



## Bravi Test

**Hello candidate,**

Thank you for your application to Bravi. For this stage we invite you to complete our Technical Assessment. The assessment has three assignments and you are expected to spend no more than 10 hours.

You should push your code to GitHub (or another git service) and send us the links. The projects should have the instructions on how to run it in the README.md file.

We expect to see how you test your application, if you follow good practices and how you solve problems. Feel free to ask any question you need.

Please solve the following challenges using Java 8 and Spring. Bonus points for Docker.

### 1. Balanced Brackets

Write a function that takes a string of brackets as the input, and determines if the order of the brackets is valid. A bracket is considered to be any one of the following characters: (, ), {, }, [, or ].

We say a sequence of brackets is valid if the following conditions are met:

- It contains no unmatched brackets.
- The subset of brackets enclosed within the confines of a matched pair of brackets is also a matched pair of brackets.

Examples:

- (){}[] is valid
- [{()}](){} is valid
- []{()} is not valid
- [{}] is not valid

### 2. Contact List

Create a REST API which will store people and their contacts. A person can have multiple contacts such as phone, email or whatsapp. The API should allow to create, update, get and delete both the people and the contacts.

### **3. Weather in my city**

Please solve the following challenge using Angular 4 and TypeScript. Bonus points for Docker, SASS and Angular CLI.

Create a web app which will allow the users to search for the current weather conditions using the name of a city. You can use the Open Weather Map api to get the weather data.

<http://openweathermap.org/api>

**May the code be with you!**