**Software Requirements Specification (SRS) Document**

**Day Planner Application  
by Team VITALITY**

**Document Information**

**Document Version:** 1.1

**Date:** 20/09/2023

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**Project:** Day Planner Application

**1. Requirement Analysis**

**1.1 Purpose**

The purpose of this Software Requirements Specification (SRS) document is to define the requirements for the development of a **Day Planner Web Application** which makes tasks management easier and follows the idea of supervision. The Day Planner Application project aims to solve the problem of inefficient daily task management by providing users with a cross-platform app that helps them:

1. Plan daily activities.

2. Set reminders (email and system notifications).

3. Manage one-time and recurring tasks.

4. Prioritize tasks with visual cues.

5. Track task progress with frequent updates.

6. Flexibly postpone tasks for future completion.

The app's purpose is to enhance users' productivity and time management by offering a comprehensive solution for organizing and executing their daily tasks effectively.

**1.2 Functions of the Application**

The functions of the application include:

1. **Task Management**: Users can create, edit, and delete tasks. They can set task names, descriptions, due dates, and specify whether a task is a one-time or recurring event.

2. **Priority Tasks**: Users can assign priorities to tasks. High-priority tasks are displayed prominently with a larger font, making it easy to identify and tackle important responsibilities.

3. **Frequent Updates**: The app prompts users with task status updates, asking if tasks have been completed or are still pending. Users can mark tasks as done or pending for future reference, helping them stay organized.

4. **Task Duration**: Users can specify the estimated duration for tasks. The app will remind users to update task status after the duration has elapsed, ensuring they stay on top of their commitments.

5. **Backtrack and Postpone**: Incomplete or pending tasks are clearly displayed to users. They have the option to backtrack on completed tasks if needed. Additionally, users can postpone tasks to a future date or time, providing flexibility in managing their schedule.

6. **Reminders**: The app sends reminders to users through email notifications and system notifications (push notifications), ensuring they don't forget important tasks or appointments.

7. **Widgets**: The application offers widgets for easy access on the user's device. These widgets provide quick access to the user's task list and upcoming events, enhancing convenience and efficiency.

These functions collectively enable users to effectively plan, prioritize, track, and adjust their daily activities, making the Day Planner Application a valuable tool for improving productivity and time management.

**1.3 Target Audience**

The userbase of the Day Planner Application is diverse and includes professionals, students, parents, entrepreneurs, seniors, individuals with health conditions, event planners, fitness enthusiasts, creatives, travelers, caregivers, remote workers, teachers, and couples/families. Essentially, anyone seeking better daily organization and time management can benefit from this app.

**1.4 Success Metrics**

Success metrics for the can help determine its success and impact. Here are key metrics to consider:

1. **User Adoption**: Measure downloads, registrations, and active users.

2. **User Engagement**: Track task creation, completion, and updates.

3. **Retention Rate**: Monitor how many users continue to use the app over time.

4. **Reminders Effectiveness**: Assess click-through and response rates for reminders.

5. **User Feedback**: Gather feedback through surveys, reviews, and direct communication.

6. **Bug Reports and Support Requests**: Monitor the number of bug reports and support requests.

7. **App Store Ratings and Reviews**: Keep an eye on app store ratings and user reviews.

These metrics collectively help determine the app's success and its impact on users' daily planning and time management.

**1.5 Unique Features**

Existing task management systems, such as Google Tasks, Todoist, and Microsoft To-Do, offer valuable tools for organizing daily activities. However, our Day Planner Application introduces unique features that set it apart:

1. **Priority Tasks**: While existing apps allow task management, our app stands out by visually emphasizing priority tasks with larger fonts. This helps users focus on what matters most.

2. **Frequent Updates**: Unlike others, our app proactively prompts users with constant task updates, ensuring nothing slips through the cracks. It's a proactive approach to task management.

3. **Backtracking**: The ability to easily backtrack on completed tasks or postpone them to a future date provides users with unmatched flexibility and adaptability.

