StructureIt Application Developer Technical Assessment

Overview

The purpose of this assessment is for you to showcase your coding talents. Since it's only 3 hours long, we don't anticipate you to produce a fully rounded, feature complete application. What it will do though is to serve as a starting point for further discussions afterwards.

Duration

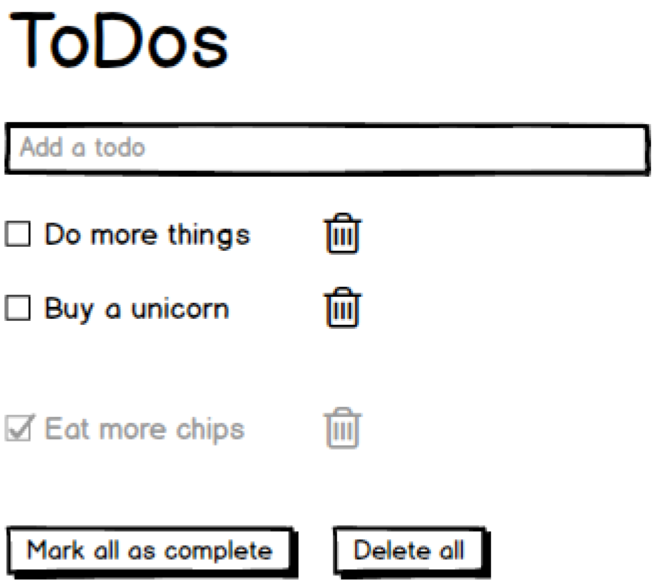
3 hours.

Specification

Produce a Todo list web application using your choice of frontend and server-side frameworks. Whilst we don't expect you to be able to include all these features, here's what a complete application would have:

- **HTML5** user interface.
- Persistent server-side **data-store**.
- Sensible **REST**-style routing (server-side and client-side).

NB: Outline the **tech** that you will use for this assessment and be sure to communicate any deviations from your initial choices. Feel free to use your own PC or the one that we will provide you with.



Stories

New todo

New todos are entered in an input at the top of the app. The input element should be focused when the page is loaded. Pressing Enter creates the todo, appends it to the todo list, and clears the input.

Mark all as complete button

A button on the page will mark all todos as complete.

Delete all button

A button will delete all todos.

Item

Each todo has a label, a checkbox and a remove button. A todo has two possible states:

1. Active
2. Complete

A todo has three possible interactions:

1. Clicking the checkbox marks the todo as complete.
2. Double-clicking the label activates editing mode.
3. Hovering over the todo shows the remove button.

Editing a todo

When editing mode is activated it will hide the other controls and bring forward an input that contains the todo title, which should be focused. The edit should be saved on both blur and enter, and the editing styling should be removed. If it's value is empty the todo should be destroyed. If escape is pressed during the edit, the edit state should be left and any changes be discarded.

Prioritisation

This is the order we think it's best to approach this task:

Part 1:

1. Create an HTML page with a form.
2. Implement a JavaScript framework.
3. Persist data on the server.
4. Display the todos in a list.
5. Todos have completed state.
6. Todos can be edited.
7. Todos can be deleted.
8. Implement anything you deem interesting to show off your skills (all up to you)

Part 2:

9. There will be one more question that you will be required to answer during the interview.

Topics for further discussion afterwards:

- What frameworks you chose.
- What tooling you used.
- What you would have done differently.
- Where you would have taken the application had you had enough time to finish it.
- Readability
- Structure of your code
- SOLID principles