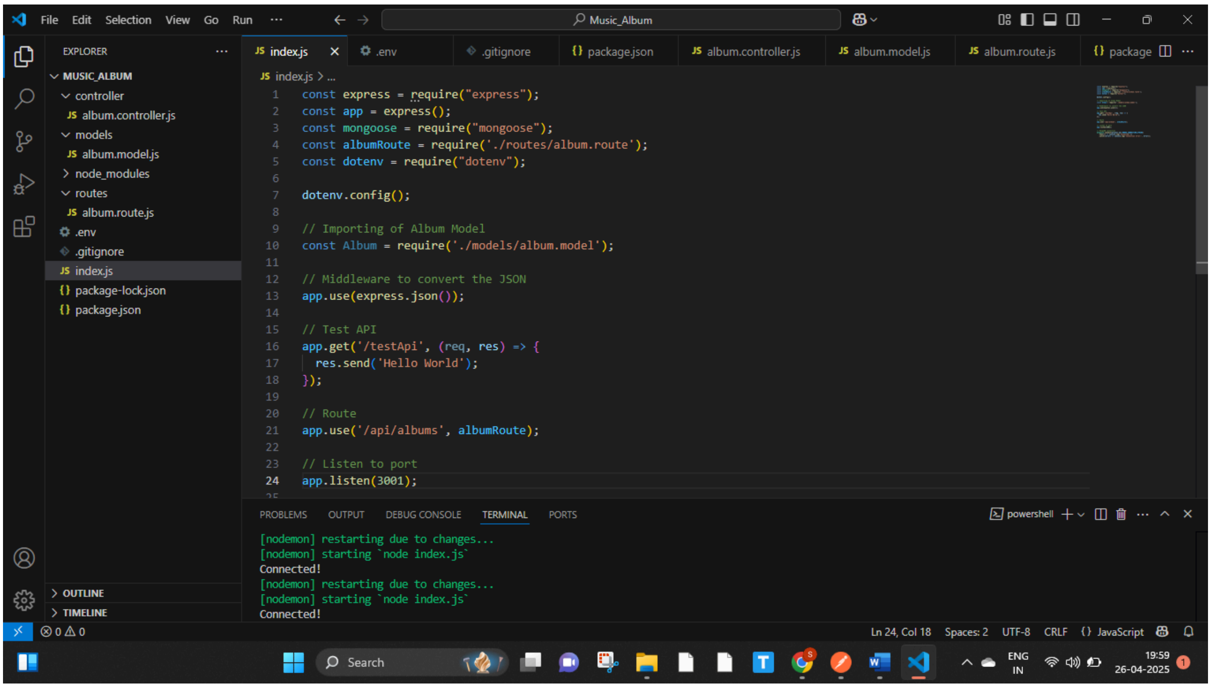
CRUD OPERATIONS

This project is a Music Album Management System built using Node.js, Express, and MongoDB. It allows users to create, retrieve, update, and delete music albums

