

# Mapping of local live music ecology

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# Guide to creating lists of venues and events

## Step 1: Creating a list of live music events taking place on snapshot census date

It is recommended that you do this around 3-4 weeks before your snapshot census date – you will need to check again 1 week before the Census in order to capture any last minute additions.

1. Create a new master worksheet in Excel/Calc

### Suggested column headers

If you are using more than one data source then ensure that each set of listings uses the same column header set-up in order that you can easily copy/paste one into another, even if one listings site does not contain all the data for each column header.

☞ You may need to add in the contact name and social network URLs manually. See Online Appendix >> Template for venue database.

Also see extra columns relating to contacting the venues:-

- Name of venue
- Name of event
- Event summary
- Event description
- Doors open (time)
- Event starts (time)
- Event ends (time)
- Doors close (time)
- Price
- Phone Number
- Email
- Event URL
- Scrape URL
- Date scraped
- 1st contact - called by
- 1st contact - date

- 1st contact - spoke to
- 1st contact - outcome
- 2nd contact - called by
- 2nd contact - date
- 2nd contact - spoke to
- 2nd contact - outcome
- Notes

1. Open up one of your listings web scrape worksheets (see later Guide to web scraping).
2. Filter the column containing the date to show only the dates of your Census.

To do this in Excel, highlight the row which contains the column headers (most likely row A), then go to Data >> Sort & Filter >> Filter. Click on the drop-down menu next to the date header and use Text Filter >> Contains >> [date of your census in correct format]. Click OK and only those events on your Census date should be showing. See Figure 1.

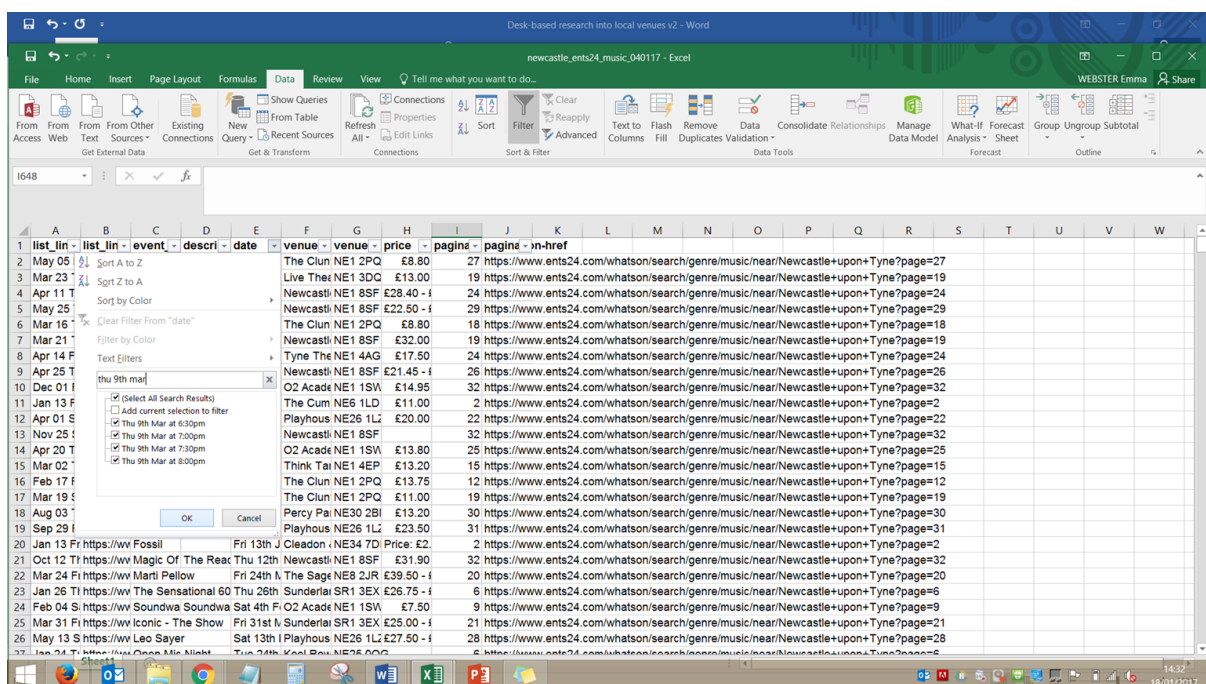


Figure 1: Using Filters in Excel 2016

To filter in Calc, highlight the row which contains the column headers (most likely row A), then go to Data >> Filter >> Standard Filter, then select the relevant Field Name, select 'Contains' from the Condition drop-down menu, and then enter the Census date in the Value box in the correct format. See Figure 2.

