

## **Individual Performance Test #1**

### **Objective**

The performance test aims to evaluate your ability to retrieve, sort, and select backend courses data according to specified requirements.

### **Test Procedure Documentation**

#### **1. Test Steps:**

##### **a. Database Tool Installation:**

- Obtain the MongoDB Database tool.
- Set it up by following the provided installation steps.

##### **b. Backend API Endpoint Setup:**

- Make a backend API endpoint for the provided course data using this command:  
``mongoimport --db mongo-test --collection courses --file courses.json --jsonArray``.

##### **c. Test Scenarios:**

- Get all backend courses and put them in alphabetical order.
- Pick and list the name and specialization of each course.
- Get all BSIS and BSIT courses from the curriculum.

##### **d. Data Validation:**

- Check data at each step to be sure it's right:
- Confirm the alphabetical order is correct.
- Make sure names and specializations are taken out right.
- Check that BSIS and BSIT courses are grabbed correctly.

## **2. Challenges Faced:**

### **a. MongoDB Installation Issues:**

- Had trouble installing MongoDB due to compatibility issues; fixed it by following the setup guide and making sure the system met the requirements.

### **b. Data Validation Complexity:**

- Found it hard to check data, especially dealing with special characters in course names; solved it by testing more and improving the checks, especially for special characters.

## **3. Solutions Implemented:**

### **a. Documentation Review:**

- Checked the MongoDB installation guide again to handle installation problems, making sure each step was followed.

### **b. Improved Validation Approach:**

- Made the data checks better by adding more tests, handling special characters better, and making sure everything was more accurate.