Final Assignment Submission

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1 Changes since mid-assignment submission

I completed the backend API in Rails, and improved the UI experience in some places.

- Major Improvements

  - The table for displaying tasks now uses Material UI, implements pagination where the user can select the number of rows to be shown per page, as well as a toggle for making the table more dense (ie rows occupy less vertical height).
  - the tasks dashboard now provides users the ability to sort by task name, due date, or description.

- Minor Improvements such as

  - The submit button on the create new account page is grayed out if password and confirm password fields don't match and a "passwords don't match" message is displayed.
  - A show password icon has been implemented for all password fields, and indicative placeholders have been added for all other fields.
  - Displaying a wrong password message on the sign in page
  - Showing a message in green when a task is added or edited successfully, and in red when a task is deleted successfully.
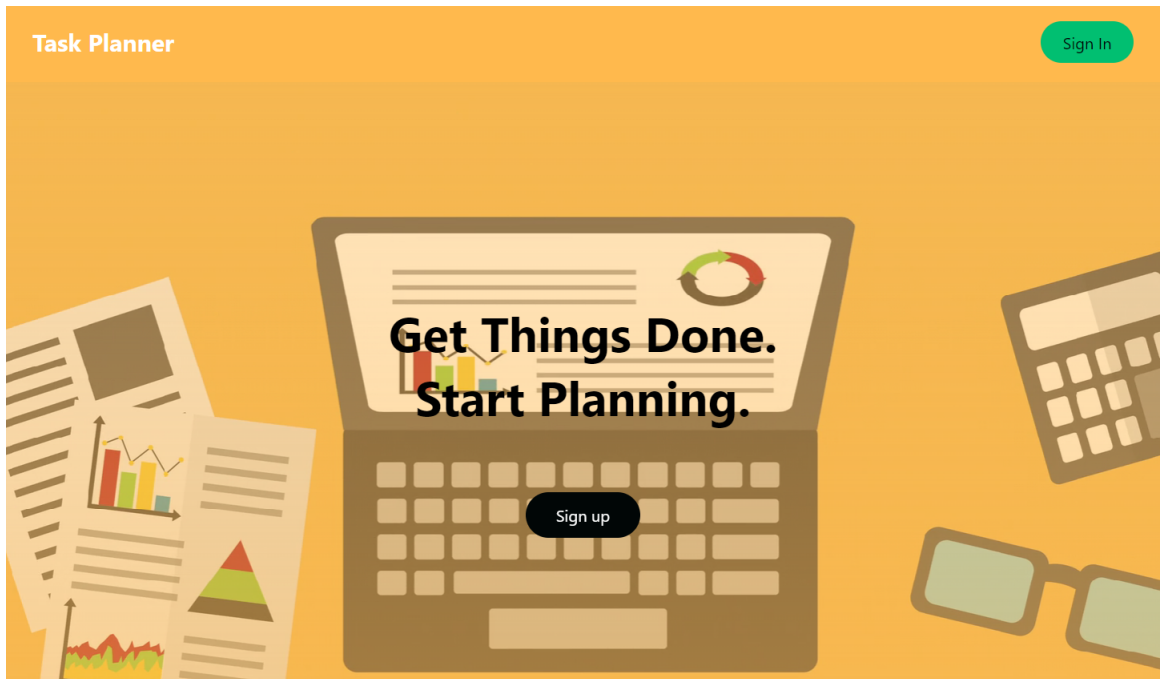
2 Improvements that can be made

1. I wanted to implement a notifications pane, but was unable to do so because of time constraints.

2. I was unable to satisfactorily implement a label system for tasks in the given time, and had to rework my project without it.

3 Final remarks

1. I started this project with no prior knowledge of React or Ruby on Rails, so this winter was well spent learning both frameworks. I now have much better command over both languages, and this should ameliorate development speed during later projects.

2. While I didn't use TypeScript in my project, by the end of it I gained a keen appreciation of the need for static typing, and the unique advantages it offers in the development process, like better intellisense and typesafety, both of which would have made managing a growing codebase better.

3. Finally, I found that my planning, which outlined only the broad strokes of my project, was inadequate. However, I have learnt from this developing experience, and will set deliverables for each week to have more fine-grained control over the development process.

