Workshop: Cubicle – Part 2

"*Cubicle*" is a place, where you can browse some of the most popular Rubik cubes in the world and add some new cubes that you have discovered.

Main Task

If you can complete the previous task, good job! Now it's time to **upgrade** your app and **implement** a few new features. For instance, replace the way you **store** data using **MongoDB** and **Mongoose**, **create** and **attach new accessories** to each **cube**, make some **relations** between them, and **include** a few more **pages**.

Installing Dependencies

As you already know, you should **install** a bunch of new things so you could be able to continue with this part of the workshop.

Here's the list:

1. MongoDB Download Center - You can check the Installation Instructions as well
2. MongoDB Node.JS Driver
3. Mongoose - **Very useful Mongoose Documentation**
4. Robo 3T

Database Connection with ExpressJS

Your **database.json** file inside the **config folder** will be **modified** because you **no longer** will **store** the data in a **JSON** file. So, make sure inside it, the **mongoose connection** via **MongoDB connection string** is **made** and **exported.**

The **`index.js`** file should **require** the exported mongoose connection (**database**) before the server starts.

Model

If you follow the previous structure you probably created ES6 class Model for each cube in this format:

- **Id** - number
- **Name** - string
- **`Description`** - string
- **`Image URL`** - string
- **`Difficulty Level`** - number

Now it's time to refactor this ES6 class to **Mongoose Schema**, so each **Cube** has the following structure:

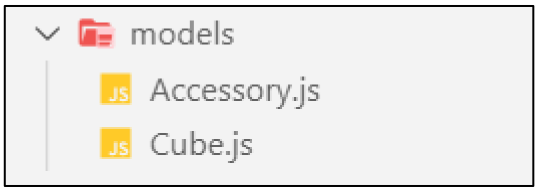
- Id - (**ObjectId)**
- Name - (**String**, **required**)
- Description - (**String**, **required, max length validation**)
- ImageUrl - (**String**, **required**, **http/https validation**)
- Difficulty Level - (**Number**, **required**, **min and max valid range**)
- Accessories - (**ObjectId**, **ref Accessories Model**)

And create another model (**Accessory**) in the following format:

- Id - (**ObjectId**)
- Name - (**String**, **required**)

- ImageUrl - (**String**, **required**, **http/https validation**)
- Description - (**String**, **required**, **max length validation**)
- Cubes - (**ObjectId**, **ref Cubes Model**)

Your model's folder should look like this:



Database Persistence

All pages in the application should persist data to **MongoDB** & work with **MongoDB.**

Additional Pages

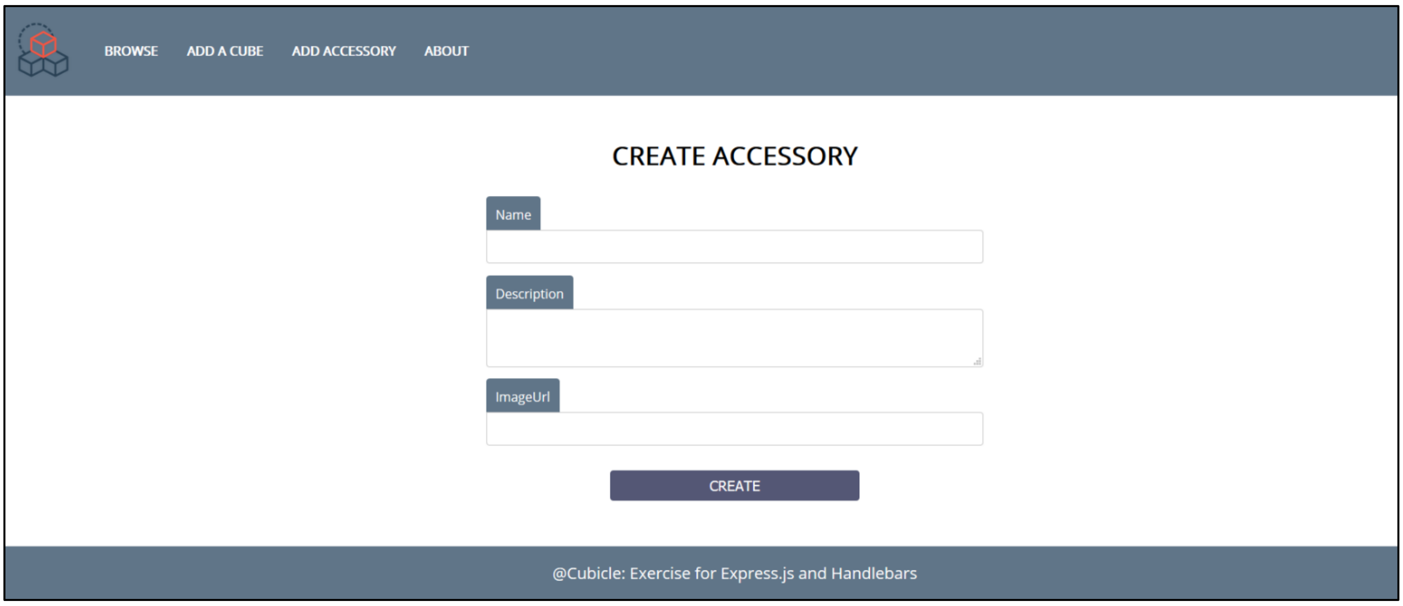
You should implement **2** new routes:

