Module: COMP1800 Data Visualisation	Logbook Coursework
Contribution: 30% of course	ZIP file required, containing PDF report & Python notebooks
Module Leader: Dr Chris Walshaw	Due date: Friday 9 <sup>th</sup> April 2021

This coursework should take an average student who is up-to-date with tutorial work approximately 15 hours

### **Learning Outcomes:**

- 2. Demonstrate an understanding of the uses and importance of visualization in dataintensive applications.
- 3. Design, implement and evaluate Interactive Visualization Systems and visual analytics solutions.

Plagiarism is presenting somebody else's work as your own. It includes: copying information directly from the Web or books without referencing the material; submitting joint coursework as an individual effort; copying another student's coursework; stealing coursework from another student and submitting it as your own work. Suspected plagiarism will be investigated and if found to have occurred will be dealt with according to the procedures set down by the University. Please see your student handbook for further details of what is / isn't plagiarism.

All material copied or amended from any source (e.g. internet, books) must be referenced correctly according to the reference style you are using.

Your work will be submitted for plagiarism checking. Any attempt to bypass our plagiarism detection systems will be treated as a severe Assessment Offence.

# Coursework Submission Requirements

- An electronic copy of your work for this coursework must be fully uploaded on the Deadline Date.
- For this coursework you must submit a **single zip file** containg your report, in an **Acrobat PDF document**, and **Python notebooks**. In general, any text in the document must not be an image (i.e. must not be scanned) and would normally be generated from other documents (e.g. MS Office using "Save As .. PDF").
- There are limits on the file size (currently 2Gb).

- Make sure that any files you upload are virus-free and not protected by a password or corrupted otherwise they will be treated as null submissions.
- Comments on your work will be available from Moodle. The grade will be made available in the portal.
- You must NOT submit a paper copy of this coursework.
- All courseworks must be submitted as above.

The University website has details of the current Coursework Regulations, including details of penalties for late submission, procedures for Extenuating Circumstances, and penalties for Assessment Offences. See <a href="https://www.gre.ac.uk/student-services/regulations-and-policies">https://www.gre.ac.uk/student-services/regulations-and-policies</a> for details.

## **Detailed Specification**

Every week you are required to create a set of Python notebooks, usually 2 per tutorial, each containing a data exploration. These notebooks comprise your visualisation logbook.

#### **Portfolio**

For this coursework you should select a portfolio of your best work, consisting of the work from 3 tutorials from your logbook.

It is your choice which 3 tutorials to select but you must include:

- one tutorial from Lectures 03 06 (Core Visualisation Techniques)
- one tutorial from Lectures 07 08 (Interactive Visualisation & Visual Analytics)
- one tutorial from Lectures 09 10 (Data-Intensive Applications)

However, you do not need to submit any tutorial exercises indicated as "optional".

Compiling a portfolio of selected work is an important skill to practice so:

- you must not submit the work from more than 3 tutorials, or you will lose marks;
- you must choose which tutorials to submit yourself your tutor will not advise you which is your best work.

However, you may ask for formative feedback during the tutorials to help you present your logbook well.

#### **Summary document**

You should also create a summary pdf document (no more than 1 page of A4 text) containing

- a discussion of the ChrisCo website data and what conclusions can be drawn about it from the entire logbook (i.e. not just the portfolio)
- a critical analysis of the portfolio with a discussion on how visualisation best practices were demonstrated and applied

The summary document may also contain visualisations if that helps to explain your conclusions and to illustrate best practices. If visualisations are included, the document may be longer than 1 page, but the text should still be limited to a page in total.

#### **Deliverables**

You must upload a single zip file containing:

- The data explorations as Python notebooks (.ipynb files)
- The summary pdf document containing your data conclusions and critical analysis.

## Marking scheme

The notebooks will be marked on how correct / informative the markdown text is, on the formatting & labelling of the visualisations and on the efficiency of the code in terms of not duplicating operations.

Task	achieved well	partially achieved	poorly/not achieved	marks
Summary document (25%)				
Data conclusions				/10
Critical analysis				/15
Core Visualisation Techniques (25%)				
Markdown text (informative, correct)				/10
Visualisations (labelling, good practices)				/10
Code efficiency (non-duplication)				/ 5
Interactive Visualisation & Visual Analytics (25%)				
Markdown text (informative, correct)				/10
Visualisations (labelling, good practices)				/10
Code efficiency (non-duplication)				/ 5
Big Data & Data-Intensive Applications (25%)				
Markdown text (informative, correct)				/10
Visualisations (labelling, good practices)				/10
Code efficiency (non-duplication)				/ 5

# **Grading criteria**

70-100%	All requirements completed to an excellent standard
60-69%	All requirements completed. However, there are a number of minor deficiencies in significant areas.
50-59%	All requirements completed. However, significant improvements could be made in many areas.
40-49%	All requirements completed. However, significant improvements could be made in all areas.
30-39%	All requirements attempted but the overall level of understanding and performance is poor.
0-29%	There are requirements missing or completed to a very inadequate standard which indicates a very poor or non-existent level of understanding.

## You must not submit the work from more than 3 tutorials or you will lose marks.

- Logbooks with 4 tutorials submitted will be capped at 60%
- Logbooks with 5 or more tutorials submitted will be capped at 30%