

# Enterprise Application Development

## Individual Project

Develop a **full-stack JavaScript** enterprise web application that interacts with a persistent database (relational or non-relational) and includes authentication with your own application's username and password. The application must implement the Create / Read / Update / Delete operations, asynchronous data consumption from a REST API (internal or external) and responsive mobile-first design, while respecting code quality and security.

An example is a book library application, with a pre-populated database, that allows users to:

- Register: create, read, update and delete a profile with personal information
- Log in and log out
- Search for books in several libraries that match certain criteria (e.g. publication year, title or author containing a word, distance to the library – with the Google Maps Distance Matrix API)
- The book search is done in a public area - any user can search for books and see the results, without creating an account or logging in
- Add read, reviewed, wish listed or purchased books to a personal area (e.g. "My Books") after logging in.

You are free to choose the exact application, but consider the requirements in the marking scheme below.

Email your project idea to [diana.ferreira@tudublin.ie](mailto:diana.ferreira@tudublin.ie) by 10/02/20.

Set up a private Git repository and add **dianaferreiraDIT** as collaborator.

You can get free private repositories on <https://education.github.com/pack>

**Regular pushes of code are an essential requirement for assessment.**

Any external code snippets must be properly acknowledged (for example with comments in the code). Remember the policy on plagiarism – facilitators and perpetrators, both get zero.

Submit your project in a compressed **.zip** folder via Brightspace by **23:59 on 19/04/20**.

**Late submissions are not accepted**, unless justified and certified with a PC Form.

Include the code, deployment folder, a dump of the database and a readme.txt with configuration and deployment information with your submission.

**Mandatory demos in class on weeks 11 and 12**, schedule TBD.

Each student, regardless of the demo date, will **receive their submitted code from the lecturer** to perform the Demo, so students demonstrating later do not get extra time to work.

**Absent students will not receive marks.**

# Marking Scheme

This project is worth 30% of module marks.

Each category of the marking scheme below is assessed as:

Not done / poor / sufficient / good.

**Details of the expectations within each category will be discussed in the lectures.**

**Use the labs to seek feedback from the lecturer on the progress of your project.**

**IT IS MANDATORY TO USE JAVASCRIPT ON THE SERVER SIDE OF THE APPLICATION.**

Responsive mobile-first design and user experience – 6 marks

CRUD operations with a persistent database – 6 marks

Authentication with username/password – 6 marks

Asynchronous data consumption from a REST API – 6 marks

Code quality and security – 6 marks

Please contact the lecturer in case any aspect of this assignment is not clear to you. Have fun!