- **`/create/accessory`** - should render the create an accessory form
- **`/attach/accessory/:id`** - should render the accessory page about attaching new accessory for cube

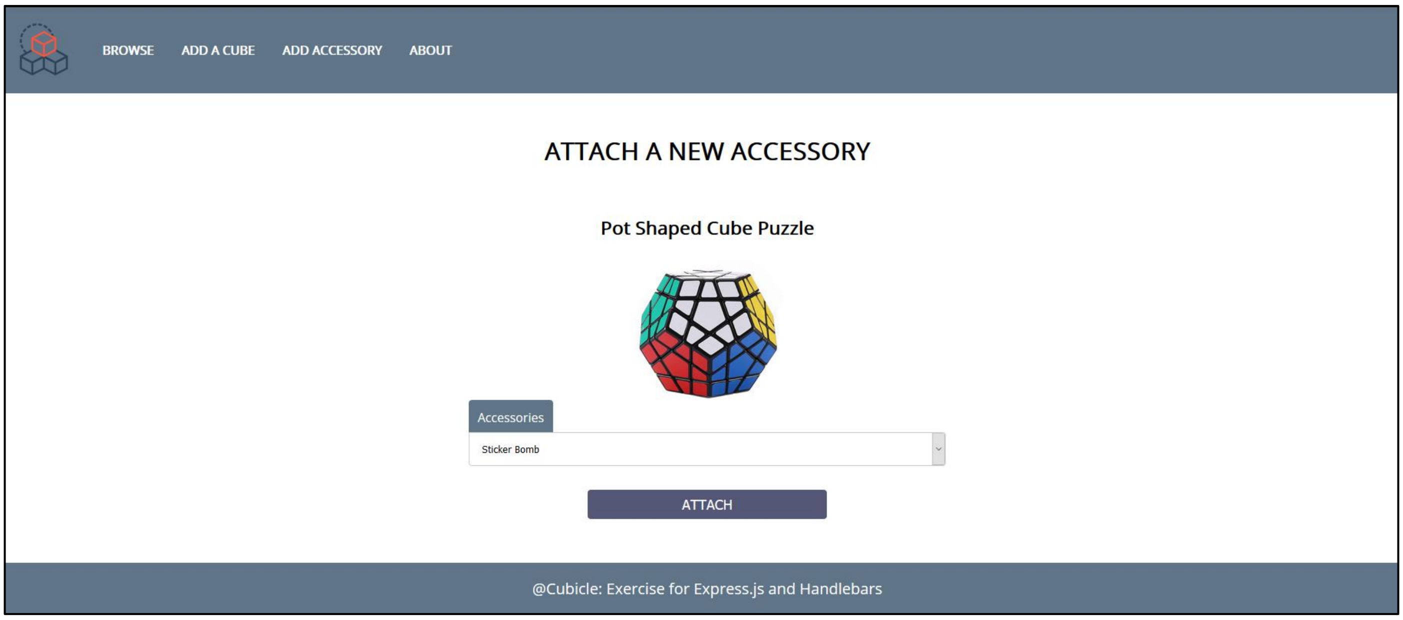
And **update the view** on **`/details/:id`** route, that renders the cube's details.

Use the provided [**Resources**]() to create the additional templates using Handlebars (The authentication here is the same as above - **`username: student`**, **`password: student`**). Identify the dynamic parts and use appropriate syntax for interpolating and rendering the application context. Replace the old **CSS** file with the given one.

