

# UECS3294 ADVANCED WEB APPLICATION DEVELOPMENT

# ASSIGNMENT

Jan 2018 Trimester

## Course Outcomes

In this assessment, you are assessed based on the following **course outcomes**:

- **CO1:** Build interactive and database-driven web applications using a web application framework and model-view-controller (MVC) software architecture.
- **CO2:** Build web applications with user authentication and authorization using cookies, session and role-based access control (RBAC).

## Assessment Contribution

This assignment contributes **15%** to the overall assessment for this course with **5%** contribution towards CO1 and **10%** contribution towards CO2.

## Membership

This is an **individual** assignment.

## Deadline

The deadline for this assignment is **Wednesday, April 11, 2018**.

## Question

Develop a web application using the *Laravel framework* based on a title of your choice. In choosing your title, you are required to ensure that your application meets the following requirements:

1. Your application must use the **MySQL** database system.
2. Your database should consist of the following tables:
  - a) **users** : This table is required for maintaining user records for authentication and authorization purposes.
  - b) A minimum of TWO (2) and a maximum of THREE (3) tables, **EXCLUDING** the abovementioned **users** table and any pivot tables. Each table must have at least a **relationship** with another.
3. Typical **CRUD** operations with data **validation** for inputs should be implemented for all models.
4. The use of **relational** queries and/or inserts/updates should be demonstrated.
5. User **authentication** is implemented.
6. The use of either **gates** and/or **policies** for user authorization should be demonstrated.

## Registration of Title

Please register your chosen title at <https://goo.gl/forms/Ynpqj5k52EcS0ev23>.

Ensure that you are signed in to your UTAR Google Account (@**1utar.my**) before accessing the registration form.

## Deliverables

You should submit the following items in your report:

1. **Title** and **description** of your web application.
2. A statement explaining or describing your authorization logic.
3. Softcopy of your entire Laravel project. Kindly upload a ZIP archive of your Laravel project in your **bitbucket.io** account. Specify the URL to your ZIP file in your report.
4. Hardcopy printouts of the following program code:
  - a) Code listings of all **database migrations**.
  - b) Code listing of your **route** file.
  - c) Code listings of all **controller** classes.

- d) Code listings of all **Eloquent model** classes.
  - e) Code listings of all **policy** classes.
5. Hardcopy printouts of **sample screen output**.

## Submission & Originality Policies

1. This assignment must be submitted completely by the abovementioned deadline.
2. All work must be original and if, taken from any works other than yours must be properly referenced.
3. Any plagiarized content will be penalized, including the award of zero marks.

## Marks Allocation

No.	Course Outcome	Assessment Criteria	Marks
1	CO1	Database design & migrations	5
2	CO1	Models & relationships	5
3	CO1	CRUD Operations & input validation	10
4	CO1	Relational queries and/or inserts/updates	10
5	CO2	Explanation/description of authorization logic	15
6	CO2	Implementation of user authentication	15
7	CO2	Use of Gates and/or Policies	30
		<b>TOTAL</b>	<b>90</b>