

Module Outline

Data Visualisation with Google Fusion Tables

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Introduction

This document is the course outline for the “Data Visualisation with Google Fusion Tables” module.

Summary

This module is targeted at participants who:

- Work with large data sets
- Want to convey their research hypotheses/outcomes to lay readers

This module assumes knowledge of:

- basic usage of Microsoft Excel (filtering/sorting)
- using a web browser (downloading/saving etc.)

By the end of the modules, participants will understand:

- how to import data into Google Fusion Tables
- how to merge multiple data sets in Google Fusion Tables
- how to create heat maps Google Fusion Tables
- how to vary the visualisation used to illustrate your data in Google Fusion Tables

External Resources

In these modules, you will make use of some external materials. These materials were not created by Intersect, but are either standard tools used in the area or are particularly useful for teaching purposes.

Resources Used in this Module

For this module, the following resources are used

| Name | Location | Description |
|----------------------|---|--|
| NSW LGA Data | http://www.tallyroom.com.au/maps | This website has links to a number of useful keyhole mark-up files (KML) which that describes the boundaries of all the LGAs in NSW using geospatial coordinates |
| Crime Statistics | http://bocd.lawlink.nsw.gov.au/bocd/cmd/crime/Init | This "Specific Crime Information Tool" offered through the NSW Bureau of Crime Statistics and Research's (BOCSAR) website allows users to search NSW crime statistics based on a number of search criteria |
| Google Account | https://accounts.google.com/NewAccount | Google requires you to create a Google Account to utilise many of its services, e.g. Google Drive & Fusion Tables |
| Google Drive | https://drive.google.com/ | Google Drive is a tool which allows you to store files on Google's servers |
| Google Fusion Tables | | Google's support page for Google Fusion Tables |

Further Reading

The following resources will help consolidate or extend the information presented here:

| Name | Location | Description |
|------|---|--|
| NSW | http://en.wikipedia.org/wiki/Local_government_areas_of_New | This Wikipedia page describes the 152 NSW Local government areas (LGA's) which are |

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|---------------------------------------|--|---|
| LGA | _South_Wales | referred to as shires, councils, cities, etc. |
| Google Drive | http://www.google.com/drive/about.html | To learn more about Google Drive, please read further here |
| Google Apps | https://sites.google.com/site/fusiontablestalks/home | To learn more about Google Fusion Tables and other Google app's, please read further here |
| Google Fusion Tables | https://support.google.com/fusiontables/answer/2571232?hl=en http://www.google.com/support/fusiontables/ | More information about using Google Fusion Tables |
| Practical use of Google Fusion Tables | http://www.guardian.co.uk/news/datablog/2012/mar/24/guardian-open-weekend-google-fusion | Read about how the Guardian uses Google Fusion tables in their newspaper |

Units Outline

| Name | Concepts Introduced | Learning Outcomes |
|---|---|--|
| Download your datasets | <p>Finding publically available data sets</p> <p>Using BOSCAR's "Specific Crime Information Tool" to find relevant data</p> | <ul style="list-style-type: none"> • how to download data sets • how to import datasets into Google Refine |
| Clean up your data with Excel | Cleaning up XML data using Microsoft Excel | <ul style="list-style-type: none"> • how to sort data in Excel • |
| Importing the LGA boundaries and crime statistics | Using the Google Fusion Tables tool to import your research data | <ul style="list-style-type: none"> • how to import a datasets into Google Refine |
| Merging the tables | Using the Google Fusion Tables tool to merge multiple data sets | <ul style="list-style-type: none"> • how to merge multiple datasets in Google Refine |
| Creating the "Heat Map" | Using the Google Fusion Tables tool to create a visual heat map to illustrate your data | <ul style="list-style-type: none"> • how to create a heatmap and modify the appearance of the visualisation |

Revision History

| Version No. | Revision Date | Summary of Changes | Revised by |
|-------------|---------------|--------------------|------------------|
| 1.0 | 17/07/2013 | Initial draft | Mairéad Stephens |
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