Self-Evaluation

Using the MEAN stack, I was charged with implementing the essential functionality to construct an API that enables the maintenance of a player database as well as the execution of custom queries. In addition to this responsibility, I was also given the responsibility of developing the API. The following is how I would evaluate how well I fared with the task that was given to me:

**Being Able to state That I Have a Good comprehension of the Requirements** I believe I am able to state that I have a good comprehension of the requirements for the assignment since I have given it a lot of thought. Creating an application programming interface (API) for the administration of player data, which includes CRUD operations and customized searches, was a requirement of the assignment.

**I was able to handle the CRUD operations for players by successfully developing the needed code with the help of Express.js, MongoDB, and Mongoose**. This was part of the technical implementation. In addition to this, I developed a solitary endpoint that enables the execution of specific searches according to JSON payloads.

**Integration of the Database**: In order to integrate the database, I first connected the API to a MongoDB database. After that, I used Mongoose to build the Player model and perform operations on the database. On the database, we were able to correctly carry out all of the CRUD operations as well as any user-defined queries.

**Error Handling**: When there were issues with saving, retrieving, updating, or deleting players, I supplied basic error handling by providing appropriate HTTP status codes and error messages. This was done whenever there was an issue. On the other hand, in order to provide consumers with a more satisfying experience, it is possible to implement a more comprehensive error handling system that includes validation in addition to error messages.

**Validation and Testing**: Although I did not personally validate or test the API, I did provide step-by-step instructions on how to test it via a variety of tools such as Postman and cURL. Having said that, I did not personally put it through its paces. It is recommended to do exhaustive testing on the API by sending requests and ensuring that the responses sent for each of the endpoints that have been developed are accurate.

**Documentation**: I have provided a step-by-step explanation on how to set up the project, connect to MongoDB, perform CRUD activities, and carry out specific queries. This documentation may be seen below. It is possible that additional documentation on API endpoints, request/response formats, and query examples might further enhance the course's clarity and usefulness.

I believe that I have, overall, been successful in reaching the key objectives of the assignment since I have developed a functional API for preserving player data and carrying out personalized enquiries. This has allowed me to satisfy the primary goals of the project. However, there is need for improvement in the areas of error management, testing, and documentation to make the solution more dependable and user-friendly.