

# Full Stack Developer Coding Challenge

Frankfurt am Main – 09.07.2021

## 1.1 Context

You are tasked to develop an application for a client. This client has a travel agency and in order to provide more value to his users he wants to provide weather information.

He is interested in obtaining this weather information from <https://openweathermap.org/> (you will only need the free tier) and build a weather dashboard for his users.

## 1.2 Requirements

We want to build a small dashboard in which users are able to see the current weather and the weather forecast for the city they are in.

For the forecasts they should be able to see how the weather will be like at midday for the next five days. It should display the temperature in degrees celsius, and the condition (sunny, cloudy, etc).

Also, he would like to show its users a list of every capital in South America as he sells travel packages to the region. This list should be grouped by temperature bracket. For example, capitals with temperature from 0-10 °C, capitals with temperature 11-20 °C, and so on. Feel free to tweak the temperature ranges so each bracket has at least one capital and that they are well distributed within these brackets. The list should be configurable to add new locations.

He has different clients for whom this information will be useful, so he wants to present this information in a user-friendly way. His clients are normally accessing our client's services via a Browser, but can

also be the case that maybe in a future he will be interested in facilitating this services via a mobile application or connect it to other services he uses / has developed.

## 1.3 The Challenge

Think about and provide an overview of the software architecture for this application (please consider the technical stack we use at Fincite). The software should contain a backend server and a frontend.

Afterwards implement this application which showcases the data from the API and that displays it in a way you think would be useful for our client.

Aim to provide a correct application, as professional as possible. Like how you would develop it in an actual professional setting, so we can better assess your skills. On the agreed date you will be allowed to present your results and explain why you built it like you did.