**BLOX ASSESSMENT**

1. **Elaborate how you tested your internship or academic projects.**
2. **What did the system used to do?**

The System was designed as a Backend Architecture for a Todo App Project developed using Node.js & Express.js. The System consisted of New User Registration, Login – Logout functionalities and also included the CRUD operations. A basic UI was created using React.js to make the system interesting. It was designed to call APIs to perform CRUD operations to store and retrieve data. The Database used was NoSQL Database i.e., MongoDB. The whole system was designed as a MVC Architecture. Various built-in packages of Node.js & Express.js were used to accommodate the functionalities and to make sure that the APIs were running successfully and securely.

1. **What other systems have you seen in the wild like that?**

There are almost all backend systems present in the wild (including many complex one’s) that focus on API Development & Management. Some examples include Modern E-commerce websites, Real-Estate Websites and much more.

1. **How do you approach the testing problem?**

Approaching the testing phase is the most important phase of building the project. Once the APIs were built and end-points in the code were setted up, the end-points were tested manually using the POSTMAN software for various URL methods such as GET, POST, PUT and DELETE. All the end-points were tested against all the possible real-time testcases manually using the POSTMAN.

1. **What were interesting bugs?**

There were certainly many interesting errors that were encountered during the development phase which included problems such as Database Connectivity Issues, Syntactical Errors, Validation Errors, End-point failures, Authentication and Authorization Errors and the Error Handling & Exception Handling Errors.

1. **How did you fix them?**

To identify and eliminate such errors, it was important to identify the root cause and implement appropriate corrective actions. It included re-reading the code manually, trying to understand the logic behind the API call and the method used for that call, the middleware’s working in-between the APIs to parse the data into the JSON format. POSTMAN was used to identify the end-points availability and to check the failures. All the software and package version related issues were resolved in accordance with the project’s requirements.