



Test case – backend engineer

Imagine that you need to create a backend REST API for the theater ticket control panel

1 General info:

this is a backend for a web application to managing theater tickets

2. Functionality:

2.1 Application should implement Create/Read/Update/Delete for ticket model, Authorization is required. But no need to include user model, just imitate it by send an encoded Authorization token with a request and verify it on the backend, it can be some constant string.

The ticket model includes:

creation date,
customer name,
performance title,
performance time,
ticket price

2.2 Also application needs some analytics:

a) how much money was earned by theater between 2 dates with division by months

example response: [{month: 'September', summaryProfit: 8000}, {month: 'October', summaryProfit: 6000}, ...]

b) how many people visited theater between 2 dates with division by months

example response: [{month: 'September', summaryVisits: 800}, {month: 'October', summaryVisits: 600}, ...]

Do both analytics in 2 ways - 1) DB aggregation 2) by using js algorithms.
And define some query param to determine which method are used
for example /analytics/visited?method=aggregation ...

3. Notes

You can use any frameworks and DB's in your project. Preferably will be Hapi.js and MongoDB. For deploying your app, please use docker-compose.

It Will be a big plus using unit testing

Also, a big plus will be using swagger for documentation

You can use any node packages you will need

Please add README with a description of how to run the project

After finishing please share the GitHub link to the project