

## ExpressJS2 Guided Project

### Introduction

This week we will enhance the **backend server we built with ExpressJS** for the Ecommerce app. We will build APIs for categories, products, cart and order details in the backend server to perform CRUD operations in the MongoDB database.

We will make use of **NodeJS** and **ExpressJS** to build the server and use the **mongoose** package to connect to the MongoDB database.

We will design our backend server as specified in the **Ecommerce App Backend Server\_Design Document.pdf** file. You can also refer to the **Sample Flow** section from this document to understand how to run the application.

### Housekeeping points

- This is a minimal example and may not follow some standard practices.
- We focus on the main flow, and not much error handling.

### Problem Statement

We will be working on the following tasks –

- **Design the routes for the endpoints to fetch categories, products and products.**
- **Build the handlers for various routes for categories and products.**
- **Build service APIs to perform all CRUD operations on categories and products.**
- **Use Postman to connect to the backend server and test APIs.**

The functionality for cart and orders is already implemented in the project.

Before you run the backend server app, you need to make sure that you have provided the connection string of the MongoDB database instance. To do so, open the **config.js** file provided in the **app** folder in the code and update the value of `DATABASE_URI` variable.

To run the backend Server App in the localhost kindly follow the below mentioned steps -

1. Download and extract the **02\_ExpressJS2 Guided Project\_Source Code** folder from the 02\_ExpressJS1 Guided Project\_Source Code.zip folder
2. Open a terminal and navigate to the **e\_commerce\_app\_backend** folder in it.
3. Run the **"npm install"** command to install the required packages as mentioned in the package.json file provided.
4. **Complete the tasks as mentioned above in the Problem Statement.**
5. Run the **"npm start"** command to run the application in the localhost. This will run your application on localhost on port 8080.
6. Now open the Postman tool to connect to the APIs of the node server. The base URL for the backend server is <http://localhost:8080/api/v1/>

7. You can try connecting to APIs as per the endpoints provided. For ex, if you want to fetch all categories you will give GET URL as <http://localhost:8080/api/v1/categories/> and if you want to fetch specific category you will give its id in the query parameter for eg- <http://localhost:8080/api/v1/categories?id=10> will fetch a category with category Id 10.
8. For more details on API endpoints please refer to the README file provided within the folder.
9. You can also refer to the **Ecommerce App Backend Server\_Steps to test APIs in Postman.pdf** to understand the step by step flow of execution.