Centralized Schedule and Reminder Management System

Introduction

This project is designed to streamline the management of schedules and reminders. In today's fast-paced world, individuals are overwhelmed with numerous responsibilities and appointments, from vehicle maintenance tasks, such as annual registration, oil changes, and tire rotations, to personal commitments including dental check-ups, physical examinations, and children's appointments. We aim to develop a comprehensive system that centralizes schedule management, enabling users to categorize tasks, create specific items within each category, set reminders, and easily query upcoming events.

Project Objective

To develop a comprehensive system that simplifies the management of schedules and reminders for a wide range of tasks and appointments, thereby helping users organize their personal and professional lives more efficiently.

Target Audience

Individuals seeking a unified solution to manage personal and professional commitments, including vehicle maintenance, healthcare appointments, and family schedules.

System Capabilities

1. User Account Management
    - Users can create and manage their accounts, including setting up personal information and preferences.
2. Category Creation
    - Allows users to create customizable categories for organizing different types of tasks and appointments (e.g., Vehicle Maintenance, Healthcare Appointments, Family Commitments).
3. Task Management
    - Within each category, users can create specific items or tasks (e.g., Annual Car Registration, Dental Check-Up).
    - Each item can have detailed information, including due dates, descriptions, and any relevant attachments.
4. Reminder Setup
    - Users can set customizable reminders for each item, choosing from various notification methods (e.g., email, SMS, push notifications).
    - Reminders can be set at different intervals leading up to the event (e.g., one week before, one day before).

5. Events Query
    - A feature that allows users to view a list of upcoming events and tasks, filtered by categories, due dates, or custom user-defined filters.
    - A feature that allows users to search for events based on search criteria.
6. System Access
    - The minimum requirement is to develop a standalone system that runs on a computer
    - Preferred access is from a web interface or a mobile application or both, ensuring users can manage their schedules and reminders on the go.

System Requirements

- The interface must be user-friendly, allowing for easy navigation and task management.
- The system should send reminders reliably at the set times, ensuring users are adequately notified.

Tools to Use for Design and Development

1. You must use some UML CASE tools to make your analysis and design, such as IBM Software Architect, Rational Rose, or StarUML.
2. You must use Microsoft Project to work out your workplan and use MS Project to keep track of the progress of your project.
3. You may use Microsoft Visio to draw Entity-Relation diagrams (ERDs), and data flow diagrams (DFDs).
4. You must use some Unit Test tools (e.g., JUnit, CppUnit, etc.) to perform automated testing.
5. You must use some version control system to keep the consistency of your code. Possible choices include GitHub, CVS, subversion, Microsoft team foundation server, etc.