

## Flask API Development for Test Case Management

### **Task:**

Develop a Flask API that exposes endpoints for managing test cases and their execution results across multiple test assets, with data stored in a SQLite database.

### **Requirements:**

1. Set up a SQLite database to store test cases and their execution results with appropriate table schema.
2. Create endpoints for:
  - Creating a new test case and storing it in the SQLite database
  - Retrieving a list of all test cases from the SQLite database
  - Retrieving a single test case by its ID from the SQLite database
  - Updating an existing test case in the SQLite database
  - Deleting a test case by its ID from the SQLite database
  - Recording the execution result of a test case for a specific test asset in the SQLite database
  - Retrieving the execution results of all test cases for a specific test asset from the SQLite database
3. Implement data validation and error handling for each endpoint.
4. Write unit tests to ensure the functionality of each endpoint.

### **Bonus:**

- Implement authentication and authorization for accessing the API endpoints.

Candidates are required to modify the Flask API implementation to manage test cases and their execution results across multiple test assets, with data stored in a SQLite database. They will be evaluated on their ability to integrate Flask with a relational database, design efficient database schemas, and maintain API functionality with database operations relevant to test case management.