

**School of Enterprise Computing and Digital Transformation  
TU Dublin - Tallaght Campus**

Higher Diploma in Computing  
2024/2025

EAD

CA2 Project  
Value: 50%  
Out: 11/03/25  
In: 29/04/25  
(Demos: 22/04/25)

Team Project – 2 people

Lecturer: Dermot Boyle

**Mini Project**

Design and develop a mini-project of your choosing which encompasses the following components:

1. A database containing at least 2 tables (SQL Azure or Oracle or MySQL)
2. An ASP.Net Core MVC or SPA application which maintains the data in that database table
3. A RESTful web service which provides access to some piece of analysis of the data stored in the database table, one GET operation will suffice.
4. A simple console client app for the web service which calls the operation and displays the result of the analysis.

Design and implement the project. Develop some unit tests for the logic of the application. Use GitHub or GitLab to manage the project and its source code.

Deploy the web application and web service on a public cloud service (AWS, Azure GCP. OCI). Scale.

Before proceeding, draft a short outline (1-pager) of the functionality of the system and submit to DB for vetting. Also indicate the team members. If you are not in a team you will be randomly assigned to a team.

Deliverables:

- Source code in GitHub/GitLab (dermotb added as collaborator to see commits)
- Demo of project running on a public cloud
- Documentation
  - Database design

- Screen shots for web and console apps
- URI addressing scheme for web service
- Source code available on github or gitlab

Both team members may work on different parts of the project initially, but both should be familiar with all the system components and source code. Students will be marked individually.