

# Enterprise Software Development

## Team Assignment

Deadline: 23.59 Friday, 31 March, 2023

The aim of this assignment is to assess your knowledge and advanced skills in developing a web application in Python with Django with your team. You must use open data for your content, which you have been given. You need to use a suitable amount of the data to enable its interpretation by users.

*As this is an assessment in python, there should be no Javascript in your submission.*

You should also be aware of item 3.2-3.4 in the University's [Code of Practice for Student Discipline](#) on plagiarism, collusion, and contract cheating.

You must develop an application that meets the following criteria:

1. to create a database driven Django application with at least two linked tables. [10 marks]
2. to base your application on your provided open data source, and to display data by appropriate means. [10 marks]
3. to load your open data of 2000-7000 records into the app in a suitable manner. [10 marks]
4. to use appropriate templates for the pages in your app. [10 marks]
5. to use appropriate error handling in your application. [10 marks]
6. to provide a good code base, making use of different application components. [10 marks]
7. to use Git as part of your development process for source control. [10 marks]
8. to include suitable tests for your codebase. [10 marks]
9. to publish the application with a cloud provider. [10 marks]
10. to document the design, development, implementation, installation and use of the application in the form of a one-page final report, and in the readme.md file of the repository. [10 marks]

### Category points

*3 points, attempted but broken; 5 points, working basics; 7 points, advanced working; 10 points, extras*

1. 3 for Django app started and not working with one table, 5 points for working with two or more linked tables, 7, (list plus item pages), 10 points for doing something more
2. 3 for displaying open data, 5 for comparing open data, 7 using visual tools, 10 for analysis doing something more
3. Attempt to load data, 3; 5 for loading some data; 7 points for loading linked tables; 10 for more
4. 3 for attempted templates, 5 with some templates, 7 points with composite templates, 10 more
5. 3 for attempted error handling, 5 for some error handling, 7 for effective use, 10 for more
6. 3 for basic django app, 5 points for some repetition, 7 for code in appropriate files, 10 for more
7. 3 git used, 5 points git log, 7 git log showing integration, 10 for more
8. 3 for basic tests, 5 points for wider use of tests, 7 for good coverage with tests, 10 for more
9. 3 for attempted cloud deploy, 5 deployed to cloud, 7 deploy with mysql/postgresql, 10 for more
10. 3 points for document plus readme file, 5 why & how app developed, 7 user details and cloud url, 10 for more

### Deliverables

- A one-page design and development report as PDF with student names and cloud deployment URL
- Application code, including the readme file.
- Git log
- Group contribution file with everyone's name and agreement
- Please submit everything via Codio. It is YOUR responsibility to ensure that it runs in Codio.

### Ideas for Applications

There is more than you can do in the time available. Consider how you can use the 'details' page to put your 'content' in context with the rest of the data you have. It's one of x, in category y - how big are these other sets, how many things share similar attributes, or where is this 'thing'? Can you compare it to other 'things' to show them side-by-side? Aim for completeness of concept to pull data together not breadth of coverage - deeper is better than wider for this assessment.

**Note:** there might be cloud database limits. Reduce your dataset as appropriate, and explain your reasoning in the readme.md file.

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