# User Manual for Personal Expense Tracker Application

## Introduction

This document provides step-by-step instructions for installing, configuring, and using the Flask Budget Management Application. The application helps users manage their finances by tracking expenses, income, and budgets.

## Installation Guide

**Prerequisites**

Before installing the application, ensure you have the following:

1. **Python**: Version 3.7 or higher.
2. **Pip**: Python package installer.
3. **Firebase Admin SDK Key**: A private key JSON file for accessing Firestore.
4. **Flask and Required Libraries**: Install the necessary Python libraries listed in requirements.txt.

## Installation Steps

1. **Clone the Repository**:
2. git clone <repository\_url >cd <repository\_folder>
3. **Set Up a Virtual Environment**:
4. python -m venv venv
5. source venv/bin/activate # Linux/Mac

venv\Scripts\activate # Windows

1. **Install Dependencies**:

pip install -r requirements.txt

1. **Add Firebase Credentials**: Place your Firebase private key JSON file in a secure location (e.g., firebase/private.json). Update the path in the Flask app:

cred = credentials.Certificate(r"path/to/private.json")

1. **Set Environment Variables**: Create a .env file to securely store sensitive information:
2. FLASK\_APP=app.py
3. FLASK\_ENV=development

SECRET\_KEY=your\_secret\_key

1. **Run the Application**:

flask run

By default, the app runs at http://127.0.0.1:5000.

## Usage Instructions

**Login**

1. Open the application in your browser.
2. Enter your email and password to log in.

**Home Dashboard**

* View an overview of your finances, including:
  + Total income and expenses.
  + Savings.
  + Notifications for exceeded budgets.

**Add a Transaction**

1. Navigate to the **Add Transaction** page.
2. Enter the details:
   * Amount
   * Description
   * Category (e.g., Food, Rent)
   * Transaction Type (Income/Expense)
3. Click **Submit**.

**Edit or Delete Transactions**

1. On the dashboard, click the edit or delete icons next to a transaction.
2. Make changes or confirm deletion.

**View Reports**

* **Monthly Report**: View income, expenses, and category-wise spending for the current month.
* **Yearly Report**: Analyze yearly financial trends.

**Set Budgets**

1. Go to the **Set Budget** page.
2. Define monthly or general budgets for different categories.
3. Save changes.

**Backup Data**

1. Navigate to /backup to create a backup of all data.
2. Optionally, download the backup file using /download\_backup.

**Logout**

* Click on the logout button to securely end your session.

## Error Handling

* **Invalid Login**:
  + Ensure your email and password are correct.
  + If you forgot your password, reset it using Firebase.
* **Database Issues**:
  + Verify Firebase credentials.
  + Check your Firestore configuration.
* **Application Crash**:
  + Check logs for errors.
  + Ensure all dependencies are installed correctly.

**Customization**

**Changing the Port**

To change the default port, modify the app.run() line in app.py:

app.run(host='127.0.0.1', port=8080)

**Adding New Features**

1. Define new routes in app.py.
2. Add corresponding HTML templates in the templates folder.

**Support**

If you encounter issues, feel free to reach out:

* **Email**: mymhelp3@gmail.com