Data Visualisation

CONTINUOUS ASSESSMENT 1

Summary

This project will contribute 10% towards the final mark for this module.

The single working Excel file must be submitted through Moodle before 23:55 on 27th February 2022.

Outline

You are required to create an interactive dashboard in Excel.

The dashboard is to be used by policing authorities in the USA to explore fatal police shootings between January 2015 and July 2017 inclusive. Management are interested in the data generally but are particularly interested in the race of the victims and the states in which the shootings took place.

The data is available on Moodle and at https://www.kaggle.com/kwullum/fatal-police-shootings-in-the-us-racial-bias .

In creating the dashboard, you should demonstrate your ability to use Excel technologies to create an engaging and useful dashboard. This dashboard can be built over more than one sheet if you wish and might include some of the following technologies:

- Tables
- Charts
- Pivot tables and pivot charts
- Slicers
- Formulas
- Forms and Controls
- Menus
- Integrated Apps

Deliverables

You are required to deliver a single Excel file containing the dashboard sheet or sheets for exploration of the data. You should also include a supporting sheet, named Background which explains to the user the purpose of the dashboard, its structure and the analysis that

is possible. You should also include a Notes sheet that gives brief information on the history of the document and changes in different versions.

Indicative Marking Scheme

Dashboard Design: 15%
Dashboard Functionality: 30%
Quality of Technical Implementation: 40%
Background and Notes: 15%

Rubric

Grade (%)	Description
80+	CA element demonstrates mastery of subject matter with novel/original work applied to a complex problem. Data is sourced correctly and has been appropriately structured. Visualisation of data is accurate, complete, thoroughly explained, and appropriate with clear link to aims. Functionality in dashboard shows original thinking and implementation beyond what was learned in course. Document is well-structured, complete with detailed version history.
70-79	CA element demonstrates thorough understanding of subject matter. Data is sourced correctly and has been appropriately structured. Visualisation of data is accurate, complete, thoroughly explained, and appropriate with clear link to aims. Functionality is well developed with only minor issues. Document is well-structured, complete with complete version history.
60-69	CA element demonstrates good understanding of subject matter. Data is sourced correctly and has been appropriately structured. Visualisation of data is accurate, substantially complete, well explained, and appropriate with good link to aims. May be missing some appropriate analysis. Document is reasonably structured, substantially complete and well delivered.
50-59	CA element demonstrates reasonable understanding of subject matter. Visualisation of data is accurate, partially complete, reasonably well explained, and appropriate with some link to aims. May be missing some appropriate analysis and links to aims and objectives may not be complete. Document is adequately structured, mostly complete and reasonably well delivered.
40-49	CA element demonstrates partial understanding of subject matter. Functionality is relatively simple allowing very basic exploration. Basic but incomplete visualisation with significant omissions. Poor link to aims and objectives. Document missing some key elements.
30-39	CA element demonstrates little understanding of subject matter. Little evidence of exploration of problem.

	Incomplete visualisation based entirely on functionality provided in class with weak links to aims. Documentation poor and missing significant elements.
0-29	CA element demonstrates almost no understanding of subject matter. No serious attempt to address the problem.

Plagiarism

PLEASE PAY SPECIAL ATTENTION TO THE ISSUE OF PLAGIARISM. The DkIT policies are available at
https://www.dkit.ie/system/files/academic_integrity_policy_and_procedures.pdf
in summary, all work submitted by learners for assessment purposes, or for written or oral publication, must be their own work. Where this is informed by the work of others, the source must be properly referenced using the accepted norms and formats of the appropriate academic discipline.

Late Submission

The policy for late submission is available at the link below. Any legitimate late submission must be accompanied by explanation and supporting documentation as per the policy.
https://www.dkit.ie/system/files/continuous_assessment_procedures_document_v4.pdf