**INTERNSHIP ASSIGNMENT**

**Steps**

* **Create Server** 
  + Nodejs has provided to create its own server (Not in PHP).
* **Create Database**
  + Connection using xampp and database created in phpmyadmin.
* **Connect to database** 
  + Connecting to database was similar to PHP using mysql module.
* **Create Web Form using Bootstrap**
  + Insert, Search and Delete operation using HTML and Bootstrap.
* **Request from HTML Web form**
  + Handling each request separately and routing for different requests using express and body-parser module.
* **HTTP methods for CRUD operations (API)**
  + GET request for search, POST request for INSERT and DELETE request for DELETE operation using method-override module.

**Experience**

As I was familiar with backend development using PHP and MySQL database, opting for NodeJS for development was an easier task. I watched several tutorials of introduction to NodeJS and started working on the assignment. Gradually, I learned how NodeJS differs from PHP and its advantages over PHP for development. After getting acquainted with NodeJS and its syntaxes, I learned about the term REST and got more insights about REST API.

At the end of the assignment, I was able to create REST API using NodeJS and got hands-on with the NodeJS. Also, I learned how to connect to database and handle form request using NodeJS.

**Challenges**

REST API was one of the challenging things to understand for me. I read several articles of what is REST, how it is different from standard development and how to create REST API in NodeJS. Still, my understandings of REST are little bit vague.

The other thing that I had difficulty was in integrating form data with API. As HTML form supports only two methods i.e. GET and POST, the other HTTP methods in REST API such as PATCH, PUT and DELETE were difficult to handle. Initially, I had used only POST method for DELETE and SEARCH operation of HTML form. Later on, I got to know about the method-override which overrides the POST method into any of the HTTP request. Lastly, after getting the desired output, I made the use of Bootstrap for creating responsive Web form.

**Issue**

Due to time constraints, I had made the connection to MySQL database by localhost only.