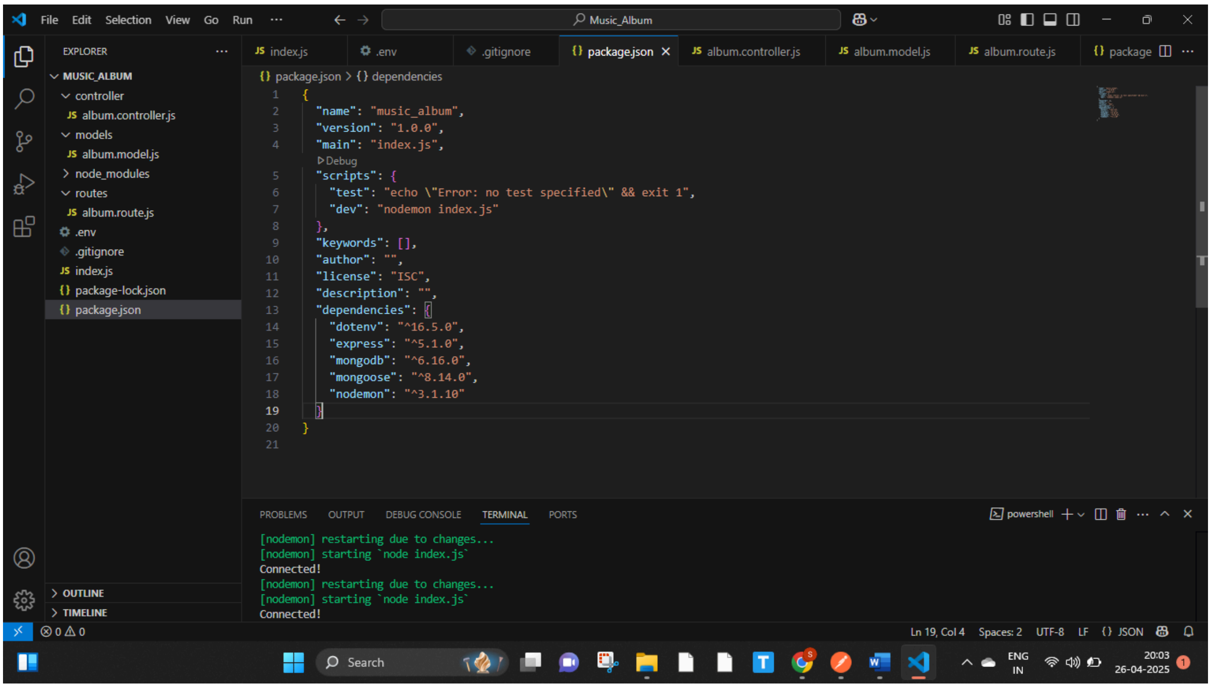
1.index.js file



```javascript
const express = require("express");
const app = express();
const mongoose = require("mongoose");
const albumRoute = require('./routes/album.route');
const dotenv = require("dotenv");

dotenv.config();

// Importing of Album Model
const Album = require('./models/album.model');

// Middleware to convert the JSON
app.use(express.json());

// Test API
app.get('/testApi', (req, res) => {
  res.send('Hello World');
});

// Route
app.use('/api/albums', albumRoute);

// Listen to port
app.listen(3001);
```

```
[nodemon] restarting due to changes...
[nodemon] starting `node index.js`
Connected!
[nodemon] restarting due to changes...
[nodemon] starting `node index.js`
Connected!
```

