MC4266 – Full Stack Web Development

Maniraj. K *Asst.Prof(Sr.Gr)*

Ex : 5

To Create a NodeJS server using Express that Creates, Insert, Updates and Deletes customers details and stores them in MongoDB database. The information about the user should be obtained from a HTML form.

Ex:5 Create a NodeJS server using Express for CRUD

1. Initialize a Node.js project

maniraj@Titan:~/Documents/FSWD_Lab$ cd Solutions

maniraj@Titan:~/Documents/FSWD_Lab/Solutions$ mkdir Ex_5

maniraj@Titan:~/Documents/FSWD_Lab/Solutions$ cd Ex_5

maniraj@Titan:~/Documents/FSWD_Lab/Solutions/Ex_5$ npm init -y

```
Wrote to /home/maniraj/Documents/FSWD_Lab/Solutions/Ex_5/package.json:
{
  "name": "ex_5",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}
```

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Ex:5 Create a NodeJS server using Express for CRUD

2. Install Express:

   maniraj@Titan:~/Documents/FSWD_Lab/Solutions/Ex_5$ **npm install express**

3. Install body-parser to parse incoming request bodies (for POST and PUT requests):

   maniraj@Titan:~/Documents/FSWD_Lab/Solutions/Ex_5$ npm install body-parser

   OR   **npm install express mongoose body-parser cors dotenv**

           Where   **Cors** *(Cross-Origin Resource Sharing)*

                          dotenv(Loads environment variables from .env file)

                          MONGO_URI=mongodb://localhost:27017/mydatabase

4. Create a new Express Server File : ex_5_server.js

Ex:5 Create a NodeJS server using Express for CRUD

5. Download MongoDB

Go to the official MongoDB download page:

🔗 https://www.mongodb.com/try/download/community

```
5.a Install mongodb.msi

 5.b. Set Environment variable

    C:\Program Files\MongoDB\Server\6.0\bin

 5.c. Start mongodb in cmd

    net start MongoDB
```

Ex:5 Create a NodeJS server using Express for CRUD

6. Install Dotenv if missing

   ```
   npm install dotenv
   ```

7. Create a html file for user input and display

8. Create a css file if required

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Ex:5 Create a NodeJS server using Express for CRUD

Execute or Run the JS

1. Start the server

node ex_5_server.js

```
D:\FSWD_Lab\Ex_5>node ex_5_server.js
(node:5952) [MONGODB DRIVER] Warning: useNew
ersion
(Use `node --trace-warnings ...` to show whe
(node:5952) [MONGODB DRIVER] Warning: useUni
ajor version
🚀 Server running on port 5000
✅ MongoDB Connected
```
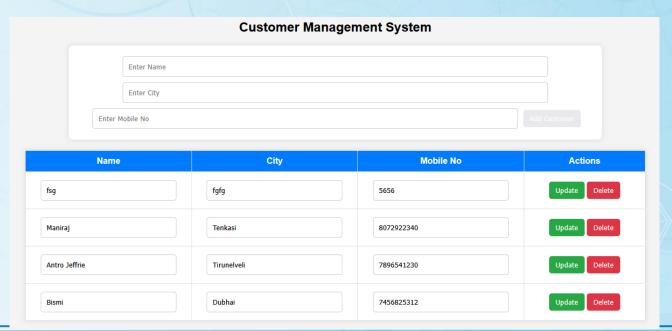
2. Open the index.html in the browser

Ex:5 Create a NodeJS server using Express for CRUD

Execute or Run the JS

3. Submit the form with the data

4. You can update or delete

Customer Management System

Name	City	Mobile No	Actions
fsg	fgfg	5656	Update Delete
Maniraj	Tenkasi	8072922340	Update Delete
Antro Jeffrie	Tirunelveli	7896541230	Update Delete
Bismi	Dubhai	7456825312	Update Delete

Ex : 6

To Create a NodeJS server using Express that Creates, Insert, Updates and Deletes customers details and stores them in mysql database. The information about the user should be obtained from a HTML form.

Ex:6 Create a NodeJS server using Express for CRUD using MySQL

1. Initialize a Node.js project

maniraj@Titan:~/Documents/FSWD_Lab$ cd Solutions

maniraj@Titan:~/Documents/FSWD_Lab/Solutions$ mkdir Ex_5

maniraj@Titan:~/Documents/FSWD_Lab/Solutions$ cd Ex_5

maniraj@Titan:~/Documents/FSWD_Lab/Solutions/Ex_5$ npm init -y

```
Wrote to /home/maniraj/Documents/FSWD_Lab/Solutions/Ex_5/package.json:
{
  "name": "ex_5",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}
```

Ex:5 Create a NodeJS server using Express for CRUD

2. Install Express:

    maniraj@Titan:~/Documents/FSWD_Lab/Solutions/Ex_5$ **npm install express**

3. Install body-parser to parse incoming request bodies (for POST and PUT requests):

  maniraj@Titan:~/Documents/FSWD_Lab/Solutions/Ex_5$ npm install body-parser

       OR   **npm install express mysql2 cors dotenv**

             Where   *Cors (Cross-Origin Resource Sharing)*

                           dotenv(Loads environment variables from .env file)

4. Create a new Express Server File : ex_6_server.js

Ex:5 Create a NodeJS server using Express for CRUD

5. Download mysql and install

CREATE DATABASE customerdb;

USE customerdb;

CREATE TABLE customers (

  id INT AUTO_INCREMENT PRIMARY KEY,

  name VARCHAR(100) NOT NULL,

  city VARCHAR(100) NOT NULL,

  mobile VARCHAR(20) NOT NULL);

6. Create .env file

DB_HOST=localhost

DB_USER=root

DB_PASS=your_mysql_password

DB_NAME=customerdb

Ex:5 Create a NodeJS server using Express for CRUD

```
6. Install Dotenv if missing


        npm install dotenv

7. Create a html file for user input and display

8. Create a css file if required
```

Any Queries?

manirajk.mca@srmvalliammai.ac.in