

Technical Assignment

Overview

Timeframe

The assignment should take around 4 hours. You're welcome to take as much time as you want, but don't feel obliged to finish it if you're not able to complete it within the timeframe.

Approach

The aim of this assignment is to evaluate the basic technical competence you'll require for this position.

- You'll need to use **Ruby on Rails** for the backend implementation of this assignment. For the frontend implementation, you need to use either the standard Rails templating (ERB), or a frontend framework like React, Angular, or Vue.
- Please include clear instructions for how to run your code, and keep in mind that we'll likely be running your code on a **Macbook**).
- Your work **must be your own**, and should be completed unassisted. Feel free, though, to search the internet to look up any content.
- Communicate your thinking as much as possible. Add a **README** to communicate how to run your solutions and any relevant notes, for example, any extra thoughts on the tasks or how you structured your submissions.
- If you are stuck or are taking too much time, **use your discretion** to implement what is important to the task at hand, and write out your challenges in the **README**.

Tasks

The following exercise will involve setting up a new web application and integrating with Trello's API in order to solve a series of tasks. <u>Trello</u> is a useful product that helps you manage tasks through the use of boards, lists, and cards.

Please make it clear in the **README** how to get the project working using our own Trello credentials.

Useful information

Trello API docs https://developers.trello.com/docs/get-started

Task A: Basic integration

- Create a new web application.
- Create a new Trello account (if you don't have one already).
- Manually setup a new Trello board and create two lists as shown in Figure 1.
- Using the Trello API, fetch the details of all the lists and cards and display them in a browser using the design shown in Figure 2 as inspiration.

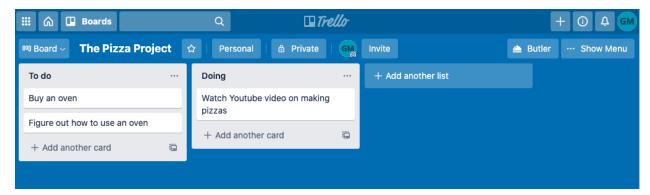


Figure 1

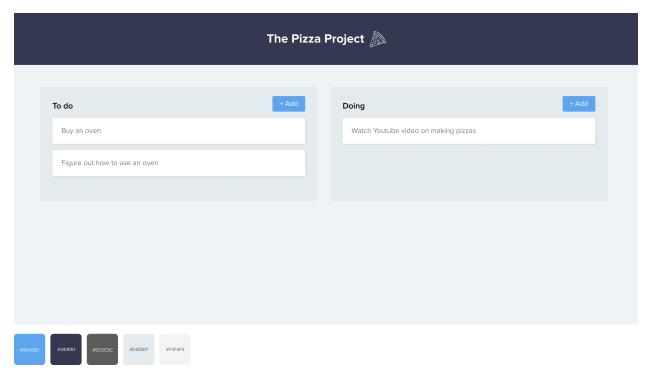


Figure 2

Task B: Card Creation

- Create a new view or modal in your application that allows you to enter a title into a form. You can use your own initiative for the design.
- On submission it should create a new card in the "To do" list as shown in Figure 3.

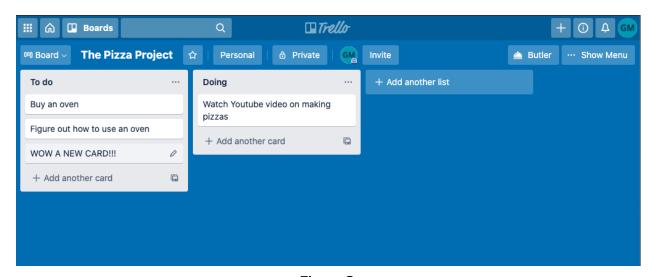


Figure 3

Task C: Webhooks

- <u>Setup a webhook</u> in Trello to ping the web server when a card is moved between two lists, as illustrated in Figure 3.
- Output the result of callback in the web server console as shown in Figure 5.
- A tool such as Ngrok is helpful for setting up the webhook in your local environment.

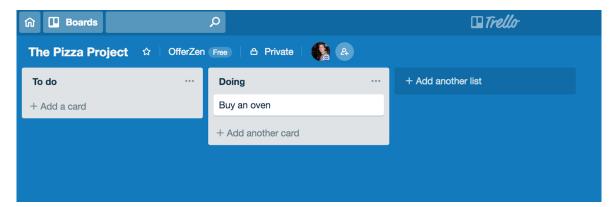


Figure 4

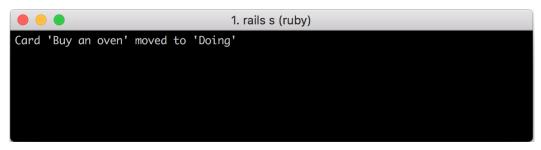


Figure 5

Task D: Questions

- How long did this assignment take you and where did you spend your time?
- What would you do differently or improve in your solution?
- Do you have any feedback on this assignment? For example: What did you enjoy? What could be better? Which aspects were unclear?