Coding test - Python

Problem description

We are a large office with a small car park. Our team has been tasked with building a website to help us to manage the car park. A number plate recognition system is in place and we'd like to only allow the entrance to the car park to open if the number plate seen is one of our employees. We want to be able to track the make, model and colour of the car as well as the owner of the car.

Other notables include:

- Cars may only have one owner, but it's possible for one person to have many cars
- Private and international number plates are considered out of scope. Standard format of `LLNN LLL` is to be taken into consideration only.
- Some kind of local persistent storage should be used to retain data across application restarts
- A list of all employees can be found in the following JSON file: game-of-thrones/data/characters.json at master · jeffreylancaster/game-of-thrones (github.com)
- Please treat this application as `production ready`
- Please implement any further API endpoints which you think are necessary.

Create Http API endpoints which will allow us to:

- List all available car makes and models. It should be possible to search the cars by make.
- List all registered employee cars. It should be possible to search for an employee by name.
- Add a new car make and model.
- Register a new car for an employee.
- Check whether a given number plate is registered by employees or not
- Perform a health check on the system

Submission:

1. Create a repository on GitHub and commit your solution.
2. Share the link to your repository with your interviewer.

Good luck! If you have any questions, feel free to ask.