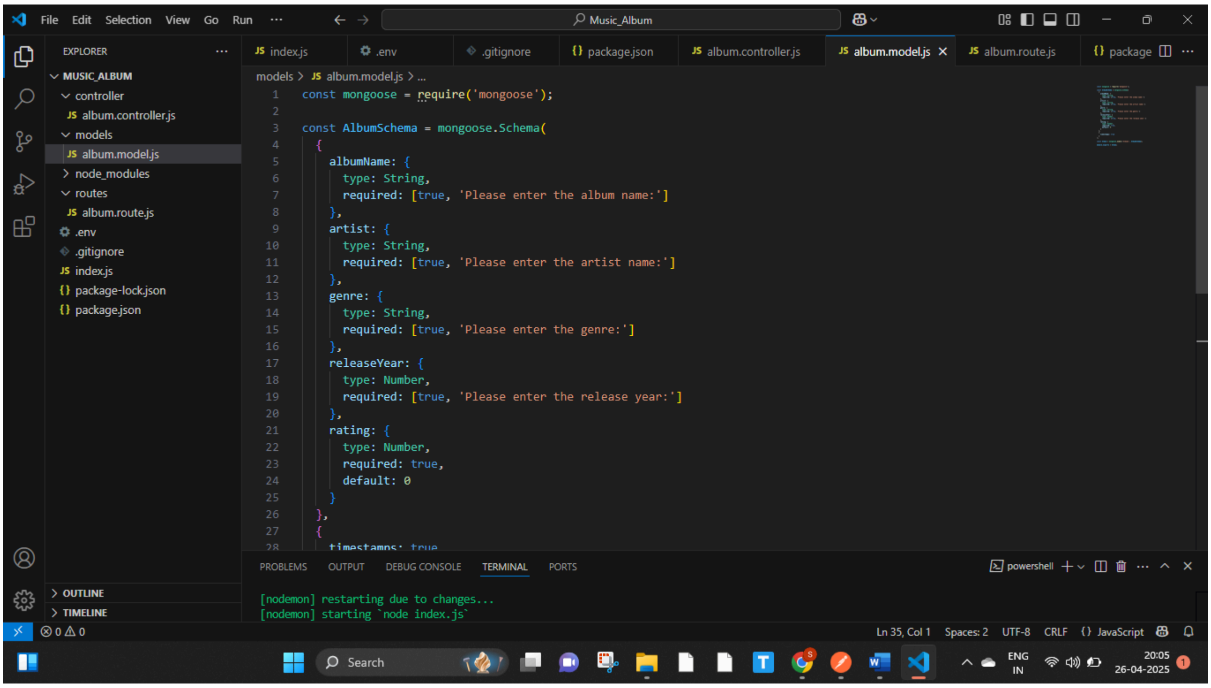
2.package.json



```json
{
  "name": "music_album",
  "version": "1.0.0",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1",
    "dev": "nodemon index.js"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "description": "",
  "dependencies": {
    "dotenv": "^16.5.0",
    "express": "^5.1.0",
    "mongodb": "^6.16.0",
    "mongoose": "^8.14.0",
    "nodemon": "^3.1.10"
  }
}
```

```
[nodemon] restarting due to changes...
[nodemon] starting `node index.js`
Connected!
[nodemon] restarting due to changes...
[nodemon] starting `node index.js`
Connected!
```

