

Todo List Application Case Study

Introduction

The Todo List Application is designed to help users efficiently manage their tasks. It allows users to add tasks, assign due dates, set reminders, and receive notifications to stay on track. The purpose of the application is to enhance user productivity by providing a platform for task management.

Technologies used

VS code as my development environment

Programming languages:

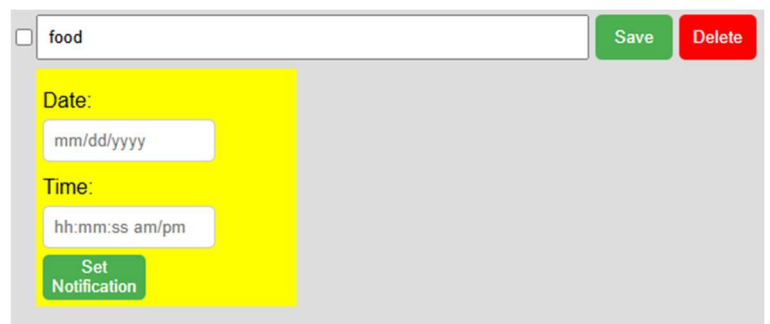
- JavaScript
- HTML
- CSS

Role

This was an individual project where I was responsible for every aspect, from initial concept and design to implementation and testing.

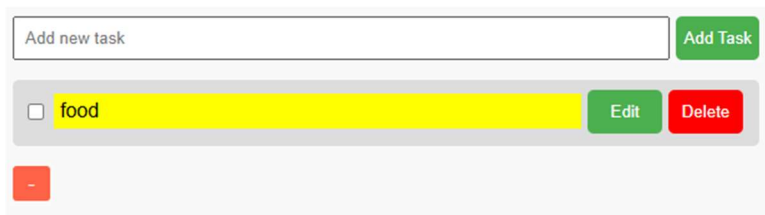
Challenges

- **CSS Formatting:** Achieving the desired layout and appearance with CSS required extensive trial and error. I explored and applied new CSS properties to align the content precisely as intended.
- **Notifications:** Having the implementation of the notification feature. It was a challenging task to trigger reminders accurately and ensure the code recognized the correct task assigned to each date and time.

A screenshot of a web form for adding a task. At the top, there is a text input field containing the word "food", followed by a green "Save" button and a red "Delete" button. Below this, a yellow rectangular box contains a "Date:" label, a date input field with the placeholder "mm/dd/yyyy", a "Time:" label, a time input field with the placeholder "hh:mm:ss am/pm", and a green "Set Notification" button.

Key Features and Functionalities

- **Task Creation:** Users can add new tasks with specific details like due dates.
- **Edit and Delete:** Users have the ability to edit tasks and delete tasks that are no longer needed.
- **Reminders:** The application sends reminders for upcoming tasks to help users stay organized.
- **User Interface:** The application has a user-friendly interface.

A screenshot of a web application interface for task management. At the top, there is a text input field with the placeholder text "Add new task" and a green button labeled "Add Task". Below this, a task is displayed in a yellow box with the text "food" and a small square checkbox to its left. To the right of the task box are two buttons: a green "Edit" button and a red "Delete" button. At the bottom left of the interface, there is a small red button with a minus sign.

Testing and Validation

I tested every feature to ensure smooth functionality. I gathered feedback from users, including friends and family, which provided valuable insights for further improvements.

User Feedback

Feedback from users highlighted the need for:

- Notifications explaining why a task was not added when the input was empty.
- A feature to delete all tasks with a single click.

These suggestions were incorporated to enhance the application.

Lessons Learned

Working on this project taught me:

- How to effectively use JavaScript promises and error handling to ensure smooth application performance.
- Proper time validation in the 12-hour format with code.
- Techniques for implementing notifications and linking them to specific tasks.

These skills have improved my coding abilities and will be beneficial in future projects.

Conclusion

The Todo List Application project was a good learning experience for front end work. It further solidified my understanding of using technologies and programming, enhanced my problem-solving skills and ability to implement user feedback.