**<** **EXPENSE MANAGEMENT WEBSITE>**

# Agile Implementation Plan

**Version 0.1**

**03/21/2025**

1. **SDLC Model**

The Software Development Life Cycle (SDLC) model chosen for this project is the Agile Model. Agile is particularly suitable for this project because it emphasizes iterative development, collaboration, and adaptability, which aligns well with the need for a lightweight and user-friendly expense tracker. **Phases of Agile SDLC for This Project:**

1. Concept & Planning:
   * Define project scope, objectives, and requirements.
   * Identify user needs and finalize the tech stack.
2. Design:
   * Create UI/UX.
   * Develop system architecture and database design.
3. Development:
   * Implement features in sprints (frontend, backend, and analytics).
   * Conduct regular code reviews and testing.
4. Testing:
   * Perform functional, usability, and performance testing.
   * Fix bugs and optimize the system.
5. Deployment:
   * Deploy the MVP version to a live environment.
   * Gather user feedback for improvements.
6. Maintenance
   * Address issues reported by users.
   * Add new features (income tracking, multi-currency support).

**7.1 Overview**

This Implementation Plan serves as a comprehensive guide for deploying and managing the Simple Expense Management Website. The document outlines the processes, timelines, and resources required to successfully implement the system. It is intended to ensure that all stakeholders have a clear understanding of the deployment strategy, operational workflows, and any associated risks or considerations.

**7.1.1 System/Situation Description**

The System is designed to provide individuals with a simple, lightweight, and user-friendly tool for managing personal finances. The system supports the following processes:

* Expense Tracking: Users can add, edit, and delete expenses with details such as date, amount, category, and optional notes.
* Categorization: Expenses are grouped into predefined categories (e.g., Food, Transport, Bills) for better organization.
* Reporting: Users can view summaries of their spending trends and generate visual charts (bar/pie graphs) for insights.

Type of Data Maintained  
 The system maintains the following types of data:

* Expense Records: Includes details such as date, amount, category, and notes.
* User Preferences: Optional settings for filtering and viewing expenses.
* Authentication Data: Login credentials (if authentication is implemented).

Operational Sources and Uses of Data

* Sources: Data is manually entered by users through the web interface.
* Uses: Data is used to generate reports, filter expenses, and provide insights into spending habits.

**7.1.2 System/Situation Organization**

Major System Components

1. Frontend Components :
   * Homepage: Displays an overview of expenses.
   * Expense Form: Allows users to add/edit expenses.
   * Expense List: Displays recorded expenses in a table format.
   * Reports Section: Shows spending summaries and visualizations.
2. Backend Components :
   * API Endpoints: For handling CRUD operations (Create, Read, Update, and Delete) on expenses.
   * Authentication Module: Manages user login/logout functionality.
3. Database Components :
   * LocalStorage: Stores expense data locally.
   * Firebase (Optional): Stores expense data in the cloud for synchronization across devices.

Charts/Diagrams

* Architecture Diagram: A detailed diagram showing the interaction between frontend, backend, and database components.
* Workflow Diagram: Illustrates the process flow for adding, editing, and deleting expenses.