3.album.model.js

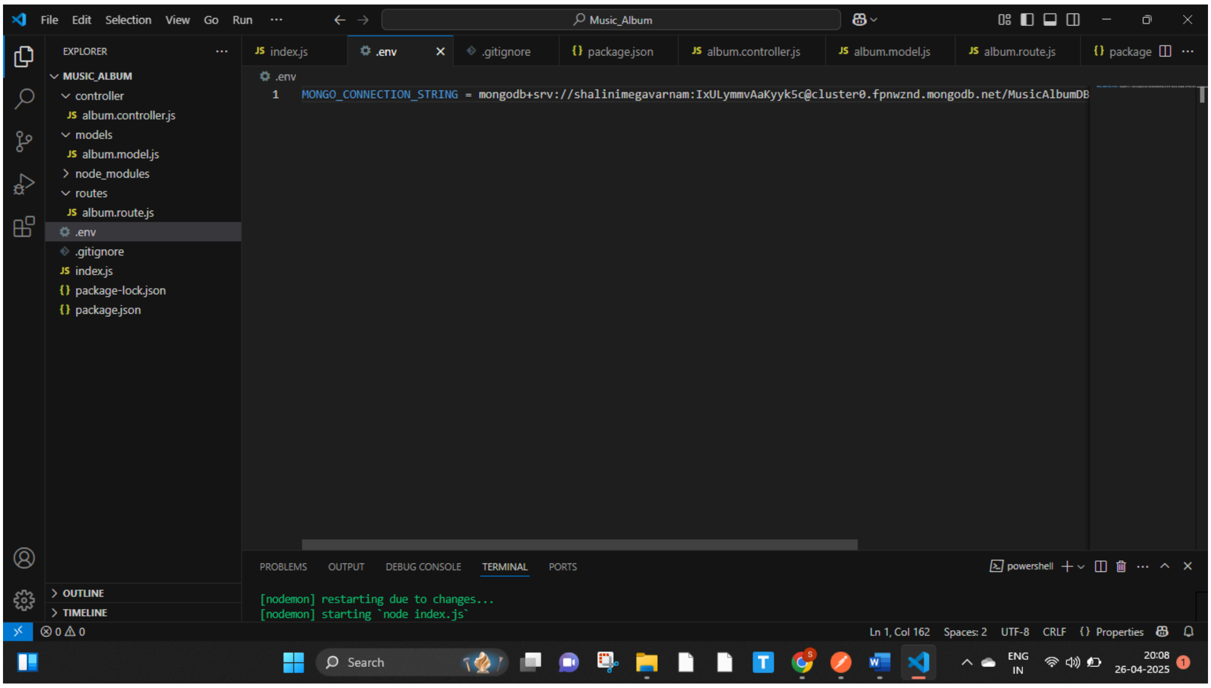


models > album.model.js > ...

```javascript
const mongoose = require('mongoose');

const AlbumSchema = mongoose.Schema(
  {
    albumName: {
      type: String,
      required: [true, 'Please enter the album name:']
    },
    artist: {
      type: String,
      required: [true, 'Please enter the artist name:']
    },
    genre: {
      type: String,
      required: [true, 'Please enter the genre:']
    },
    releaseYear: {
      type: Number,
      required: [true, 'Please enter the release year:']
    },
    rating: {
      type: Number,
      required: true,
      default: 0
    }
  },
  {
    timestamps: true
```

```
[nodemon] restarting due to changes...
[nodemon] starting `node index.js`
```

4..env

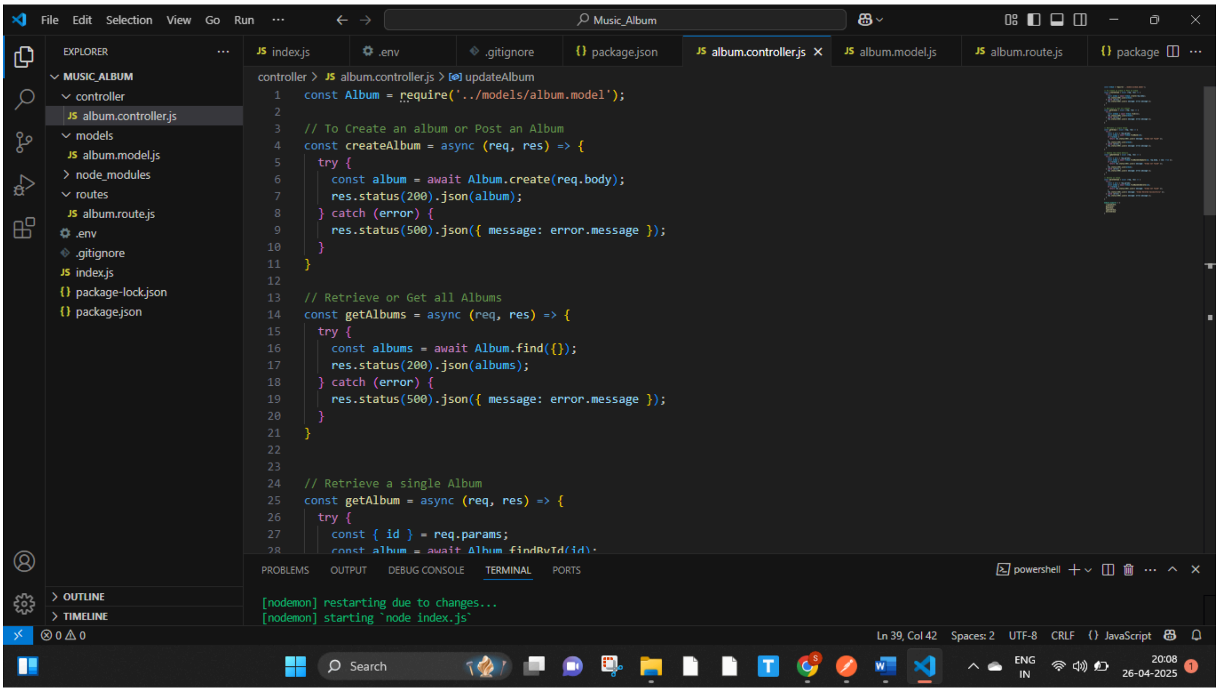


.env

```
MONGO_CONNECTION_STRING = mongodb+srv://shalinimegavarnam:IxULymmvAaKyyk5c@cluster0.fpnwznd.mongodb.net/MusicAlbumDB
```

