Singapore Book Council Digital PA System

Introduction

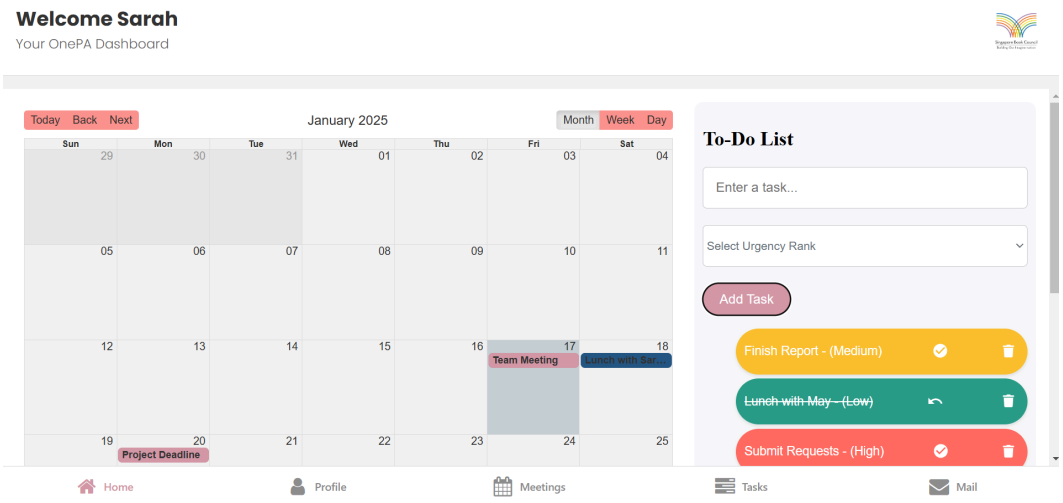
The **Singapore Book Council Digital PA System** is a cost-effective solution designed to revolutionize administrative efficiency for scheduling and managing meetings, automating task management, and streamlining communication processes. This platform aims to address the challenges of using multiple disconnected tools by providing a **centralised, user-friendly solution**. Administrators can now manage meetings, tasks, and emails seamlessly in one place, reducing time spent switching between platforms and increasing overall productivity.

Key goals of this solution include:

- Enhancing usability with a clean, intuitive interface.
- Centralising functionality for meetings, tasks, and email management.
- Automating tedious administrative tasks such as reminders, follow-ups, and email summaries.

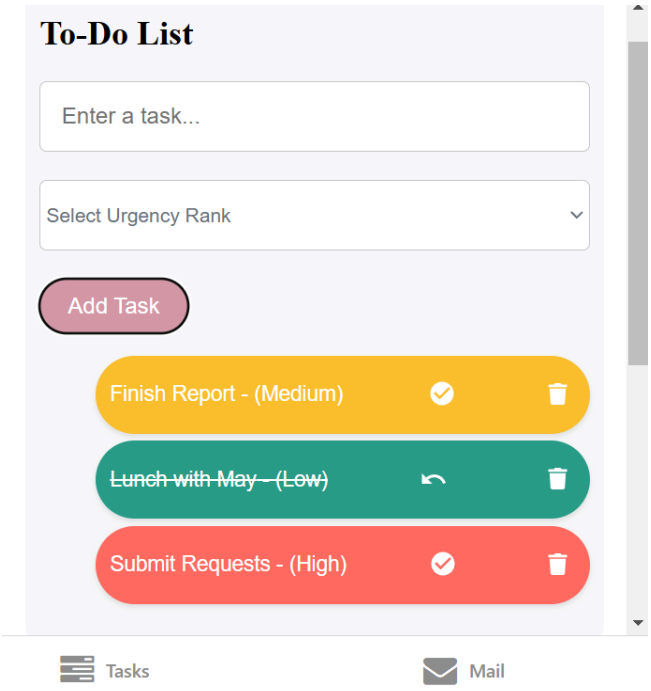
Features of the System

1. **Dashboard**
    - Provides an **overall calendar view** displaying all upcoming meetings.
    - Clean, visually appealing interface for quick and easy navigation.

