Assignment: Build a RESTful API with MongoDB using Node.js and Express (100 marks)

Expand on the previous assignment by integrating MongoDB as a database, testing concepts such as database interaction, CRUD operations, and advanced middleware handling.

Requirements:

1. Connect to MongoDB: (30 marks)

- Use Mongoose to connect your Node.js application to a MongoDB database. (10 marks)
- Create a schema for storing user data. Schema should have proper validations. (20 marks)

2. Define REST API Routes with MongoDB: (50 marks)

- **GET /users** – Fetch all users from the MongoDB collection.
- **GET /users/**
  – Fetch details of a specific user by MongoDB ObjectId.
- **POST /user** – Add a new user and save it in MongoDB.
- **PUT /user/**
  – Update details of an existing user.
- **DELETE /user/**
  – Delete a user by MongoDB ObjectId.

Submission Guidelines: (20 marks)

- Submit a zip folder of your code.
- Provide a document with screenshots of your test results and also add screenshots of MongoDB Compass showing results after each API execution. (15 marks)
- Provide clear comments explaining the logic. (5 marks)