

BreachLock Evaluation Assignment

Hi,

You have been selected for the Programming Evaluation Round for BreachLock Inc. This Assessment will consist of 1 Question for Backend. Please solve it, in order to qualify for the next rounds.

Q-1. This project is to gauge the backend skills of you by creating a simple server that manages a parking lot. You are expected to use Python with FastAPI to create this & MongoDB as the Database.

You will create three API endpoints which are mentioned below:

- a.) Park a Car: The Endpoint will be given the car number as input and outputs the slot where it is parked. If the parking lot is full, the appropriate error message is returned.
- b.) Unpark the Car: This endpoint takes the slot number from which the car is to be removed from and frees that slot up to be used by other cars.
- c.) Get the Car/Slot Information: This endpoint can take either the slot number or car number and return both the car number and slot number for the input.

Constraints:

1. The parking lot size is given using an environment variable in the .env file which you should create in the code base and we can change that when we are starting the service. (Please add the .env file as .env.sample).

Common Information Regarding the Questions

1. If you feel that there is some information missing from the document, you are expected to take a decision on that by yourself. As that will help us understand your thinking even better.
2. Your solution should include a README.md that gives clear instructions on how to start the service and explains the solution.
3. Once you are done with the Assessment, please share with us the Github/Gitlab/Bitbucket Repository Public URL on our mail, so we can evaluate it.