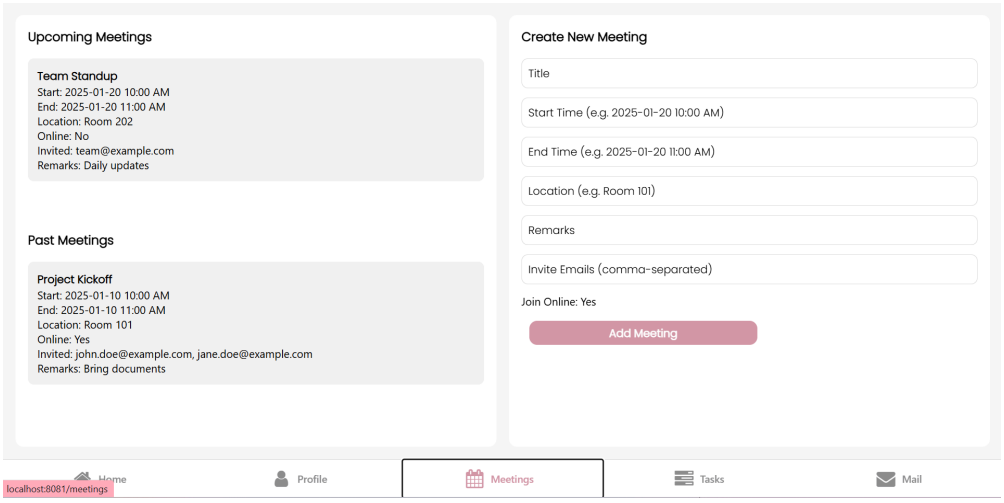


2. **To-Do List**

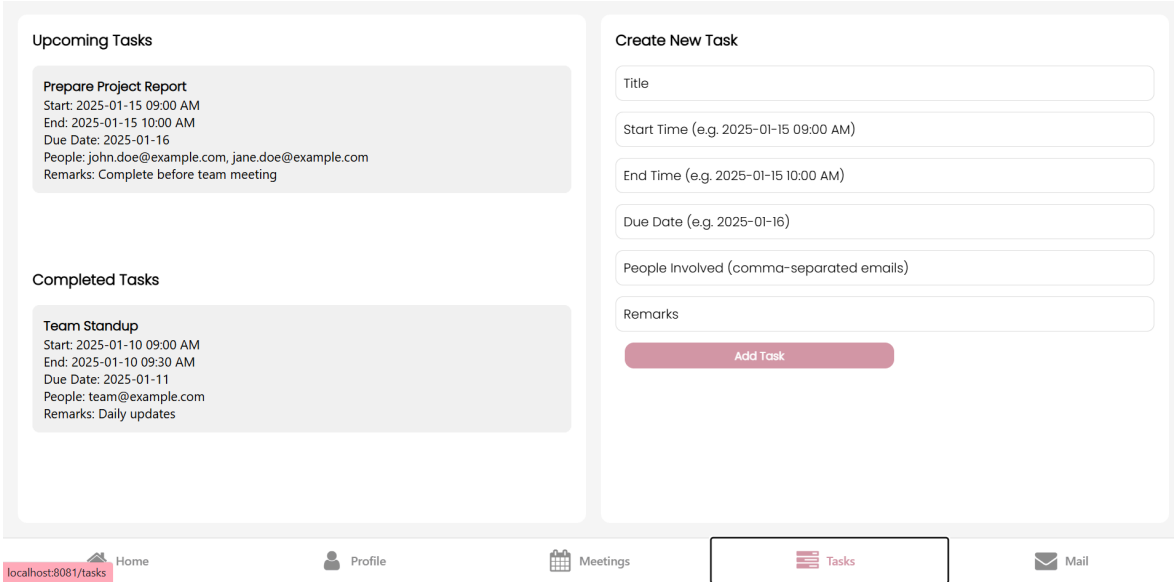
- Highly interactive **to-do list** where tasks can be ranked by urgency (red, yellow, and green visual cues).
- A digital solution for tracking immediate priorities and ensuring timely completion of tasks.



