A Multi-tier Online Book Store

Raneen Dwikat

11821050

Alaa Qzaih

11819539

First, we want to talk about the tools we used.

We used:

* Node JS as language,
* Express: framework to build REST API
* CORS : to allow access from subdomains and trusted third parties
* Morgan: a middleware for node.js that logs HTTP requests
* postman for testing endpoints,
* .csv file for database so we used FS (file system) module to interact with data.
* nodemon to keep refresh the servers
* npm-requests to send request from server to another

what we do?

We build two server on different ports (3000 for book server and 3001 for order server) and we send requests from order server to book server using npm-requests. We tried to build a good and easy to read structure, so we declare a router folder that contains two files once for order server and the other is for book server. And the same for controller folder .

Let's talk about the 3 requests

1. search: this request use book server to get all book with same topic. The book server listen on port 3000. When it handle a request with URL matching to URLs in book router file, it call a function in book controller file . that function use FS module to get all entries with topic that had been send in header as parameter.
2. Info: this request also use book server with same process. This request use item number (unique, it's like id) to get information about the book like cost as a json file
3. Purchase: this request use order server to post an order.

The function that have been called by this request send a new request to book server in order to check number of stock and if there is a book with item number that have been send as a parameter. if it return true then a new request will send to book server to decrement number of stock in order to acknowledgment this purchase.

NOTE: TO RUN OUR PROGRAMME YOU NEED TO WRITE ON TERMENAL "npm start"