

Assessment 1 Information

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| Subject Code: | DATA4100 |
| Subject Name: | Data Visualisation Software |
| Assessment Title: | Creating Visualisations |
| Assessment Type: | Individual Report |
| Word Count: | 12 Slides (+/-10%) |
| Weighting: | 30 % |
| Total Marks: | 30 |
| Submission: | In class (In online workshop) |
| Due Date: | Week 5 |

Your Task



Fact Checking a President using data.

- The US president claims that COVID-19 cases and deaths in his country are not as bad as other locations, especially Europe. Donald Trump has continually made statements which do not appear to be supported by the data. For example:

“It's going to disappear. One day it's like a miracle, it will disappear...”

<https://edition.cnn.com/2020/02/28/politics/donald-trump-coronavirus-miracle-stock-markets/index.html>

The U.S. has “among the lowest case-fatality rates of any major country anywhere in the world.”

<https://www.theatlantic.com/politics/archive/2020/10/trumps-lies-about-coronavirus/608647/>

“We’re last, meaning we’re first, we have the best,”

<https://time.com/5875411/trump-covid-19-death-rate-interview/>

- We want you to **fact check his claims** by making visuals based on data from two different dates (see assessment description)
- You will create persuasive visualisations ranking the US COVID infections, death rates relative to the rest of the world



Software Required

- Tableau Public/trial version or Power BI
- PowerPoint

Assessment Description

- *An individual report demonstrating: Visualisations, their effectiveness and interpretation*
- *Learning outcomes: LO1, LO2*

Face-to-Face students

- **You need to bring a laptop to class to complete this task individually**
- You have 2 hours to perform this task (see instructions below)
- You can take any materials into the class and the task is open book.
- At the end of two hours upload your PowerPoint slides to Turnitin (as a PDF file)

Online students

- You have 2 hours to perform this task (see instructions below) **during your online workshop class**
- You use any materials and the task is open book
- At the end of two hours upload your PowerPoint slides to Turnitin (as a PDF file)
- **You must do the tasks in the online workshop with your camera on**

Assessment Instructions (This is for both online and Face-to-Face students)

- **Access two datasets:**
 - You will be given two excel files at the beginning of the assessment
 - For August 2020
 - For December 2020
- **Create Six visualisations which make use of:**
 - different variables
 - different graph type, e.g. table/chart/map/tree map/dial/doughnut, etc.
 - **Two** of the visualisations should compare results from the two datasets
- Cut and paste the graphs into separate slides of PowerPoint (6 slides)
- For each visualisation provide an interpretation, including an explanation of the summary statistics/analytics that you have used. Explain how the visualisations either contradict or support Donald Trump's claims above. (2 slides)
- Explain the theory of user experience design and how you have applied it. (2 slides)
- Explain how you have made your visualisations effective in terms of:
 - i. pre-attentive attributes
 - ii. Gestalt laws
 - iii. integrity
 - iv. ease of use, and
 - v. cognitive load(2 slides)

Assessment Marking Guide

| Data Visualisation Software | | |
|-----------------------------|--|---|
| Section | Detail | Marks Available |
| Visualisations | <p><i>Create 6 diverse visualisations:</i></p> <ul style="list-style-type: none"> <i>Different variables and graph types</i> <i>two effective visuals making comparison between dataset results (Aug 2020 vs now)</i> | <p>3 marks for visualization</p> <p>5 marks for originality and persuasiveness</p> <p>2 marks for comparisons</p> |
| Interpretation and context | <ul style="list-style-type: none"> <i>Interpret results</i> <i>Relate back to fact checking issue (in context) and present a convincing argument</i> | <p>5 marks</p> <p>3 marks</p> |
| User experience design | <i>Outline the theory and application of UX design to their visualisations</i> | 5 marks |
| Features of Visuals | <p><i>Evaluate how to employ the below principles to make their visualisation effective:</i></p> <ul style="list-style-type: none"> <i>Pre-attentive attributes</i> <i>Gestalt laws</i> <i>integrity</i> <i>Ease of use</i> <i>cognitive load</i> | <p>2 + 2+ 1 + 1+ 1</p> <p>= 7 marks</p> |



Important Study Information

Academic Integrity Policy

KBS values **academic integrity**. All students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Academic Integrity and Conduct Policy.

What is academic integrity and misconduct?

What are the penalties for academic misconduct?

What are the late penalties?

How can I appeal my grade?

Click here for answers to these questions:

<http://www.kbs.edu.au/current-students/student-policies/>.

Word Limits for Written Assessments

Submissions that exceed the word limit by more than 10% will cease to be marked from the point at which that limit is exceeded.

Study Assistance

Students may seek study assistance from their local Academic Learning Advisor or refer to the resources on the MyKBS Academic Success Centre page. Click [here](#) for this information.