

**University of Rajshahi**  
**Dept. Of Computer Science and Engineering**  
**B. Sc. Engineering. Part-3 (Odd Semester) Examination 2024**  
**Course: CSE 3232 (Web Engineering Lab)**

**Group-2**

Create a **Library Management System** using the Laravel web framework. You can find the initial project in the following GitHub repository.

<https://github.com/m-r-kushal/webe-library.git>

**Objective 1:**

Using git, clone the repository to your computer. Take necessary steps to make the initial application up and running. (E.g., create a MySQL database for the application, create .env file and update configuration info in it, install project dependencies, generate app\_key etc.).

Finally, run the Laravel application and show the application home page.

**Objective 2:**

Create **migration** to generate a table for book information following the table naming convention for Laravel and use **Model factory** and **seeder** classes to insert 200 test records in the table. Show the inserted records from database.

Table attributes:

- id [primary key]
- title [string:255]
- author [string:255]
- short\_description [text]
- isbn [string:13, 13-digit number]
- stock\_quantity [int, default:0, non-negative]
- price [float, non-zero positive]
- publication\_year [int]

**Objective 3:**

Write necessary model, views, and controller methods to perform the following actions

1. Show all books with pagination
2. Search books based on title or author
3. Create forms and write related code to add new book, edit existing book and delete a book

During the add and update operation, you should perform server-side validation on user inputs, and your application should show proper warning messages in case validation fails.

**NB:** i) A sample file named **create.blade.php** is given in the “resources/views/books/” folder. You may use this file as the starting point for building book insert form.  
ii) The use of AI assistance for coding is strictly prohibited and will result in suspension.