

Experiment 9

Routes Parameters

Experiment 9: Routes Parameters

Lab Objective: Set up a Routes Parameters

Step 1: Setup the Project Folder:

```
● PS C:\Users\91959\Desktop\Collage\3rd_year\Gulsan_Sir\Backend\my-node-app> npm init -y
Wrote to C:\Users\91959\Desktop\Collage\3rd_year\Gulsan_Sir\Backend\my-node-app\package.json:

{
  "name": "my-node-app",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "type": "commonjs"
}
```

Step 2: Install Express.js:

```
PS C:\Users\91959\Desktop\Collage\3rd_year\Gulsan_Sir\Backend\my-node-app> npm install express ej
added 8 packages, and audited 76 packages in 2s
14 packages are looking for funding
  run `npm fund` for details
found 0 vulnerabilities
```

Step 3: Create app.js File:

```
● PS C:\Users\91959\Desktop\Collage\3rd_year\Gulsan_Sir\Backend\my-node-app> touch app.js
Touching app.js
```

Step 4: Create a Basic Express Application:

```
● ● ●
1 const express = require('express');
2 const app = express();
3 const PORT = 3000;
4
5 app.listen(PORT, () => {
6   console.log(`Server is running on http://localhost:${PORT}`);
7 })
```

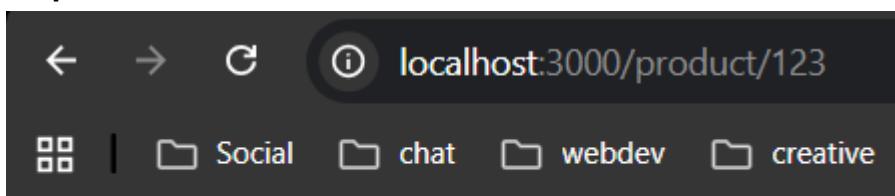
Step 5: Define a Route with Route Parameters:

```
1 app.get('/product/:id', (req, res) => {  
2   const productId = req.params.id;  
3   res.send(`Product ID: ${productId}`);  
4 });
```

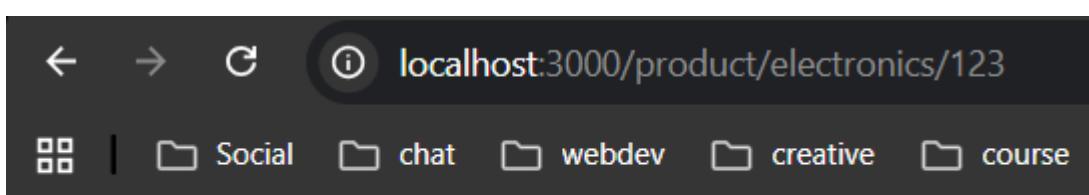
Step 6: Accessing Multiple Route Parameters:

```
1 app.get('/product/:category/:id', (req, res) => {  
2   const { category, id } = req.params;  
3   res.send(`Category: ${category}, Product ID: ${id}`);  
4 });
```

Step 7: Test the Route



Product ID: 123



Category: electronics, Product ID: 123

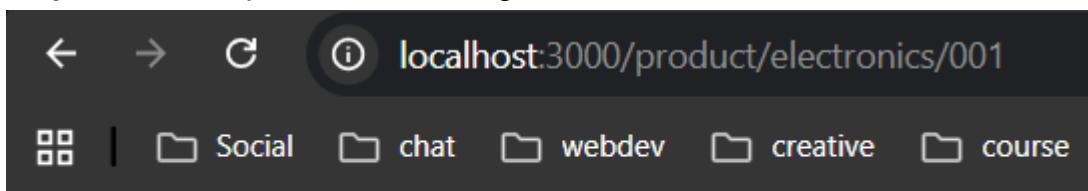
Step 8: Add Logic for Dynamic Content

```
1 app.get('/product/:category/:id', (req, res) => {
2   const { category, id } = req.params;
3   if (category === 'electronics') {
4     res.send(`Electronics Product with ID: ${id}`);
5   } else {
6     res.send(`Category: ${category}, Product ID: ${id}`);
7   }
8});
```

Step 9: Error Handling for Missing Parameters:

```
1 app.get('/product/:category/:id', (req, res) => {
2   const { category, id } = req.params;
3   if (!id) {
4     res.status(400).send('Product ID is missing!');
5   } else {
6     res.send(`Category: ${category}, Product ID: ${id}`);
7   }
8});
```

Step 10: Clean up and Final Testing:



Category: electronics, Product ID: 001