4. **Task Duration**: Our app lets users set task durations and sends timely reminders for updates. This feature helps users allocate their time more efficiently, a unique aspect in task management.

5. **Widgets**: Offering widgets for quick access from the device's home screen enhances convenience, making our app an even more user-friendly and accessible tool.

These unique features of the Day Planner Application make it a standout choice for individuals seeking not only task organization but also a proactive and flexible approach to daily planning and time management.

**2. Functional Specification**

**2.1 User Perspective**

From a user's perspective, the application will provide an intuitive and efficient experience for managing daily tasks and activities. Here's how the system will behave:

1**. User Onboarding**: Upon launching the app for the first time, users will be guided through a simple onboarding process. They'll create an account or sign in and set their initial preferences.

2. **Task Creation**: Users can easily create new tasks by tapping a "New Task" button. They'll provide task details, including a title, description, due date, and priority level.

3. **Priority Task Visualization**: The app will display priority tasks prominently with larger fonts, ensuring users notice and prioritize them over other tasks.

4. **Recurring Tasks**: Users can set tasks to be one-time or recurring, such as daily at 11:00 AM, providing flexibility for managing routine activities.

5. **Reminders**: Users will receive reminders for their tasks through various channels, including email and system notifications, ensuring they stay on track with their schedule.

6. **Task Updates**: The app will frequently prompt users to update task statuses. Users can easily mark tasks as completed or pending, providing a sense of accomplishment and progress tracking.

7. **Backtracking and Postponing**: Incomplete or pending tasks will be clearly displayed. Users can backtrack on completed tasks or postpone them to a later date or time, offering flexibility in managing their agenda.

8. **Widgets**: Users can add widgets to their device's home screen for quick access to their task list and upcoming events, streamlining daily planning.

9. **Customization**: The app will allow users to customize their experience, including themes, notification preferences, and task categories, tailoring it to their needs.

10. **Feedback and Support**: Users can provide feedback and access support within the app for assistance or reporting issues.

Overall, the Day Planner Application will behave as a user-friendly and proactive tool, helping users efficiently manage their daily activities, prioritize tasks, track progress, and adapt their plans as needed, ultimately improving their time management and productivity.

**2.2 Different Scenarios**

**The software will include the following key features:**

* User Registration and Authentication
* Create and Manage Events
* Calendar View
* Task Management
* Reminders and Notifications
* Data Backup and Recovery
* User Profile

**2.3 User Classes and Characteristics**

The primary users of the Day Planner Application will be individuals who need to manage their daily schedules, appointments, and tasks efficiently. Users may include professionals, students, and anyone who values effective time management.

**2.4 Operating Environment**

The software will be compatible with the Android OS (versions 8.0 and above).

**2.5 Design and Implementation Constraints**

* The software will be developed using Flutter for front end MySQL to manage the database and Django for the back end development.
* The user interface will be designed to be intuitive and user-friendly.
* Data storage and synchronization will require internet connectivity.

**2.6 User Documentation**

User documentation, including user manuals and online help, will be provided to assist users in learning how to use the software effectively.

**2.7 Assumptions and Dependencies**

* The software assumes that users have access to a compatible device and internet connectivity.
* Dependencies may include third-party libraries, APIs, or services for features like calendar synchronization.

**3. Specific Requirements**

This section provides detailed information about the specific requirements of the Day Planner Application.

**3.1 External Interface Requirements**

**3.1.1 User Interface**

The user will be able to track his/her progress, check whether the scheduled task is completed or not and if there is any need to modify his schedule for the particular day. We will be adding specific features like tracking of tasks so that the user will be notified when an important task is upcoming. We will also allow user to add reminders for 5 mins before the task or an hour before the task.

**3.1.2 Hardware Interfaces**

Any compatible device with a stable internet connection.

**3.1.3 Software Interfaces**

External applications such as the device’s Calendar application, email clients, etc.

