**Description**

This repository contains two separate parts: a backend starter app built with the PHP framework CodeIgniter 4 and a frontend app that uses React, TypeScript, and Bulma.

To get started with either project, you can clone or download the repository and then follow the installation instructions provided in project's section of the README file.

The backend project requires PHP version 7.4 or 8.0 and the CodeIgniter 4 framework version 4.0, while the frontend project requires Node.js and several dependencies listed in the README file.

**Final Thoughts**

In the course of developing the frontend for this project, I was faced with a decision regarding how to implement filtering functionality. Initially, I opted for client-side filtering using the DataTables library, believing this would be an appropriate solution given the limited amount of data in my database.

However, as I considered the implications of scaling up the "Books" table, it became clear that relying solely on client-side filtering could lead to significant performance issues and long loading times. To address these concerns, I decided to create a new API endpoint for server-side filtering.

By moving filtering operations to the server, I was able to offload processing and ensure that users with older computers would not experience any difficulties when filtering large amounts of data. This approach also provides greater scalability and performance, making it a more robust solution for handling increasing amounts of data.

Overall, this experience highlights the importance of considering the scalability and performance impact of different approaches when building web applications. By being willing to adapt and iterate on my initial approach, I was able to achieve a more effective solution that better aligns with the needs of the project.