

Introduction

This challenge is designed to test your coding style and skills across analysis, problem solving and organisation.

At Radical we're interested in how you structure your code, how you write it, how you test it and how you would intend to hand it over to other team members. We'd like to see good structure, attention to detail, testing and code documentation.

We also appreciate that in the "real world" you have the whole internet as a resource to help you with work. Therefore please be encouraged to use any resources you feel would help you.

The Bookworm Challenge

Our user is an avid book reader who is keen to keep a record of their favourite books. Additionally they would like to be able to assign a rating of up to 5 stars and note the price of each book.

Rather than have to type in all the book data, they would like to be able to pull the details from an online listing, such as the New York Times book list.

You are required to create a PHP Laravel solution for a Back-end server which can utilise:

- At least one External book list API: eg: New York Times best sellers API
- An Internal API: internal back-end endpoints that can take data returned from the external APIs or other independent data and do CRUD operations on the local database. The database would be expected to store and manage the user's selection of favourite books along with any star rating applied.
- The user expects to be able to search for books by author or title, select returned data or rows and add them to an internal database. The user also wants to retrieve all data from the internal database and perform the appropriate CRUD operations on them.

To get access to the above external API, you'll need to sign-up for the API account and create a dummy app or project in order to get your API keys and/or client secret.

What are the outputs we expect?

We should be able to see

- Architecture and/or high level view of the application
 - Database design
 - Internal API structure (eg Swagger)
 - Brief notes regarding any architectural / software patterns used in the solution
 - Create a React app using TypeScript and responsive design. You will need to ensure pixel-perfect design and showcase your understanding of good design principles.
- Designs:

[https://www.figma.com/file/fVl28nk8xQjBtRD1JvvhB1/Dev-Challenge-\(Copy\)?node-id=0%3A1&t=Qmejb49TeXWnwZAU-1](https://www.figma.com/file/fVl28nk8xQjBtRD1JvvhB1/Dev-Challenge-(Copy)?node-id=0%3A1&t=Qmejb49TeXWnwZAU-1)

The deadline for submissions is 2pm on Monday 15th July, with final stage interviews scheduled for Friday 19th July. Share your completed response to the challenge with paul.boyham@radicalcompany.com when you are happy with it.