

# Data Visualisation Assignment 3

MATH2270 Semester 2, 2017

## Interactive Storytelling

**Due:** End of SWOT-VAC (Week 13): 11:59 PM 22/10/2017 (20%)

### Assignment Instructions



Data visualisation is a great way to support fact-based story telling. For Assignment 3, we will be teaming up with [The Conversation](#), an independent, not-for-profit, source of news and views, sourced from the academic and research community and delivered direct to the public. The Conversation aims to increase the amount of multimedia content to support their stories. Data visualisation is key area of interest.

They would love to see what you can come up with!

Here is an example of a story supported by interactive data visualisations - [Three charts on: who holds more than one job to make ends meet.](#)

For Assignment 3, your goal will be to pick a previously published story and create an interactive data visualisation(s) to support that story. The choice is yours (or you can choose from the Editor's choices below), but you will need to source the data. That will be the tricky part.

### Editor's Choice

The editor has expressed an interest in visualisations supporting the following two stories:

- [Three charts on: Australia's booming prison population](#)
- [Why Aboriginal people with disabilities crowd Australia's prisons](#)

Both include interactive visualisations that you will need to build upon.

### Open or Public Data

Assignment 3 must be based on open or public data. Ensure you include the right attribution.

## Visualisation

- Work through Andy Kirk's Visual Design Process described in [Module 1](#) in order to produce an insightful visualisation of the story and data you selected.
- Your design must include interactive elements.
- You can submit up to three related data visualisations. However, they must follow a single narrative. Each must include interactivity. The plots must fit nicely within The Conversation Website.
- This assignment will be about showcasing your data visualisation capabilities publicly. Therefore, your assignment submission must be hosted online (see [RPubs or Cloud Hosting](#))
- Your visualisation must properly attribute the source story and data source

## RPubs or Cloud Hosting

- You will need to host your interactive visualisation(s) on the web. Use [RPubs](#) for Markdown and [Shinyapps](#) for Shiny. The goal is to make your work shareable with the editor and easy to include in your ePortfolio.

## Submission Instructions

- Upload the link to the online version of your visualisations to the the **Assignment 3 Links Submission** on Bb.
- Upload a single PDF copy of your publication to the **Assignment 3** Turnitin link on Bb. If you have a Carto map, submit a PDF of a screenshot. If a Shiny app, upload a PDF of your code. If an RMarkdown document, a PDF of the knitted HTML file. The easiest way to achieve this is to **Preview** your notebook → **Open in Browser** (Chrome) → Right click on the report in Chrome → Click **Print** and Select the **Destination** Option to **Save as PDF**.
- I do NOT require your dataset. However, you must be ready to hand it over if requested.

## Late Submissions

Late submissions will be marked in accordance with the late submission policy. Please see the [course information sheet](#).

## Collaboration versus Collusion and Plagiarism

You are permitted to discuss and collaborate on the assignment with your classmates.

**However, the assignment must be an individual effort.** Assignments will be submitted through Turnitin, so if you've copied code and data from a fellow classmate, it will be detected. It is your responsibility to ensure you do not copy or do not allow another classmate to copy your

work. If plagiarism is detected, both the copier and the student copied from will be responsible. It is good practice to never share assignment files with other students. You should ensure you understand your responsibilities by reading the RMIT University website on [academic integrity](#). Ignorance is no excuse.

## Marking Rubric

Please refer to Andy Kirk's Visual Design Process described in [Module 1](#).

Criteria	Not acceptable (0)	Needs Improvement (2)	Meets Expectation (3)	Exemplar (4)
<b>Purpose and Focus (20%)</b>	There was no apparent purpose to the data visualisation. The visualisation lacked an apparent focus.	The purpose of the data visualisation was not entirely clear. The focus of the visualisation could be improved by drawing better attention to key features or looking at the data from another angle.	The purpose of the data visualisation was clear. The focus of the visualisation drew attention to key features and provided insight, however, the focus could be narrowed or broadened to improve insight.	The purpose of the data visualisation was obvious. The focus of the data visualisation was very effective in conveying insight into the data.
<b>Options and Method (20%)</b>	The visualisation demonstrated inappropriate choices in data representation, presentation and method.	The visualisation did not demonstrate the best choices in data representation, presentation and method. Better choices and methods could be used.	The visualisation demonstrated good choices in data representation, presentation and method. Only minor adjustments were needed or other alternate methods could be explored.	The visualisation demonstrated best practice in data representation, presentation and method.
<b>Insight (20%)</b>	The visualisation did not demonstrate insight into the data.	The visualisation demonstrated some insight into the data.	The visualisation demonstrated a high degree of insight into the data.	The visualisation demonstrated original and important insight into the data.
<b>Objectives (20%)</b>	The visualisation failed to meet the design objectives: Form vs. function, justification, accessibility and no deception.	The visualisation had some issues with the design objectives: Form vs. function, justification, accessibility and no deception.	The visualisation met most of the design objectives: Form vs. function, justification, accessibility and no deception.	Form and function were well balanced, decisions were justified, the design was intuitive and accessible, and did not deceive.
<b>Online pub (20%)</b>	Publication was unacceptable or missing.	Publication was included, but there was room for improvement.	A good quality publication was included. Only minor improvements were needed.	A high quality publication was included. There was little that could be faulted.