**3.1.4 Communication Interfaces**

The software will work with external system features such as Time and Date, Calendar, email clients,

**3.2 Functional Requirements**

* Feature 1: User Registration and Authentication
* Requirement 1.1: Users must be able to create an account.
* Requirement 1.2: Users must be able to log in with their credentials.
* Requirement 1.3: User authentication must be secure.

**3.3 Non-Functional Requirements**

**3.3.1 Performance Requirements**

**Response Time:** The software must load the calendar view within 2 seconds.

**Concurrent Users:** The software must handle a minimum of 1,000 users concurrently.

**Data Synchronization:** Synchronization of data with external calendars should occur in real-time or with a delay of no more than 5 minutes.

**Scalability:** The system must be able to scale horizontally to accommodate increased user load.

**3.3.2 Security Requirements**

* User data must be encrypted during transmission.
* User passwords must be securely stored using industry-standard hashing algorithms.

**3.3.3 Reliability Requirements**

* The software must have a minimum uptime of 99.9%.
* Data loss during synchronization should be minimized.

**3.3.4 Compatibility Requirements**

* The software must be compatible with popular web browsers.
* Mobile apps must be compatible with major mobile operating systems.

**4. System Features**

**4.1 Feature 1: User Registration and Authentication**

* Users must be able to create a new account.
* Users must be able to log in with their username and password.
* User authentication must be secure and protect user data.
* System Behavior
* Users can register by providing their email address and creating a password.
* Passwords are securely hashed and stored in the database.
* Users can log in using their registered email and password.
* Authentication tokens are issued to verified users.

**4.2 Feature 2: Task Management**

* To-Do List: A list which will track all the tasks to be completed for the day.
* Priority Levels: Users can designate task priorities by color coding and labelling.
* Due Dates and Deadlines: Allow users to specify task deadlines.
* Checkboxes: Provide checkboxes or markers to indicate whether the task is completed.
* Notes and Details: Space for users to add task descriptions or short notes.
* Task Categorization: Segregate the tasks in various categories.
* Drag-and-Drop Functionality: User can reorder tasks by moving them to different time slots.
* Task Progress Tracking: Users can track the progress of ongoing tasks (progress bar or percentage completion).

**4.3 Feature 3: Time Management**

* Reminders and Notifications: Send reminders and notifications for upcoming tasks or deadlines.
* Weekly timesheet: To track the time spent on a task during the entire week.
* Daily timesheet: A list of daily tasks to be done on that day.
* Task Timer: Display timer to log time spent on individual tasks.

**4.4 Feature 4: Customization**

* Custom Tags: User can add tags (doing/completed/cancelled) to the tags.
* Layouts & Themes: User can change the theme(light/dark) and can also change the colour schemes of the layout.

**4.5 Feature 5: Layout**

* Priority Task Display: According to the actual time, display the tasks according to that slot on the top.
* Activity Stream: Display all the activity updates.
* Calendar view: User can view all the events/tasks along-with their deadlines.
* Summary view: View of all the key events for the previous, current, and the following week.

**4.6 Feature 6: Reports and Analytics**

* Task Reports: These reports will help users track their progress on various projects or tasks.
* Time reports: A detailed view of the time spent by a user on the tasks along with the time spent on it.
* Total Hours Worked: Display the total hours worked by summing up the daily totals.

**4.7 Feature 7: Data Backup and Recovery**

* Users can create manual backups of their data.
* In case of data loss, users can restore their data from a backup.

**4.8 Feature 8: User Profile**

* Users can update their profile information (e.g., name, profile picture).
* Users can customize notification preferences.
* Language and time zone settings can be adjusted.

**5. User Documentation**

The user documentation will include the manual on how to use the application providing guidance on how to customize the software according to personal interests.

It will also include the Terms and Conditions explaining how much of user data will be gathered and stored in our servers. The gathered data will help in providing a better experience to the user.