# WRSPM - Expense Manager

The Expense Manager 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 expenses including subscriptions, bills, and 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 expenses.
* Expense Categorization: Users should be able to categorize expenses (e.g., bills, subscriptions, car payments).
* Expense Tracking: Users need to track expenses over time and view historical data.
* Notifications: Users should receive notifications for upcoming due dates.
* Budget Planning: Users should be able to create and manage budgets for regular expenses and big purchases.
* Budget Alerts: Users should receive alerts when they are nearing their budget limits.

**System Specifications (S):**

* Expense Entry: The system should allow users to enter expense details, including name, amount, category, and due date.
* Budget Entry: The system should allow users to set up budgets for different categories and big purchases.
* Data Storage: Expenses should be stored securely in Firebase.
* User Authentication: The system should use Firebase Authentication for secure user login.
* Notifications: The system should send notifications based on due dates for expenses.
* Reporting: The system should provide visual reports and summaries of expenses over time.

**Program and Hardware (P):**

* Programming Language: The application will be developed using Java with JavaFX for the frontend.
* Database: Firebase Firestore will be used for storing expense data and budget data.
* Authentication: Firebase Authentication will be used for managing user logins and security.
* Devices: The application should run on standard desktops and laptops with internet access.

**Model (M):**

* User Interface (UI): JavaFX will be used to create an intuitive and user-friendly interface.
* Backend Integration: Firebase will handle data storage and user authentication.
* Notifications System: The application will include a notifications system for due dates and budget alerts.
* Reports and Analysis: The application will generate visual reports using JavaFX charts to help users analyze their spending patterns.