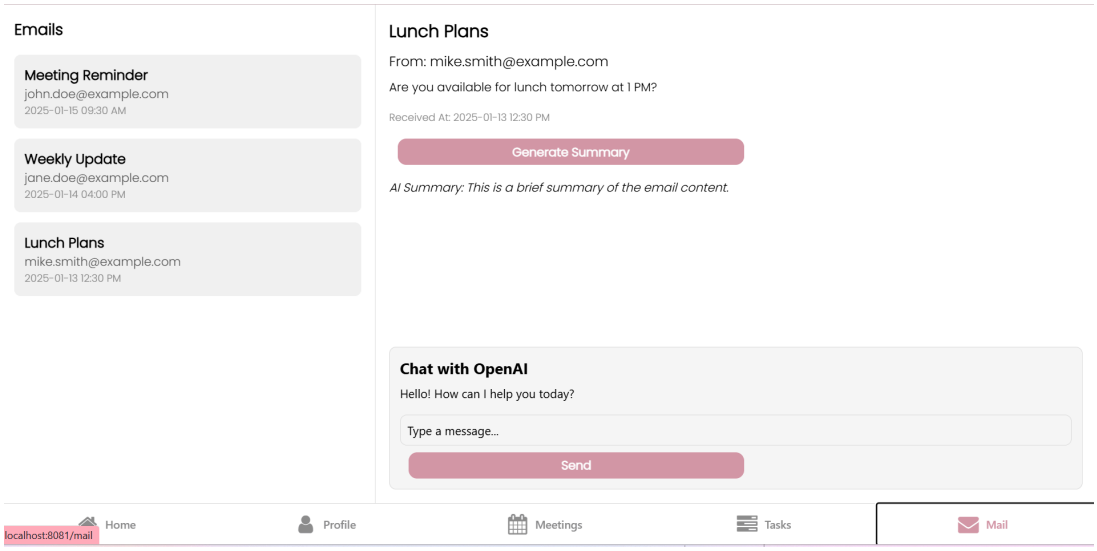
3. **Meetings**
   - Easy meeting creation with automated features:
     - Sends invites to participants.
     - Automatically adds meetings to the shared calendar.
   - Simplifies scheduling and coordination.



4. **Tasks**
    - Enables seamless creation and management of tasks.
    - Allows administrators to involve other users, assign due dates, and track progress.



5. **Email Functionality**
    - Integration with users' email accounts using APIs.
    - AI-powered features, including:
        - **Email summarization**: Quickly generate concise summaries of email threads.
        - **Chat function**: Users can write prompts to generate emails or perform other automated actions.



Tech Stack

The system is built using a robust and scalable tech stack to ensure seamless deployment and usability:

- **React Native**: For creating a cross-platform mobile and web application.
- **Expo**: Simplifies the development process and ensures the app is easily deployable.
- **Firebase**: Provides secure authentication and backend storage for reliable performance and data management.

Thought Processes

- **User-Centric Design**: The system was designed with a focus on user experience, ensuring ease of use and accessibility for administrators of all technical skill levels.
- **Centralization**: By consolidating multiple functionalities into one platform, we aimed to eliminate the inefficiencies of using multiple tools.
- **Automation and Efficiency**: Incorporating AI and automation to handle repetitive tasks, thereby freeing up users to focus on higher-value activities.
- **Scalability and Flexibility**: Built with scalable technologies to support future enhancements and customization based on organizational needs.

Prototype Viewing Instructions

Prerequisites

1. **System Requirements:**
    - A computer with Node.js (v14 or later) installed.
    - Expo Go app installed on a mobile device (available on iOS and Android).
    - A stable internet connection.
2. **Required Tools:**
    - A text editor or IDE (e.g., VSCode).
    - Git installed on your computer.
    - Firebase project set up with Authentication and Firestore enabled.
    - Access to the AI text analysis API credentials (e.g., OpenAI API key).

Instructions

1. Clone the Repository

Open your terminal and run:

```
git clone <repository_url>
cd <repository_name>
```

2. Install Dependencies

Run the following command to install required dependencies:
bash
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npm install

3. Set Up Environment Variables

Create a .env file in the root directory and add the following:

```
FIREBASE_API_KEY=<Your Firebase API Key>
FIREBASE_AUTH_DOMAIN=<Your Firebase Auth Domain>
FIREBASE_PROJECT_ID=<Your Firebase Project ID>
FIREBASE_STORAGE_BUCKET=<Your Firebase Storage Bucket>
FIREBASE_MESSAGING_SENDER_ID=<Your Firebase Messaging Sender ID>
FIREBASE_APP_ID=<Your Firebase App ID>
AI_API_KEY=<Your AI API Key>
```

- Replace the placeholders with your Firebase and AI API credentials.

4. Start the Project

Run the following command to start the development server:

```
npx expo start
```

- This will open an Expo developer tools interface in your browser.

5. View the Prototype

- **Using a Physical Device:**
    1. Open the Expo Go app on your mobile device.
    2. Scan the QR code displayed in the Expo developer tools interface.
    3. The app will load and run on your device.
- **Using an Emulator:**
    1. Install and set up an Android or iOS emulator on your computer.
    2. In the Expo developer tools, click on "Run on Android device/emulator" or "Run on iOS simulator."
    3. The app will start in the emulator.
