Home Assignment for Senior Full Stack Developer

We would like you to demonstrate your skills and show us your development process by completing the following assignment:

Task:

Create a simple web application that allows users to search for books. The application should have a front-end that allows users to enter search terms and view the results, and a back-end that exposes an API to search a database of books.

(You case seed the data or use an something like https://openlibrary.org/api/books to see the database with real data).

Here are the details:

1. The database of books should include at least 50 (more is better) books with the following information: title, author, publication year, and description.

2. Create an API endpoint that allows users to search the database of books by title, author, or publication year. The endpoint should return the relevant book information for each match found.

3. Create a front-end using React.js that allows users to enter search terms and view the results from the API. The front-end should also display the book information for each match found, including title, author, publication year, and description. In addition to search term searches, the front end should be able to filter based on a "tag" – e.g year or author.

4. Please provide instructions on how to run the application, including any necessary setup steps.

5. Please also include a brief description of your thought process and any assumptions you made while completing the assignment.

Submission:

Please provide your solution as a zip file or a link to a public repository on a source control platform like GitHub.

Note: This is a home assignment, so there's no need to spend a lot of time on design or aesthetics. We're mostly interested in seeing how you approach the problem, and your ability to write clean, well-documented, and efficient code.

Constraints :
 Only constraints are the usage of PHP on the back-end and React.JS on the front-end. No limitation on chosen frameworks or packages. You can install any npm/composer package to help you in achieving the task.