

## MID TERM TEST

### VIRTUAL LEARNING SYSTEM

You are required to develop the software solution for a Virtual Learning System

The system simplifies and simulates a virtual learning system (like LinkedIn Learning, Coursera).

The Primary module is the Course Module which has to be implemented first on a priority basis.

The application would be used by Course Moderators to

- Manage course and author details.

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#### THE APPLICATION HAS TO BE IMPLEMENTED USING

- Microsoft SQL Server as the database.
- Spring Boot Application for the RESTful Web Services.
- Spring Data JPA integrated with Hibernate for performing the ORM.
- Postman to test the RESTful end points.

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#### THIS SOFTWARE MODULE TO BE RELEASED INITIALLY NEEDS TO HAVE THE FOLLOWING FEATURES:

The course moderator who uses the system on behalf of the user should perform the following operations.

- A. Login and get authenticated.
- B. Search for courses by author or course name.
- C. Display the details of the courses.
- D. Add course to the cart.
- E. Delete courses from the cart.

Requirements:

- A. Login table with Login Id and Password

- B. Database named VLSDB, Course Table with Course Id, Course Name, Author Name, Duration in hours, Availability.
- C. Exception handling and custom exceptions
- D. Implement layered architecture with controllers, services and repositories.
- E. Readable code with comment line entries.

**Submission:**

1. Submit a single zip file that contains everything required.
2. You are supposed to submit all the code that you have written.
3. Along with the code you are also required to submit a document that mentions
  - a. Project Name of your Back End and/or Front-End applications
  - d. Database name for the application.

**Note:** *The project should follow best practices.*