Assignment Details

Module Title:	Data Visualisation & Communications
Module Code:	B8IT107
Module Leader:	Clive Gargan
Level:	8
Assessment Title	Data Analysis & Visualisation
Assessment Number:	1 of 1
Restrictions on Time/Length	N/A
Individual/Group:	Individual
Assessment Weighting:	100% (CA One: 40%, CA Two: 60%)
Issue Date:	7th March
Due Date:	23rd March (6pm)
Feedback Date:	Hand in date plus 2 weeks
Mode of Submission	Moodle only

Learning Outcomes:

1. Critically evaluate different visualisation techniques and apply to particular tasks

2. Appraise and interpret outputs from different categories and processes within data visualisation

3. Develop visualisations of complex data sets using appropriate tools and techniques

4. Demonstrate the design of new and innovative visualisation methods

5. Develop programming constructs needed to encode information visualisation algorithms

6. Critically evaluate and apply data visualisation design principles and interactive strategies

Assessment Overview

You are required to design and develop an effective visualisation of data for a topic of your choosing. You will compile a report on the process of creating the visualisation and also create a presentation of the visualisation.

Assignment Tasks

You are required to implement a Data Visualisation Solution using publicly available data along with a Report.

Data Visualisation (60%)

• Choose a publicly-available data set for your chosen topic;

• Carry out any necessary pre-processing on the data to prepare it for visualisation;

• Examine the data to identify interesting features (variables);

• Determine the purpose of your visualisation i.e. what insights into the data do you want to show?

• Choose a visualisation technique appropriate to the data and objectives of your project;

• Using your chosen technique, create an interactive data visualisation;

Project Report (40%)

The report should be about 1500 words long and include the following:

• Information on the dataset you have chosen, including basic domain information;

• A comprehensive statement of the objectives of the visualisation;

• A step-by-step description of the visualisation process.

• A clear justification for your choice of visualisation technique;

• Conclusions including findings/interpretations and a short reflection on the challenges of working on this project.

NOTE: You must submit your Report via Moodle using the CA_ONE link and your artefact using CA_TWO link.

ASSESSMENT CRITERIA Criteria/Mark	< 40	40 - 49	50 - 59	60 – 69	70+
Data Visualisation (60%)					
Key Areas include: Visually appealing, Scalable,gives the audience the right information and is Accessible	Very Poor visually and key areas missed.	Acceptable but poor standard visually and key areas missed.	Reasonable standard and key areas covered.	Good standard and key areas covered.	Excellent standard and key areas covered.
Report (40%)					
Key Areas include: Overall Presentation, Description & Functionality and detailed Design.	Very Poor documentation. Description &functionality weak. Missing key parts (e.g. database schema). Poorly structured with spelling and syntax errors.	Poor documentation. Description and functionalities stated but lack clarity. Some key areas missing.	Adequate documentation with adequately stated details. Key areas are of reasonable standard.	Good documentation, all essential key areas covered. Description & functionalities clear.	Excellent documentation, Comprehensive design.

IMPORTANT NOTES:

1. You must NOT use or copy parts of a solution from another student.

2. <u>Extensions to assignment submission deadlines</u> will be granted in exceptional circumstances only. The appropriate "Application for Extension" form must be used and supporting documentation (e.g. medical certificate) must be attached. Applications for extensions should be made directly to the Head of Year or Programme Leader in advance of the deadline date.

3. <u>Late Submission Penalties</u>: Immediately after the submission deadline for an item of continuous assessment, a penalty will be applied per day or part thereof. For the purposes of these penalties, a day is defined as any day of the week, including weekends and public holidays when the College may be closed. The minimum possible mark for late submission is 0%. The number of marks deducted depends on the lateness of the submission and will be deducted according to the following scale:

   Where an assessment is submitted between 1 and 14 days late 2 marks per day are deducted

   An assessment submitted after the deadline but within 24 hours of the original deadline will attract the first day penalty, i.e. deduction of 2 marks

   Where an assessment is more than 14 days late it is annotated at the discretion of the lecturer but no marks can be awarded.