## Interview

### Scenario

Hilton Restaurants want to create a reservation system to allow guests to reserve tables. Guests will make a reservation with their info, and restaurant employees can browse and manage those reservations.

### Requirements

* Guests should able to make reservations.
* Guests should able to update their reservations.
* Guests should able to cancel their reservations.
* Restaurant employees should able to update reservations.
* Restaurant employees should able to mark a reservation as completed or canceled.
* Restaurant employees should able to browse all the reservations by date and status.
* Restaurant employees should able to check reservation detail.

Info structure of reservation

* Guest Name
* Guest contact Info
* Expected arrival time
* Reserved table size info
* Status of the reservation

Tech Requirements

* Use Node.js stack to complete this test
* Data should be persisted to a NoSQL database
* Build RESTful Endpoints
* Build GraphQL Endpoints
* Unit-test code
* A SPA(Single Page Application) to interact with the backend and show how the API works.

Non-Tech Requirements

* Clean code & Clean Architecture
* Logging properly
* Exception handling in good strategy

### Bouns (not must)

* Solution for building and deploying the project
* Basic Authentication
* Use following tech
* Couchbase
* cucumber
* Docker
* GraphQL
* Loopback
* React
* TypeScript
* Anything that you think make sense

### FAQ

* Something I think is missing or confusing in the requirement?

You can always send us an email (HR email address?) to get more details about this test. But keep in mind this is a code test to see the capability of engineering skills in a limit time. For missing requirements, you can make your best guess, but please note the reason make you do so.

* Do I need to cover all the bonus points?

No, the bonus for the candidates who think the test is too simple to show off their skills. if you do well, you can get a better chance to pass the test.

* How long this test take.

Usually, we would suggest completing the test in a week and no more than two weeks after you got it. Please contact us to ask for more time if you need it.

### Submit

* Source code
* Instruction of how to set up and execute
* Explain of the tech stack used in this project and what the reason behind the choice
* Explain of the project structure and why make it so
* Test Report if applicable