Places/listview project

This test consists of two parts

- A coding test
- A set of technical questions

Coding Test

Google Places has a public search API:
https://developers.google.com/places/web-service/search

The Places API allows you to query for place information on a variety of categories, such as: establishments, prominent points of interest, geographic locations, and more. You can search for places either by proximity or a text string. A Place Search returns a list of places along with summary information about each place.

As with all google web services, it requires that you sign up for a google account, and get an API key: https://developers.google.com/places/web-service/get-api-key

You can use the nearby search endpoint to retrieve a list of places within a specified area, allowing you to refine that list using keywords, or a type of place (as defined here: https://developers.google.com/places/web-service/supported_types

As an example, this (with a valid API key) returns a list of cafe's matching the keyword "surf" within a 1.5KM radius around Newquay:
https://maps.googleapis.com/maps/api/place/nearbysearch/json?location=50.4164582,-5.100202299999978&radius=1500&type=cafe&keyword=surf&key=[REPLACE%20WITH%20YOUR%20KEY]

Your challenge is to create an application that accepts a location (lat/lon) as an input, and presents a list of places, matching the keyword "surf" within a 1km radius of that location. Present a list view, showing the following place attributes, for each item in the list:

- Name
- Rating
- Opening hours

Platform Choice

You can create the application as either a command line application, web application or mobile application using the following guidance:

- PHP, Python or JavaScript as a backend for web applications
- JavaScript, or Python for command line only applications
- iOS or Android as the target platform for mobile applications

Requirements

Feel free to spend as much or as little time on the exercise as you like as long as the following requirements have been met.

- Please complete the user story below.
- Your code should compile and run in one step.
- Feel free to use whatever frameworks / libraries / packages you like.
- Please include tests
- Please allow any API keys to be configurable by the tester (do not hardcode your google maps API key)
- Please avoid including artefacts from your local build

User Story

Ensure all of the following:
As a **user running the application** I can **view a list of lodges in a 1km radius of a user submitted lat/lon** so that **I know which lodges are closest to my chosen location.**
As a **user running the application** I can **see the public rating assigned to each lodge** so that **I know which lodge has the highest rating in the area I'm viewing.**
As a **user running the application** I can **see the opening hours (if available) for each lodge** so that **I know which lodges are open right now.**
If you have chosen a web or mobile application, you can optionally include any of the the following:
As a **user running the application** I can **use geo targeting to determine my current location** so that **I don't need to type it into an input box**
As a **user running the application** I can **use a map to view & approximate my search location and radius** so that **I don't need to type it into an input box**

Acceptance criteria

- For a given lat/lon, a list of places matching the keyword "surf" and type "lodging" are returned
- The name, rating and opening hours of the lodge are clearly displayed

Technical questions

Please answer the following questions in a text file, and submit with your code:

1. How long did you spend completing the assignment? How (if at all) would you change your solution if you had more time?
2. Can you describe a feature (perhaps with some reference code) that exists in your chosen programming language that you found particularly useful?
3. How would you track down a performance issue with yours or another developer's code?

Submission notes

- We tend to use GitHub, but feel free to use whichever hosted version control system you are comfortable with.
- When your project is ready send us the URL to the repo.
- Please include pertinent instructions for running your project in a README markdown file.
- We do not accept projects as compressed email attachments.
- Feel free to make assumptions, but communicate them in the code or ask us for clarification if unsure.
- Reach out and ask questions if anything in this brief is unclear!