NodeJS

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Preparations

Create an Express server that runs on port 3000 and implements one GET method for the route „/" and returns {"productapi":"1.0"}

Agenda

Task 1: We want to create a backend system that stores product data. The user can

A - Read all product data

B - Create a new product

C - Delete a product with a certain ID

D – Search for a product by a searchterm

A – Read all products

1. All products are stored in one JSON file products.json
   - Each product has
     - type (either "book", "music" or "movie" – no other types allowed)
     - price
     - title
     - description
     - imageurl
     - Id (a randomstring of 20 characters)
2. Think of how a JSON file with some products would look like. Make an example products.json and create

   2-3 products with your text editor.
3. Implement a GET request that returns the whole products.json.

B – Create a new product

1. What HTTP-Method would you use to create a new product?

2. Implement that method using the module fs. Return the product information including a server-side generated ID by the module randomstring.

C – Delete a product

1. In the JSON array of products each product has an unique ID. Implement a method that reads the JSON file, looks for the proper ID and deletes that product. Aftewards, the JSON file should be saved again.

2. What HTTP-Method would you use to delete a product?

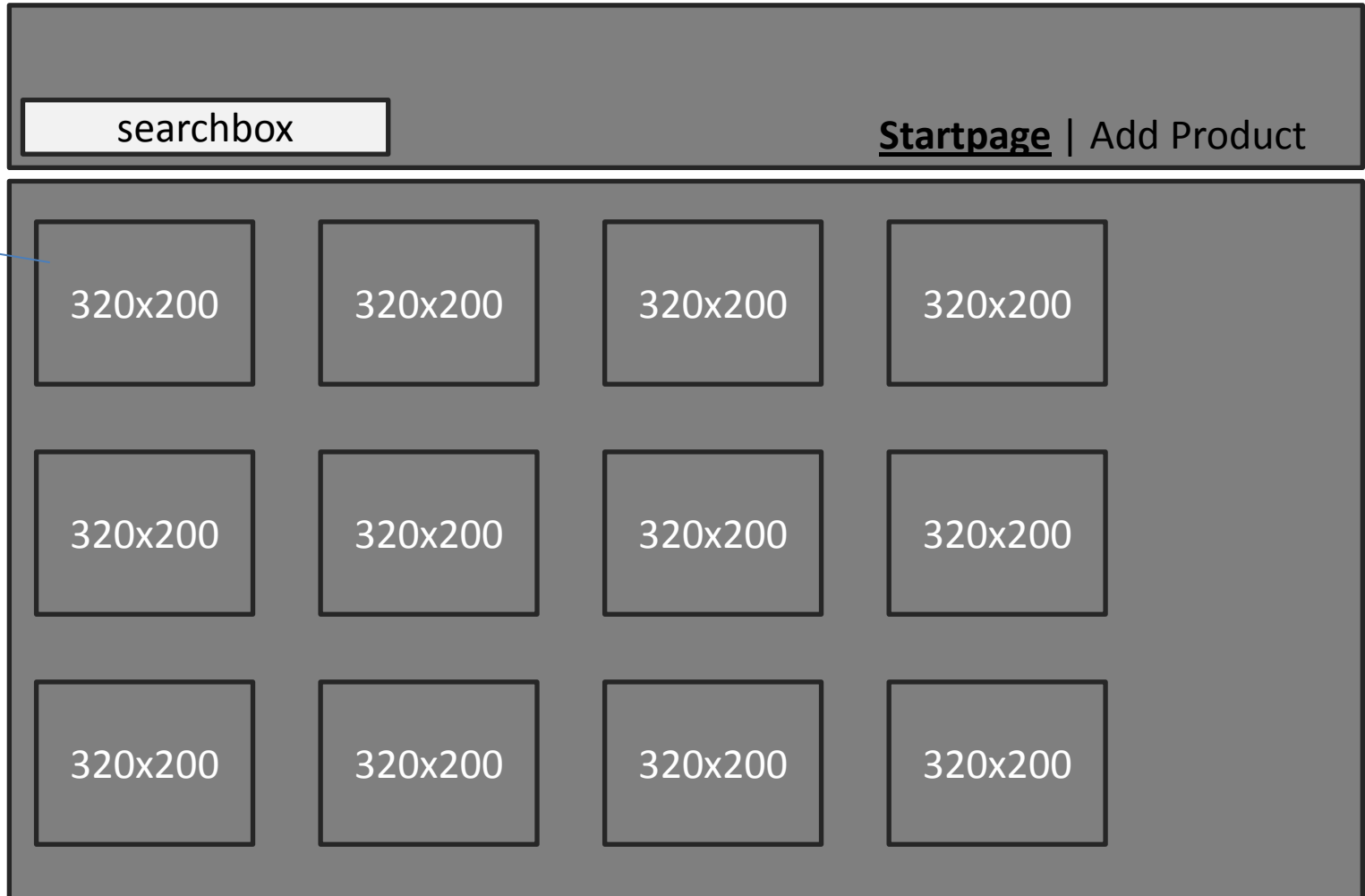3. Implement that method using module fs.

D – Search for a product

1 . Product have the attributes title and
description. Look for a way to search for a string
(i.e. „potter") in both of those strings and if at
least one occurence exists in either the title or
the description, return the product id.

2. Extend your GET /products route by one query
parameter „q". If q is defined, only return the
products that match the searchterm.

Frontend

Task 2: We want to create a frontend app that
reads, creates and deletes product-data.

1. Create a folder /public in your server folder.
2. In there, create an index.html, main.js and style.css and a basic HTML5 website.
3. Include the STATIC-Middleware in your NodeJS backend and remove the current „/" route in your server.
4. Test, if by going to localhost:3000/ your index.html will be shown.

Frontend Startpage

Startpage | Add Product

imageurl

320x200	320x200	320x200	320x200
320x200	320x200	320x200	320x200
320x200	320x200	320x200	320x200

Frontend Add Product

searchbox

title

dropdown type

price

imageurl

description

Ok