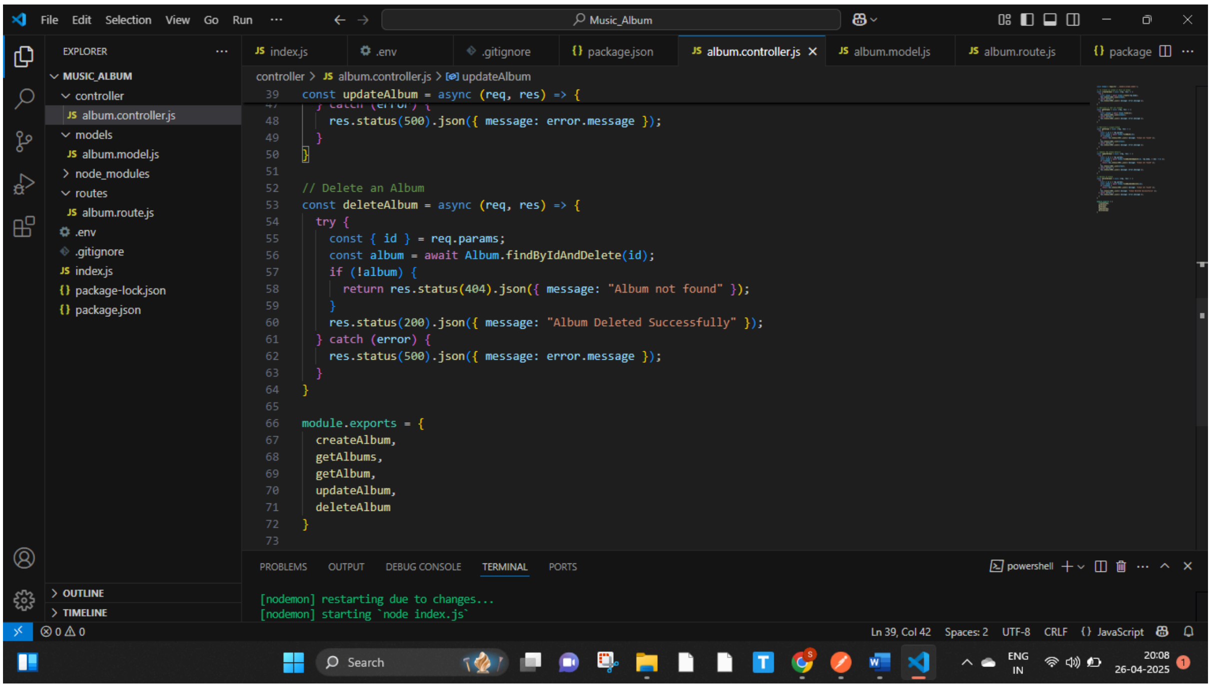
```
[nodemon] restarting due to changes...
[nodemon] starting `node index.js`
```

5.album.controller.js


File Edit Selection View Go Run ···
Music_Album
EXPLORER
MUSIC_ALBUM
controller
album.controller.js
models
album.model.js
node_modules
routes
album.route.js
.env
.gitignore
index.js
package-lock.json
package.json
OUTLINE
TIMELINE
index.js .env .gitignore package.json album.controller.js album.model.js album.route.js package
controller > album.controller.js > updateAlbum
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
powershell
Ln 39, Col 42 Spaces: 2 UTF-8 CRLF {} JavaScript
Search
ENG IN
20:08
26-04-2025

```javascript
const Album = require('../models/album.model');

// To Create an album or Post an Album
const createAlbum = async (req, res) => {
  try {
    const album = await Album.create(req.body);
    res.status(200).json(album);
  } catch (error) {
    res.status(500).json({ message: error.message });
  }
}

// Retrieve or Get all Albums
const getAlbums = async (req, res) => {
  try {
    const albums = await Album.find({});
    res.status(200).json(albums);
  } catch (error) {
    res.status(500).json({ message: error.message });
  }
}


// Retrieve a single Album
const getAlbum = async (req, res) => {
  try {
    const { id } = req.params;
    const album = await Album.findById(id);
```