4 User Guide

1. Main page

Figure 1: sign in to log in to an existing account and sign up to create a new account
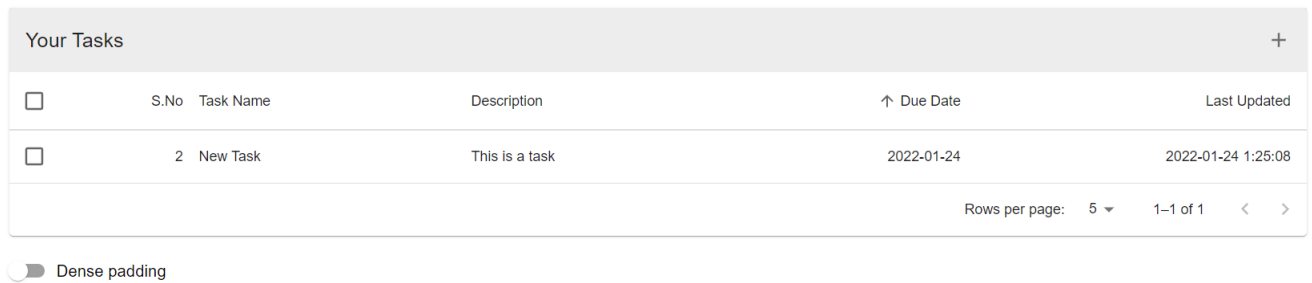
2. Login and Sign up

Figure 2: Sign in

Figure 3: Sign up

3. Task View - Sort ascending or descending by clicking the column label you want to sort by. The arrow near the label indicates current sort direction.
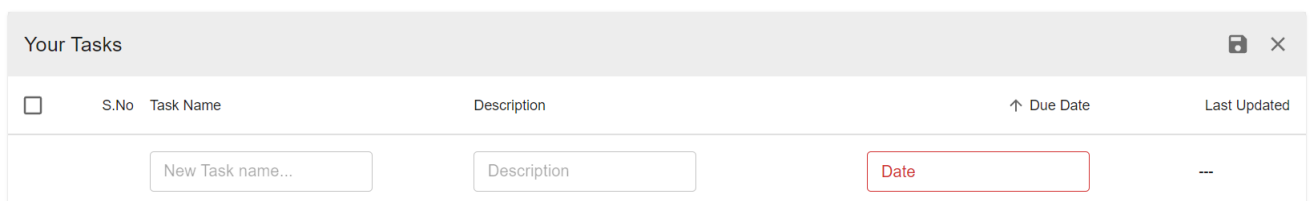

Figure 4: Task View
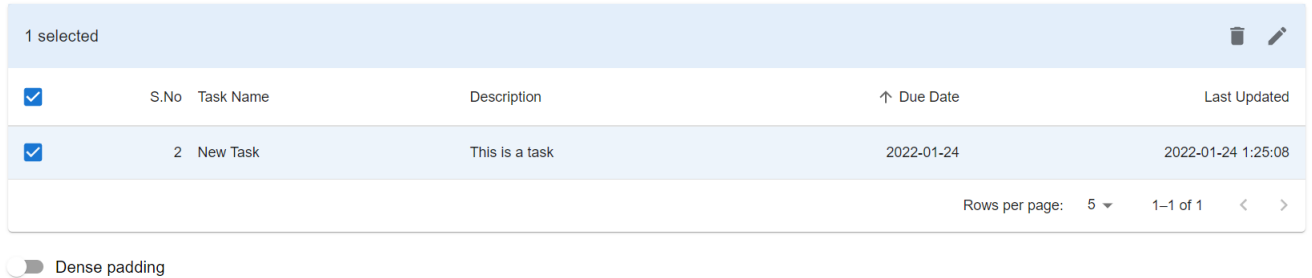
4. To add a task, click the + sign. When you're happy with what you see, click on the save icon. Or cancel it!

Figure 5: Add task

5. Edit and Delete tasks by selecting a task and then clicking the delete (trash) or edit (pencil) buttons. Note that selecting multiple tasks gives only the delete option; you can edit only one task at a time.
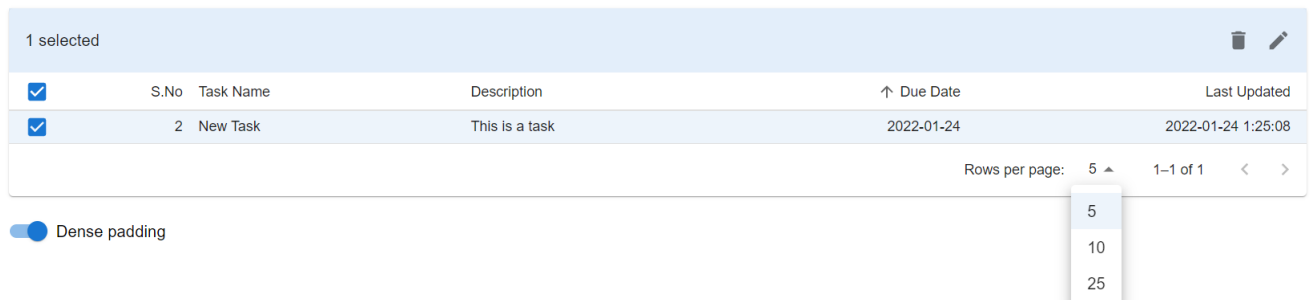

Figure 6: Edit and Delete

6. The dense padding toggle makes rows occupy less vertical space, and the pagination options allow you to choose how many tasks to see in a page

Figure 7: Dense Padding and Pagination