

# Node.js Express and MongoDB CRUD Exercise

## Project Subject: Song Task Tracker

### Folder Structure:

```
- routes/  
  - songRoutes.js  
  
- middleware/  
  - errorMiddleware.js  
  
- controllers/  
  - songController.js  
  
- models/  
  - songModel.js  
  
- config/  
  - dbConfig.js  
  
- index.js (main entry point)
```

### Database Connection ( `config/dbConfig.js` ):

- Use the MongoDB Node.js driver.
- Create a connection to MongoDB Atlas.
- Define a function to connect to the database and return the database object.

### Model ( `models/songModel.js` ):

- Define the structure of the "Song" document in MongoDB with the following properties:
    1. Song Title
    2. Artist
    3. Album
    4. Release Date
    5. Genre
    6. Duration
  - Export the model for use in the controller.
-

### **Routes ( `routes/songRoutes.js` ):**

- Develop routes for CRUD operations (Create, Read, Update, Delete).
- Utilize Express Router to organize routes.

### **Controller ( `controllers/songController.js` ):**

- Implement CRUD operations using the MongoDB driver (NODEJS).
- Manage request and response logic.
- Utilize the model to interact with the database.

### **Error Middleware ( `middleware/errorMiddleware.js` ):**

- Implement middleware to handle errors.
- Return appropriate error responses.

### **Database Connection in Main Entry ( `index.js` ):**

- Import and use the database connection in the main entry point.
- Initiate the Express server.
- Connect the routes and controllers.