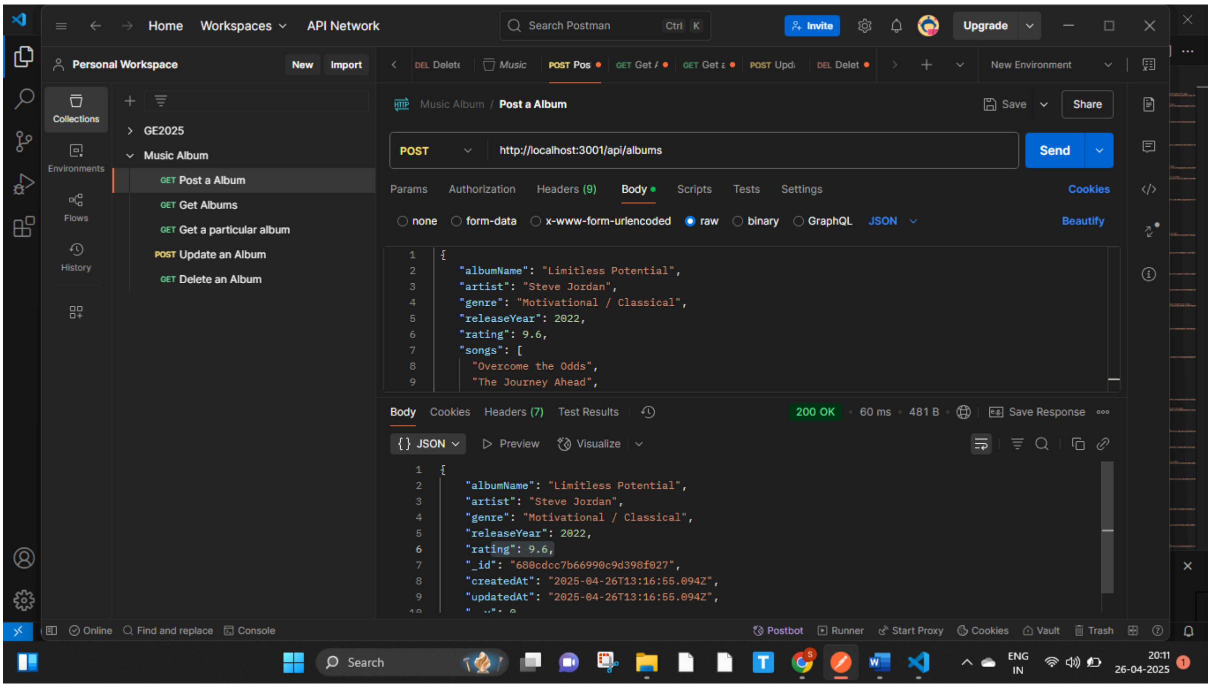
```
[nodemon] restarting due to changes...
[nodemon] starting `node index.js`
```


File Edit Selection View Go Run ···
Music_Album
EXPLORER
MUSIC_ALBUM
controller
album.controller.js
models
album.model.js
node_modules
routes
album.route.js
.env
.gitignore
index.js
package-lock.json
package.json
OUTLINE
TIMELINE
index.js .env .gitignore package.json album.controller.js album.model.js album.route.js package
controller > album.controller.js > updateAlbum
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
powershell
Ln 39, Col 42 Spaces: 2 UTF-8 CRLF {} JavaScript
Search
ENG IN
20:08
26-04-2025

```javascript
const updateAlbum = async (req, res) => {
  } catch (error) {
    res.status(500).json({ message: error.message });
  }
}

// Delete an Album
const deleteAlbum = async (req, res) => {
  try {
    const { id } = req.params;
    const album = await Album.findByIdAndDelete(id);
    if (!album) {
      return res.status(404).json({ message: "Album not found" });
    }
    res.status(200).json({ message: "Album Deleted Successfully" });
  } catch (error) {
    res.status(500).json({ message: error.message });
  }
}

module.exports = {
  createAlbum,
  getAlbums,
  getAlbum,
  updateAlbum,
  deleteAlbum
}
```

```
[nodemon] restarting due to changes...
[nodemon] starting `node index.js`
```

