

Parking Lot

The office basement has a parking lot of 120 car parking space capacity out of which 20% is reserved for differently-abled and pregnant women since its closest to the lift.

Reserving a parking space has become a tedious job and consumes a good amount of time, hence management has decided to automate it based on a first come first serve basis with the following features.

Requirements:

- Users can book a parking space 15 mins prior to arrival, in which he will get a parking number.
- If the user fails to reach in 30 mins then the allotted space again goes for rebooking (15 mins extra wait time).
- If Reserved space is occupied completely then the reserved users will be allotted general parking space.
- If 50% capacity is utilized, then 15 mins extra wait time will be eliminated (for both reserved and general).
- If there is a clash for the general use and reserved for a general parking spot than the reserved user will be a priority.

Guidelines:

- You can use any Framework for the NodeJS runtime environment.
- You must use a NoSQL database.
- UI is not required.
- 3 mandatory API is required for QA
 - Get all available parking slots
 - Get all occupied parking slots
 - Total registered users

Evaluation:

- Database design/ Data Structure.
- API structure with appropriate standards.
- Business Logic.
- The scope provided for further added features.
- API and code version support.
- Quality of code.