



Interview assignment - Fullstack developer in Westpac

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Goals

This application is solely for the job interview purpose

Specifications

Backend

Springboot 2.4.3, H2 database, Java 1.8, Maven

1. Retrieve sample data - posts and comments in JSON from jsonplaceholder.typicode.com via HTTP request
2. Store those data in in-memory database
3. Provide 2 REST services
 - a. Query post data
 - b. Query comment data regarding specific post

Frontend

ES6 Javascript, ReactJS 17, React-Virtualized

1. Retrieve sample data - posts and comments in JSON from backend via HTTP request
2. Display them on screen

Database

1. In memory H2 database, it purge all the data after the application stop

Other features

Take care large amount of HTML elements by only loading part of it to DOM which is currently showing in the screen, plus a little bit buffer

Where is the source code?

<https://github.com/fifithecat/westpac> for the backend part
https://github.com/fifithecat/westpac_frontend for the frontend part

How to deploy and run the application?

****Require port 8080 for backend, 3000 for frontend****

After loading the source code to your computer

Backend

In command prompt, navigate to the directory with pom.xml,

"mvn clean install"

It will run all unit test cases and create a jar in the "target" folder.
Navigate to the "target" folder,

"java -jar westpac-interview-0.0.1-SNAPSHOT.jar"

to run the application.

Once the application start, it will start to download sample data from
<https://jsonplaceholder.typicode.com/>

If "Finish loading sample data" appears in console, that means the backend is ready

Of coz, you can import them to eclipse, and run **"PostReadingApplicationAPI.java"** as java application.

Frontend

In command prompt, navigate to the directory with package.json, "npm install". It will load all the necessary frameworks. Once finish,

"npm start"

To start the application.

Run the application

By default, it would open the default browser, if not, open firefox/chrome and navigate to **"localhost:3000"**

Issues resolved

Most of my time spent on the issues below

- spring-boot-configuration-processor not found
- junit test and h2 database, unable to save during test
- applying the react-virtualized

Outstanding issue

The screen layout has to be recalculate and re-render if screen size change detected