Project Specification Document

MyAcademicAlly

Student's Task Manager

By: Parth Dalwadi, Dylan Lorrilliere, Anthony Panarello,
Michael Provenzano, Quynh Tran

Scrum Master: Akshat Baranwal

GitHub: https://github.com/nhunewgnu/Nimble-Programmers
Slack: https://fall2023seniorproject.slack.com/archives/C05SJRCN9TL

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Project Summary

The project aims to develop a user-friendly web application tailored to the unique needs of students, offering a centralized hub for managing their multifaceted daily lives. Through streamlined features encompassing class schedules, gym routines, work commitments, and more, the application seeks to empower students with the tools they need to maintain impeccable organization. By providing a clear, intuitive platform, the project intends to facilitate efficient time management, reduce stress, and foster a conducive environment for academic excellence. The ultimate goal is to support students in their academic journeys by helping them harmonize their personal and educational responsibilities seamlessly within one digital ecosystem.

Project Goals

The main goals of this project are to:
1. Create a user-friendly web application.
2. Provide students with a centralized platform.
3. Enable efficient management of daily life.
4. Include features for class schedules, work schedules, and gym routines.
5. Support effective organization of personal and academic commitments.
6. Foster improved time management skills.
7. Reduce stress and enhance overall well-being.
8. Facilitate harmonization of personal and academic responsibilities.
9. Empower students to achieve academic success.
10. Implement financial planning and budgeting tools.
11. Offer summary graphs for tracking daily spending habits.
12. Ensure secure user access with login/signup functionality.
13. Provide a clear list view of upcoming tasks based on deadlines.

Product Features

1. **Responsive Web App Design:** The project will be developed as a responsive web application, ensuring that it adapts seamlessly to various screen sizes and devices. Whether accessed on a desktop, laptop, tablet, or smartphone, the application's layout and functionality will automatically adjust to provide an optimal user experience, making it accessible and user-friendly across a wide range of devices.

2. **Login Page:** The web application features a secure login page where users can conveniently sign in if they already have an account or easily sign up to create one. Once logged in, users gain access to their personalized planner and dashboard, enabling them to efficiently manage their academic commitments.

3. **To-Do Lists and Task Management:** To help students manage their daily tasks effectively, the app can offer a to-do list feature. Users can create tasks, set priorities, and mark them as completed when finished. This aids in time management and reduces the chances of forgetting important assignments or activities.

4. **Task List View:** The application offers a convenient "Task List View" feature that allows users to see all their upcoming tasks in a clear and organized list format, sorted by their respective deadlines. This feature provides users with a quick and comprehensive overview of their pending assignments, ensuring they never miss an important deadline and can effectively prioritize their tasks for optimal time management.

5. **Project View:** This feature enables users to create and manage projects within the application. Users can assign tasks to specific projects and then utilize the "Project View" to filter and organize their tasks based on these projects. This functionality streamlines project management, making it easy to track progress, allocate resources, and prioritize tasks within the context of specific projects, enhancing overall productivity and organization.

Limitations

Limitations of our project include but are not limited to:

1. **Resource Constraints:** Limited development resources, including time and manpower, may affect the speed of feature implementation and the scope of the project.
2. **Security Challenges:** Ensuring robust security measures for user data, especially when handling financial and personal documents, is crucial. Any data breaches or vulnerabilities could have severe consequences.
3. **Compatibility Issues:** Ensuring the web application works seamlessly across various browsers, devices, and operating systems can be challenging and may require extensive testing.
4. **User Engagement:** Encouraging users to consistently use the application can be difficult. To achieve its goals, the app must offer continuous value and user engagement.
5. **Scalability:** As the user base grows, scalability becomes a concern. Ensuring the application can handle increased traffic and data without performance degradation is vital.

Stretch Goals

In terms of stretch goals, these are the additional features that we would like to include if possible:

1. **Project Sharing:** Allow users to add other users to existing projects. This includes the ability to assign specific projects to individual users. This feature allows for easy and intuitive collaboration on group projects.
2. **Profile Customization:** Allow users to edit their profiles, including adding or changing profile pictures and updating personal information. This feature enables users to personalize their experience within the application and helps build a sense of community.
3. **Theme Customization:** Implement theme change options, allowing users to switch between different color schemes or themes according

to their preferences. This enhances the visual appeal of the application and lets users tailor the interface to their liking.

4. **Data Security and Privacy:** Ensuring the security and privacy of user data is paramount. The application should implement robust security measures to protect sensitive information, including academic records and personal schedules.

5. **Performance Tracking:** Students can track their academic performance through the app. It can display grades, GPA calculations, and progress reports. This feature encourages students to set academic goals and monitor their progress toward achieving them.

6. **Custom Filters:** Students can create personalized filters to tailor their task list views according to specific criteria. These filters can be based on due dates, priority levels, project affiliations, or any other task attributes that matter most to the individual. By enabling custom filters, the application allows students to focus on precisely what they need at any given moment, enhancing their productivity and task organization.

7. **Custom Labels:** To further refine task categorization and organization, students can create custom labels. These labels serve as tags that can be assigned to tasks. For instance, a student might create labels like "Homework," "Exam Prep," "Personal," or "Group Project." These labels add a layer of context to tasks, making it easier to group and categorize them based on their nature or significance. This feature is particularly beneficial when dealing with a diverse set of tasks with varying priorities and deadlines.

8. **Academic Scheduling:** A core feature of the application is the ability to manage class schedules. Students can input their course details, including class times, locations, and professors' names. The app can then generate a personalized calendar, complete with reminders for upcoming classes and assignments.

9. **Personal Calendar:** Beyond academic commitments, the app allows students to integrate their personal schedules. This includes work shifts, extracurricular activities, and social events. Having everything

in one place helps students avoid scheduling conflicts and allocate their time wisely.

10.   **Multi-View Calendar:** The application offers users the convenience of switching between daily, weekly, and monthly calendar views, allowing them to seamlessly toggle between different time frames and plan their academic and daily activities with precision and flexibility.