# 1nfluencersmarketing.com

Provide the answers to these questions in a called engineering\_answers.md file in the Git Repository along with the web application test. The instructions to build and run the projects must be at the README.md file.

#### 1. Web Skill Test

Provide the answers to these questions in a called engineering\_answers.md file in the Git Repository along with the web application test.

### JavaScript / Reactjs

- What are JavaScript Data Types?
- What is the use of isNaN function?
- Differentiate between Real DOM and Virtual DOM
- List some of the major advantages of React.
- How different is React's ES6 syntax when compared to ES5?
- What's Typescript, why use it?
- What's state management in React and what libraries would use for this?

#### Git

- What is the difference between pull and fetch commands?
- What is the difference between Git and Github?
- What is a branch?
- What is a pull request?

#### php / MongoDB

- What are php data types?
- How can php and Javascript interact?
- What is a Replica Set in MongoDB?
- What is a Transaction in a database context?

## 2. Web Application - Weather Mapping

- a) Create an API using php (You can use Laravel, Yii 2 or any other framework you want) and MongoDB. This application must:
  - Register and authenticate an user to access the other endpoints. The user must have an unique email address and the password must have at least 8 characters;
  - The application must consult this API (<a href="http://openweathermap.org/API">http://openweathermap.org/API</a>) to request weather data and save it to the DB:

- All endpoints must return an JSON response with status, data, message and HTTP code.
- b) Create a ReactJS application to show information about the temperature of multiple cities, using the php API. The application must:
  - Login and registration page;
  - Have an input where the user can select multiple cities;
    Show a map with markers for each selected city. When a marker is selected, the application <u>must</u> show a tooltip with the city information;
  - Show a chart comparing the temperature of each selected city;
  - Have a responsive layout;
  - (Bonus) Extra points for using CSS animations;
  - (Bonus) Extra points for using a state management library.