# WRSPM for ExpenseManager

Course: Software Engineering

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Project Role: Project Manager, Frontend Developer

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Institution: Farmingdale State College

# Overview

ExpenseManager is a tool designed to help individuals manage their finances more effectively. By providing a comprehensive platform to track income, expenses, and budgets, the Expense manager empowers users to gain control over their financial well-being and make informed financial decisions.

# World Assumptions (W)

- Users have access to the internet and appropriate devices (e.g. smartphones, computers).
- Users manage various types of expenses, including subscriptions, bills and personal payments.
- Users are motivated to track and manage their expenses efficiently.

# User Requirements (R)

- Easy-to-Use Interface
    - The system should provide a user-friendly interface for managing finances.
- Expense Categorization
    - Users should be able to categorize their expenses (e.g., bills, subscriptions, car payments).
- Expense Tracking
    - Users need the ability to track expenses over time and view historical records.
- Notifications
    - The system should notify users about upcoming due dates for expenses.
- Budget Planning

- o Users should be able to create and manage budgets for regular and one-time expenses.

# System Specifications (S)

- Expense Entry

    - o Users can input expense details, including name, amount, category, and due date.

- Budget Entry

    - o Users can define budgets by category and for large purchases.

- Data Storage

    - o Expense and budget data are securely stored using Firebase Firestore.

- User Authentication

    - o Secure login is implemented using Firebase Authentication.

- Notifications

    - o The system provides alerts for upcoming due dates.

- Reporting

    - o Users can view visual reports and summaries of spending patterns over time.

# Program and Hardware (P)

- Programming Language: Java

- Frontend Framework: JavaFX, and HTML/CSS

- Database: Firebase Firestore

- Authentication: Firebase Authentication

- Target Devices: Standard desktops and laptops with internet access

# Model (M)

- User Interface (UI)

  o Designed using JavaFX and Figma to provide a clean, intuitive experience.

- Backend Integration

  o Firebase handles user authentication and secure data storage.

- Notification System

  o Sends alerts for due dates.

- Reports

  o Generates reports to help users analyze their spending habits.