Create Accessory Page View

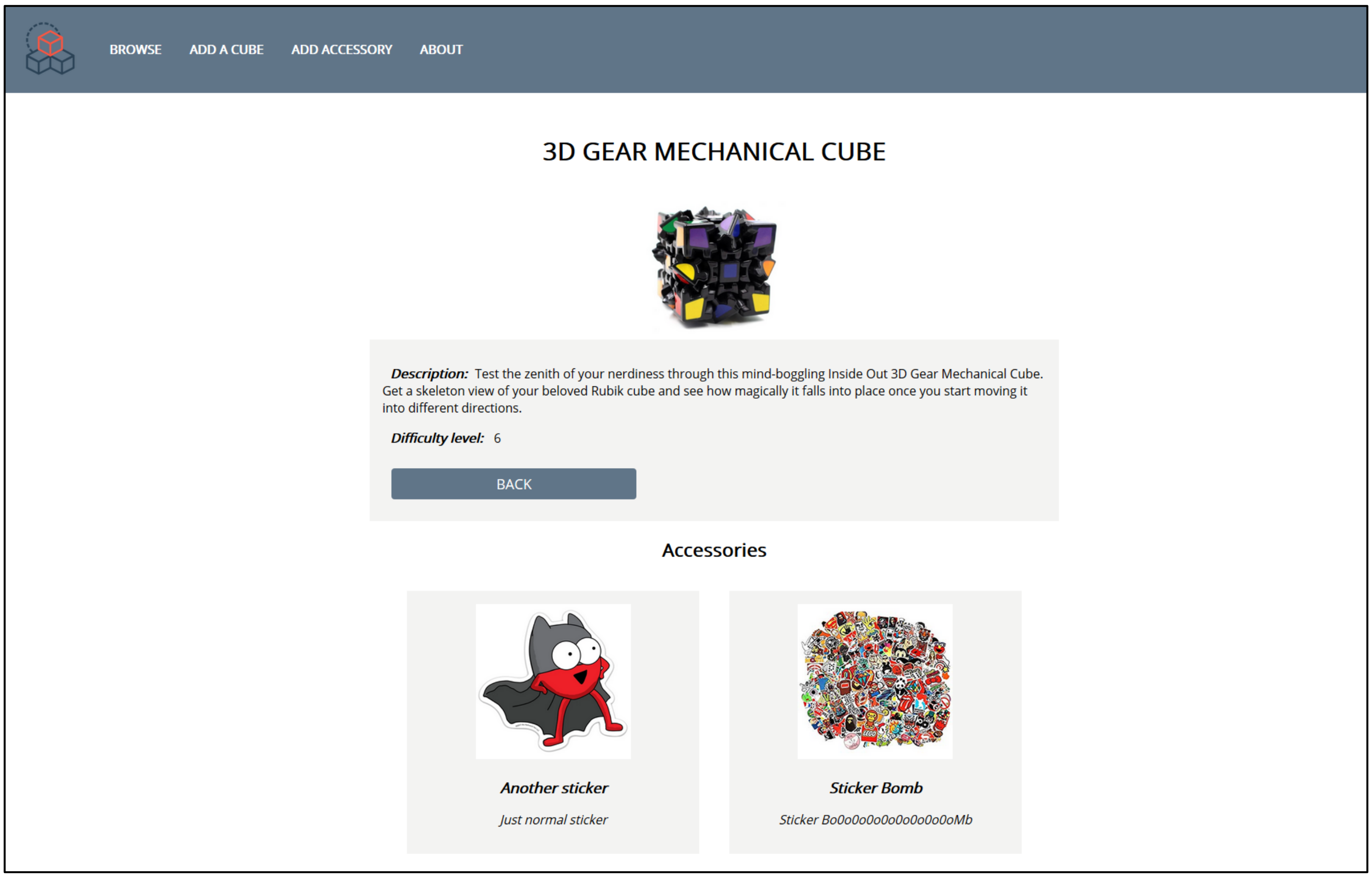


Attach new accessory view



Note that, the options inside the select element must be only these which the current <u>cube doesn't have attached to itself</u>.

Updated Details Page View



Description: Test the zenith of your nerdiness through this mind-boggling Inside Out 3D Gear Mechanical Cube. Get a skeleton view of your beloved Rubik cube and see how magically it falls into place once you start moving it into different directions.

Difficulty level: 6

Good Luck! 😊