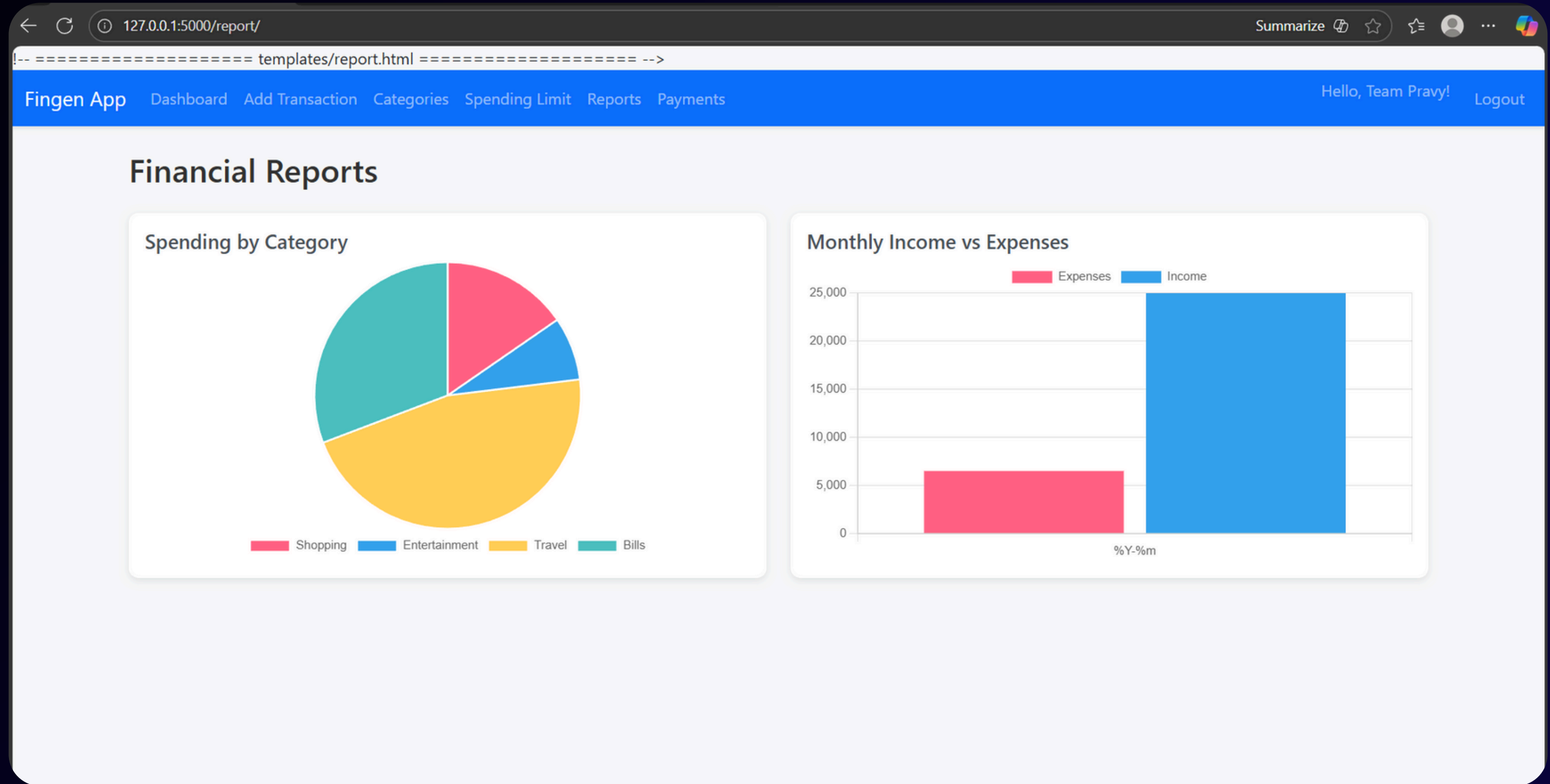
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Reports





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Categories

Fingen App Dashboard Add Transaction Categories Spending Limit Reports Payments

Hello, Team Pravy! Logout

Manage Categories

Add New Category

Category Name

Type

Expense



Add Category

Your Categories

Name	Type	Actions
Food	expense	Delete
Travel	expense	Delete
Bills	expense	Delete
Shopping	expense	Delete
Entertainment	expense	Delete
Salary	income	Delete
Freelance	income	Delete
Other	income	Delete



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Manage
Payments

127.0.0.1:5000/payment/

Summarize

Fingen AppDashboardAdd TransactionCategoriesSpending LimitReportsPayments

Hello, Team Pravy!Logout

Payment added successfully!

Manage Payments

Add New Payment

Amount (\$)

Description

Add Payment

Payment History

Date	Description	Amount	Status	Actions
2025-11-12 00:35	EMI	\$3000.00	unpaid	<div>Mark Paid</div> <div>Delete</div>

Challenges Faced

- Establishing database connection and resolving MySQL access errors
- Integrating Flask Blueprints for modular development
- Managing sessions and authentication
- Designing a modern and intuitive UI
- Coordinating tasks efficiently under limited time

“Each bug fixed was a lesson learned.”

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- Simplifies financial tracking
- Encourages mindful spending habits
- Keeps you within your daily budget
- Builds awareness of your financial health
- Promotes smarter, stress-free living

Real-Life Impact

**FINGEN is more than
an app — it's your
daily money mirror.**



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Thank You