

Displaying Linked Places Using Google Maps

Version: 1.0

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Introduction

The purpose of this project was quite simple, to represent the relationships between the places indicated in 'PI CI and Sites_R24.xlsx' file, in ideally the simplest way possible.

To solve this problem Google Maps and the Google Places API have been employed. Using these technologies, it is possible to find locations and further details from place names, and display them on a map.

This documentation is written to be understood with minimal technical knowledge, but also contains details that may be referenced by developers.

Site Map

www

js

Blob.js | External lib

Blob.js.license.txt | License details

csvToArray.v2.1.min.js | External Lib

csvToArray.v2.1.min.js.license.txt | License details

data.js | Methods and specification for storing and using place relationships, and fetching place data from Google. Depends on map.js, blob.js, csvToArray.v2.1.min.js and FileSaver.js.

display.js | Methods for displaying place relationships on a map, and powering a GUI to manage the map. Depends on map.js and data.js

FileSaver.js | External lib

FileSaver.js.license.txt | License details

map.js | Methods for displaying and using Google Maps.

example.html | Display information directly from the sample spreadsheet, using Google Places to find location data, save and load json files (text).

help.txt | Text help file for example.html

map.json | Example result from example.html.

simple.html | One page demonstrating the minimum needed to (just) display points.

test.csv | 'PI CI and Sites_R24.xlsx' complete saved as .csv.

test_partial.csv | First two lines of 'PI CI and Sites_R24.xlsx' saved as .csv.

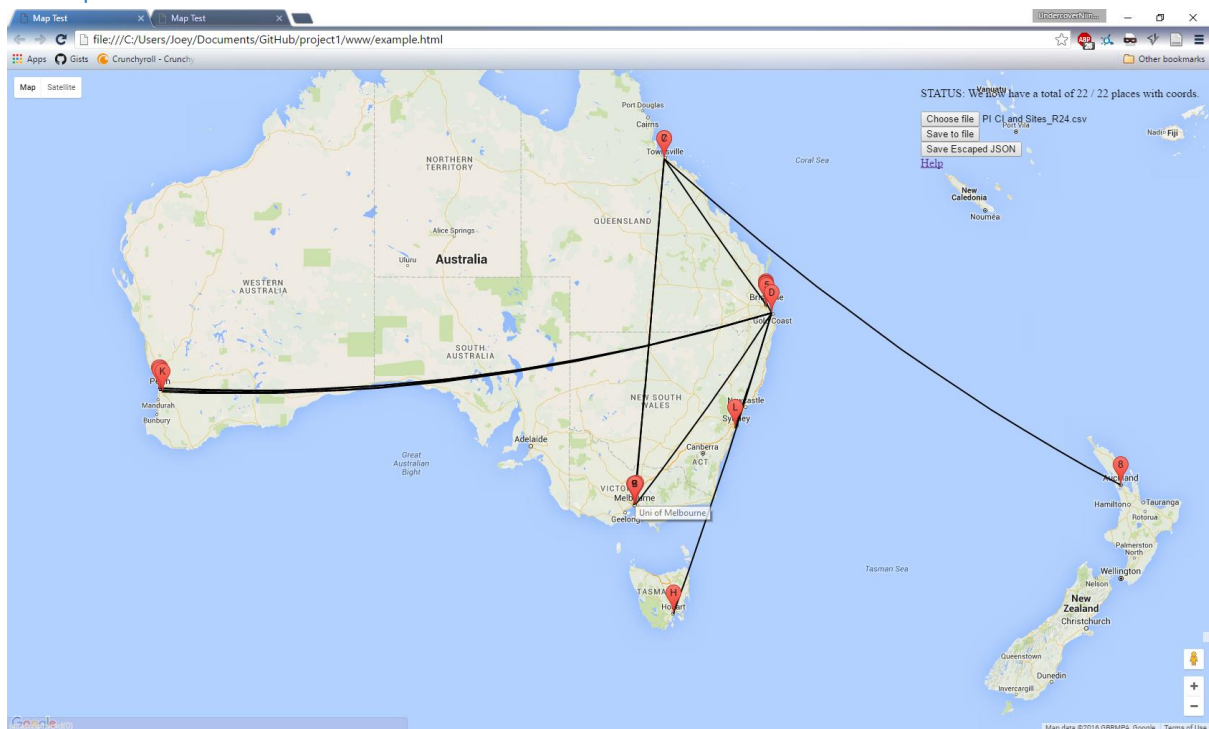
Usage

To demonstrate usage two sample web pages are given.

