

Map places — frontend developer exercise

Your exercise is to create a system for adding, editing and displaying Places on a map. The system should also include functionality for filtering Places. All requirements are outlined in the backlog below.

You don't need to finish the whole system, even a partially completed system tells a lot about your design decisions, software development skills and the quality of your code.

What you *can* use:

- Google Maps API or Bing Maps API, and their associated frontend SDKs.
- Any PHP framework(or Java framework etc)
- Sass (SCSS) or an equivalent for your CSS
- ES2015/ES6 features

What you *shouldn't* use:

- JavaScript frameworks like Angular or React. We'd like to see what design decisions you make in the frontend development process.
- jQuery or equivalent DOM library
- Bootstrap or equivalent CSS/web framework

Backlog

API / Backend

- As an API, I want to have a CRUD (Create, Read, Update, Delete) structure for Places.
- As an API, I want to have a CRUD structure for Place keywords.
- As a Place, I want to have the following data:
 - Title
 - Description
 - Map coordinates (Latitude and Longitude)
 - Opening hours
- As a Place keyword, I want to have the following data:
 - Label
 - What Places I'm associated to

Frontend

- As a User, I want to be able to add new Places.
- As a User, I want to be able to remove existing Places.
- As a User, I want to be able to edit the title, description, opening hours and coordinates of an existing Place.
- As a User, I want to be able to search Places by title.
- As a User, I want to be able to filter Places to display only open places.

- As a Map, I want to be able to display the currently filtered set of Places.
- As a User, I want to be able to add, edit and remove keywords for a Place.
- As a User, I want to be able to filter Places based on a list of Place keywords.
- As a User, I want to have a clear, and if possible, a good-looking user interface to do all these actions in.
- As an Application, I want to be a single-page application so that users don't have to reload the page when they filter or add Places, for example.

Extra respect

- As a User, I want to select a Place's location (coordinates) straight from the Map when adding a Place or editing a Place
- As a User, I want to be able to set an existing Place as a favorite Place.
- As a User, I want to be able to remove a Place from the list of my favorite Places.
- As a User, I want to filter Places to display only my favorites.

Documentation

A readme file should be supplied when returning this exercise for review. The readme should contain system requirements, installation instructions and possible instructions about using sample data.