6.Post a Album



POST http://localhost:3001/api/albums

○ none ○ form-data ○ x-www-form-urlencoded ● raw ○ binary ○ GraphQL JSON

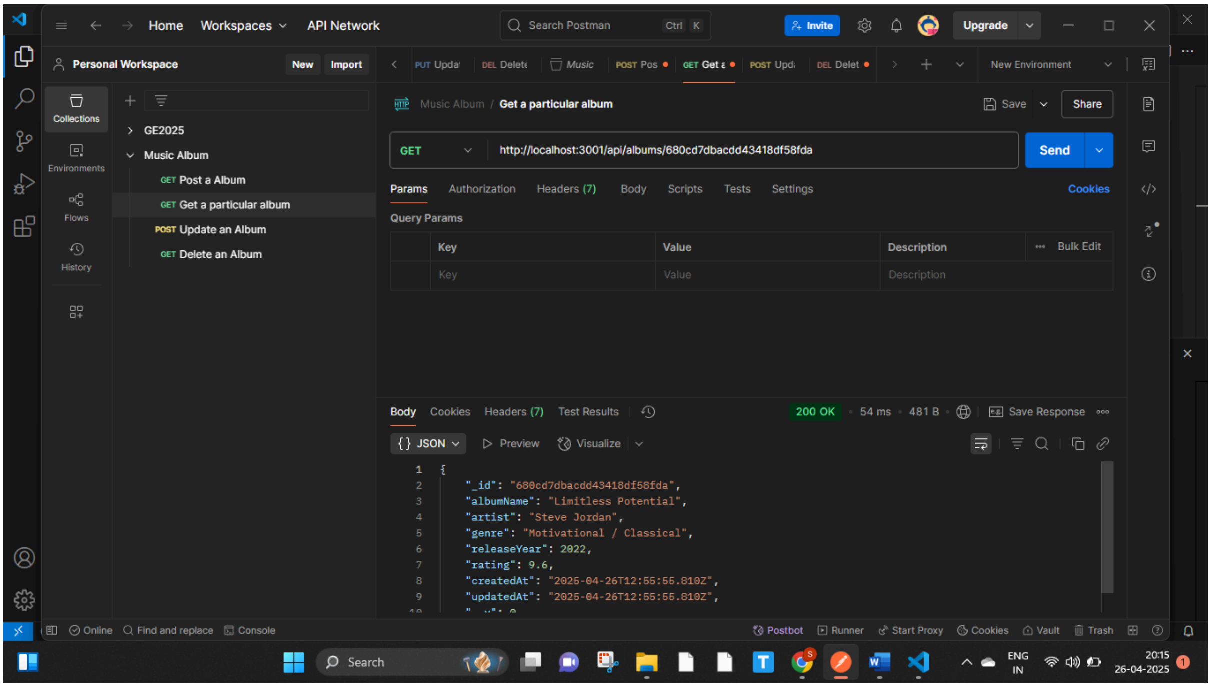
```
{
  "albumName": "Limitless Potential",
  "artist": "Steve Jordan",
  "genre": "Motivational / Classical",
  "releaseYear": 2022,
  "rating": 9.6,
  "songs": [
    "Overcome the Odds",
    "The Journey Ahead",
```