Requirements

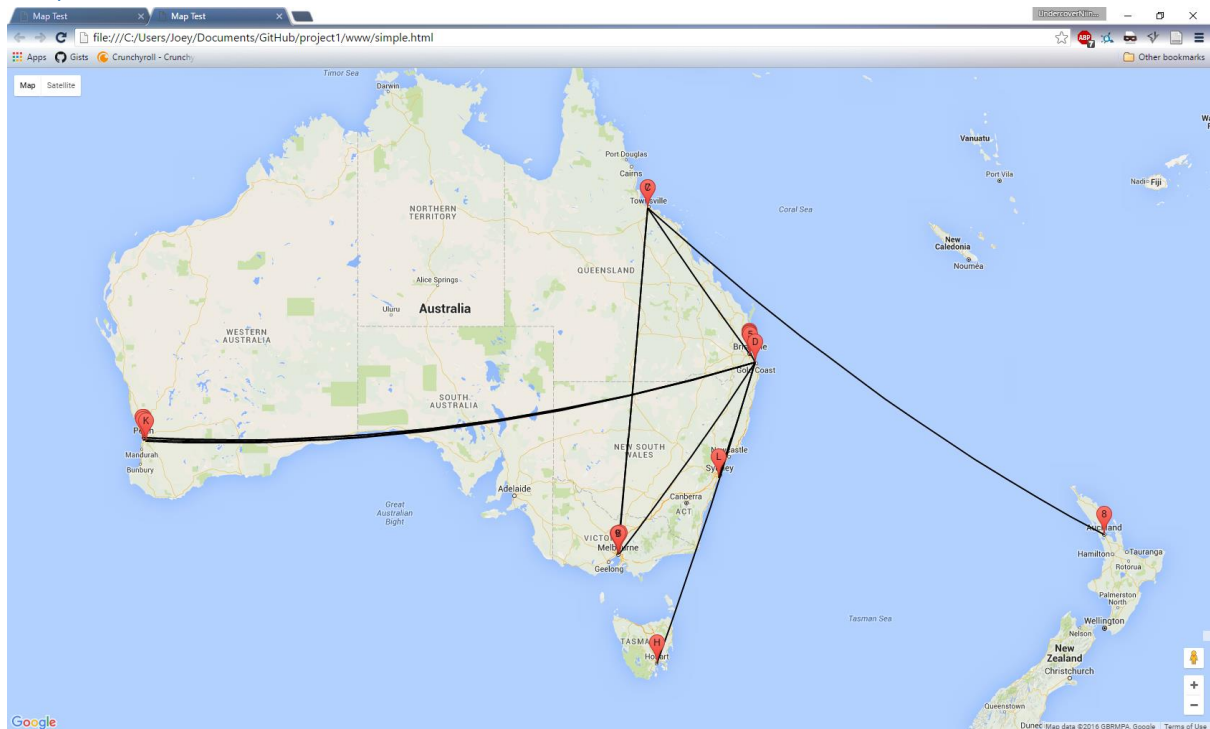
- An internet connection (google maps requirement)
- The entire sample directory extracted preserving file structure as per site map
- A modern browser
- NOTE: Google restricts the amount of place queries per 100 seconds/day. As a result, attempting to query more than one file per 2 minutes may fail with a fatal error.

example.html



- Map centred on Australia
- Interactive interface with status
- Choose .csv example file to load
 - o Will automatically search google for place data
 - o Status displayed while working
- Choose .json file (output) file to load without looking up google
- Save to .json
- Save escaped json to file, for updating simple.html
- Points labelled with a unique number, letter (case sensitive) or symbol.
- Tooltip contains full name

simple.html



- Map centred on Australia
- Minimalist display
- Changing the value field of input id="ourJSON" to the escaped JSON output from example.html will update data.
- Can be added to your existing website structure as is
 - o Requires the 'js' folder to be copied across into the same directory (may be complicated by naming conflicts)
- Style, line colour, etc, can all be changed using Google's Maps JavaScript API (configured in map.js)
- Points labelled with a unique number, letter (case sensitive) or symbol.
- Tooltip contains full name