

# DL836 – Creative Computing – Year 3

## Web Application Frameworks

### Assignment #2

**Requirements** You are required to create a Vue application that allows a user to view and manipulate data about courses, students and enrolments at a college. Access to the data is provided by a REST API, which is provided with this assignment. The requests supported by the REST API are outlined below:

Method	URI
GET HEAD	/
GET HEAD	api/courses
POST	api/courses
GET HEAD	api/courses/{course}
PUT PATCH	api/courses/{course}
DELETE	api/courses/{course}
GET HEAD	api/enrolments
POST	api/enrolments
DELETE	api/enrolments/{enrolment}
PUT PATCH	api/enrolments/{enrolment}
GET HEAD	api/enrolments/{enrolment}
POST	api/login
GET HEAD	api/logout
POST	api/register
GET HEAD	api/students
POST	api/students
PUT PATCH	api/students/{student}
DELETE	api/students/{student}
GET HEAD	api/students/{student}
GET HEAD	api/user

All requests, apart from the api/login and api/register requests, require authentication. Any validation errors returned by the REST API must be handled appropriately.

The REST API is implemented within a Laravel application. You are required to extend this application by building a Vue front-end application that allows a user to login and, once they are logged in, to view, create, edit and delete enrolments. Your program code must be commented to explain how it works.

You are also required to write a report explaining the following:

- The role of the different elements of the Vue framework that you have used, for example Vue components and the Vue router;
- The structure of Vue components;
- The relevant details of any AJAX library such as Axios that you have used;
- How you have tested and debugged the app.

The report must contain a link to a GitHub repository containing the source code for your application.

**Submission** You should submit your report to Blackboard. The deadline for submission is 11:59pm Sunday 28<sup>th</sup> April 2019. For each day that your assignment is submitted late, 5% will be deducted. Assignments submitted more than 7 days late will not be accepted. Late submissions must be submitted to the programme co-ordinator, Tim McNichols, along with a late submission form.

**Assessment** The following assessment rubric will be used:

	Explain the principles of web application frameworks	Design, implement and test web applications using industry standard application frameworks	Document, explain and defend the design and implementation of web applications
Excellent	Project report contains an excellent and completely relevant explanation of Vue framework with no major errors/omissions	Source code and presentation demonstrate very good design, implementation and testing skills with no major errors/omissions	Source code comments and project report provide an excellent explanation of the design and implementation of the application with no major errors/omissions
Very good	Project report contains a very good and clearly relevant explanation of Vue framework with very little evidence of major errors/omissions	Source code and presentation demonstrate good design, implementation and testing skills with very little evidence of major errors/omissions	Source code comments and project report provide a very good explanation of the design and implementation of the application with very little evidence of major errors/omissions
Good	Project report contains a good and generally relevant explanation of Vue framework with little evidence of major errors/omissions	Source code and presentation demonstrate good design, implementation and testing skills with little evidence of major errors/omissions	Source code comments and project report provide a good explanation of the design and implementation of the application with little evidence of major errors/omissions
Satisfactory	Project report contains an adequate and somewhat relevant explanation of Vue framework with some major errors/omissions	Source code and presentation demonstrate adequate design, implementation and testing skills with some major errors/omissions	Source code comments and project report provide an adequate explanation of the design and implementation of the application with some major errors/omissions
Weak	Project report contains an inadequate and somewhat irrelevant explanation of Vue framework with many major errors/omissions	Source code and presentation demonstrate inadequate design, implementation and testing skills with many major errors/omissions	Source code comments and project report provide an inadequate explanation of the design and implementation of the application with many major errors/omissions
Very poor	Project report contains a very poor or irrelevant explanation of Vue framework with substantial errors/omissions	Source code and presentation demonstrate very poor design, implementation and testing skills with no substantial errors/omissions	Source code comments and project report provide a very poor explanation of the design and implementation of the application with substantial errors/omissions