Body Cookies Headers (7) Test Results 200 OK 60 ms 481 B

```
{
  "albumName": "Limitless Potential",
  "artist": "Steve Jordan",
  "genre": "Motivational / Classical",
  "releaseYear": 2022,
  "rating": 9.6,
  "_id": "680cdcc7b66990c9d398f027",
  "createdAt": "2025-04-26T13:16:55.094Z",
  "updatedAt": "2025-04-26T13:16:55.094Z",
```

20:11 26-04-2025

7.Get a particular album



GET http://localhost:3001/api/albums/680cd7dbacdd43418df58fda

Query Params

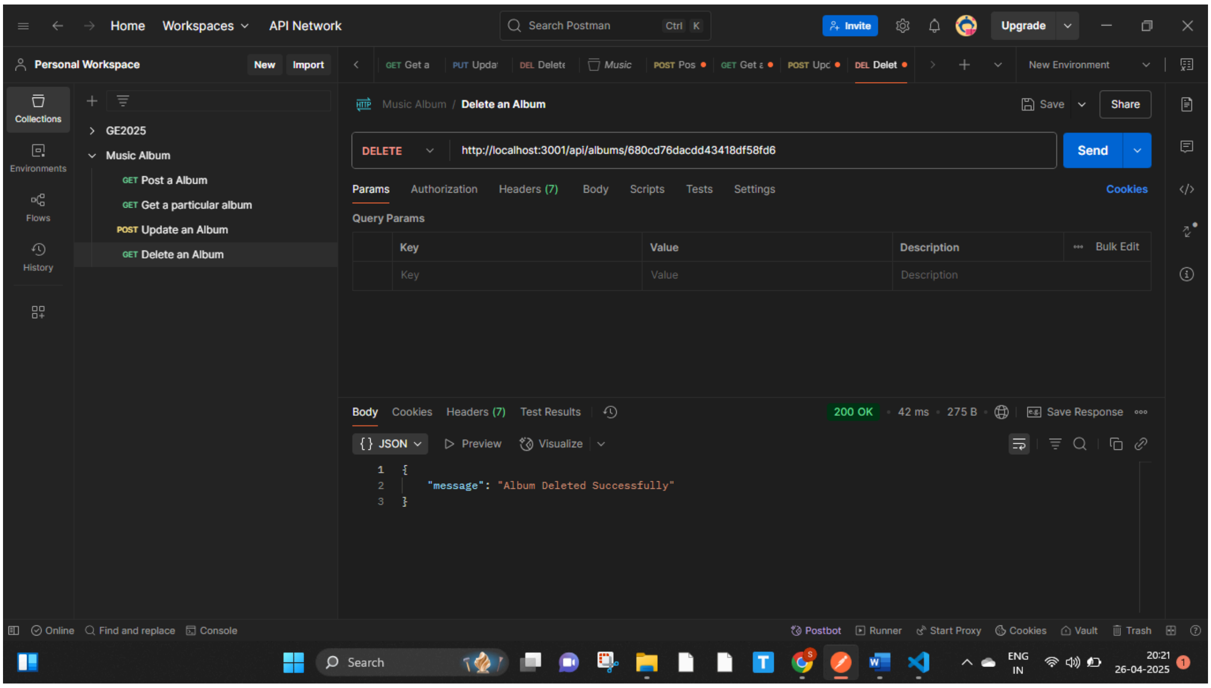
Key	Value	Description
Key	Value	Description

Body Cookies Headers (7) Test Results 200 OK 54 ms 481 B

```
{
  "_id": "680cd7dbacdd43418df58fda",
  "albumName": "Limitless Potential",
  "artist": "Steve Jordan",
  "genre": "Motivational / Classical",
  "releaseYear": 2022,
  "rating": 9.6,
  "createdAt": "2025-04-26T12:55:55.810Z",
  "updatedAt": "2025-04-26T12:55:55.810Z",
```

20:15 26-04-2025

8.Delete a Album



DELETE http://localhost:3001/api/albums/680cd76dacdd43418df58fd6

Key	Value	Description
Key	Value	Description

200 OK · 42 ms · 275 B

```
{
    "message": "Album Deleted Successfully"
}
```