

## Full stack task

Implement a simple single-page web application which manages a collection of books. Your web application should have a UI consisting of a single HTML web page, and a simple backend. The backend provides a REST API with which the UI communicates. We want the application to have the following features:

1. When the web page is loaded, it fetches all the books to a list. The title and the author of each book are displayed in the list.
2. When a book in the list is clicked, it is selected and its author, title and description are displayed in a form next to the list.
3. By inputting data to the form and pressing a button labelled “save new”, the user can add new books to the collection.
4. By editing the form data of an existing book and pressing a button labelled “save”, the user can update the data of the book in the collection.
5. There is also a delete button that can be used to delete a selected book from the collection.
6. All the changes that user has made to the collection must be preserved on a page reload.
7. The application (front and backend) can be started with a single command in terminal

Illustration:

The illustration shows a web form for managing books. On the left, there are three input fields: 'Title', 'Author', and 'Description'. The 'Description' field is a larger text area. To the right of these fields is a large empty rectangular box. At the bottom of the form, there are three buttons: 'Save New', 'Save', and 'Delete'.

Use React for frontend. You can freely choose the technologies by which you are going to implement the backend.

Take into account:

- We will evaluate the quality of your code. Readability, good practices and maintainable solutions are therefore essential!
- Other factors that are being evaluated: error handling, usability, structure.
- Automated tests are not required, but good tests are regarded as a bonus.
- You can use an in-memory object as a database, but demonstrating a proper usage of an actual one is regarded as a bonus.
- Include only the essential files into your version control repository, and also a clear README how to start the application!

- Before you send your answer, please give us feedback about this task:  
<https://forms.gle/KigqVHXSamaf66GC9>