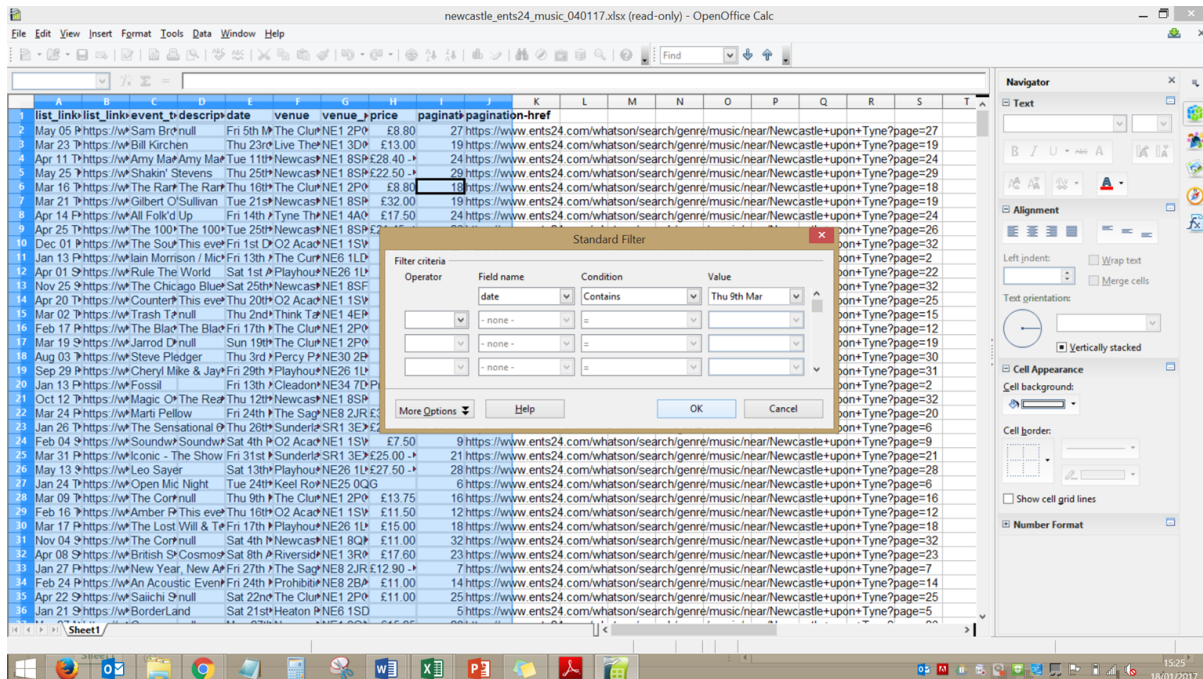


Figure 2: Filtering data in Open Office Calc

- Copy the data for the Census date and paste it into the master worksheet – you will need to cut columns to be moved. In Excel, select the columns using Ctrl + V, right click in the column to the right of where you want the cut cells to go, and then select 'Insert cut cells'. In Calc, you will need to insert a new column in which to cut/paste the data.
- Repeat for other listings data until you have a complete list of events occurring on your Census date.

☞ The snapshot Census lasts for 24 hours so don't forget to include events from midday on the day of your Census to midday on the following day!

## Identifying events not in listings data

☞ It is very likely that there will be events occurring which are not listed in 'traditional' listings sources, e.g. regular folk sessions in pubs, or live music in restaurants. To find them, it is suggested that you check through your list of venues (see below) for such events and check on social media in the days before the Census.

It is also suggested that if you have spare capacity then a pair of volunteers is dispatched to seek out events by going out and about in cultural/entertainment hubs and listening out for live music not already listed in the master list of Census night events.

## Step 2: Creating a list of venues in your town/city

- Open up one of your listings web scrape worksheets and create/insert a new sheet.
- Copy the columns from the listings sheet which contain venue name, address, postcode, and any other contact information, e.g. website. Paste into the new sheet. We suggest the following columns for your venue database (see Online Appendix >> Template for venue database):-

- Name of venue
  - Address
  - Postcode
  - Area (e.g. city centre)
  - Contact name
  - Phone number
  - Email address
  - Web address
  - Facebook address
  - Twitter address
  - Venue type (see Glossary Sheet)
  - Notes
  - Is there an event on snapshot census date?
3. Remove duplicates from this list based on venue name.
  4. Repeat for each of your worksheets of listings data until you have a number of lists.
  5. Copy/paste all of these lists into a new master list.
  6. Remove duplicates from this master list.
  7. Filter out and delete any venues in postcodes which do not belong to your town, city or region/local authority area.
  8. To ensure there are no duplicate venue names (e.g. The Old Fire Station / Old Fire Station), you may wish to use OpenRefine and use the Cluster and Facet function (see below).
  9. Once you have a refined list of venues, you will now need to fill in any missing data, e.g. website and social media addresses.
  10. Create a new column for venue type and assign each venue a type based on the list in the Glossary (Appendix H).

### **Step 3: Tidying data basics**

#### **Create copy of sheet**

You should keep the original data just in case but also create a copy that can be tidied up. To do so in Excel, right click on the tab at the bottom of the page; select Move or Copy; select '(move to end)', ensure 'Create copy' is selected) – rename both tabs (suggest

renaming as 'original' and 'edited' with date of scrape). In Calc, right-click on Sheet 1 and select Move/Copy Sheet.

### **Freeze column headers**

To ensure that you can always see the column headers, first format these in bold. In Excel, go to View >> Window >> Freeze Panes and select Freeze Top Row. In Calc, select the row below, or the column to the right of the row or column that you want to be in the frozen region. All rows above, or all columns to the left of the selection are frozen. Choose Window – Freeze. To deactivate, choose Window - Freeze again.

To freeze both horizontally and vertically, select the cell that is below the row and to the right of the column that you want to freeze.

### **Hiding / unhiding columns**

In Excel/Calc, hide any columns which are extraneous to your data analysis by highlighting entire column (click on the column heading (A, B, C, etc.) to select the entire column, then right click and select Hide). You can Unhide if needs be by selecting the adjacent columns to the hidden column, right-click and Unhide.

### **Separating values using text to columns: fixed width**

To separate values in columns which have a fixed width after initial value, e.g. if date format is 'Sat 26 Nov 2016', you will need to separate the 'Sat' from the date in order that Excel recognises this as a date rather than a text – the day of the week in this case has a fixed width of three characters and so can be separated using this method.

1. Insert extra column to right of date column.
2. Highlight entire column.
3. Data >> Text to columns.
4. In the Text to columns wizard in Excel, select 'fixed width' – ensure that the break line is in the correct place, i.e. after the day of the week (see Figure 3):-

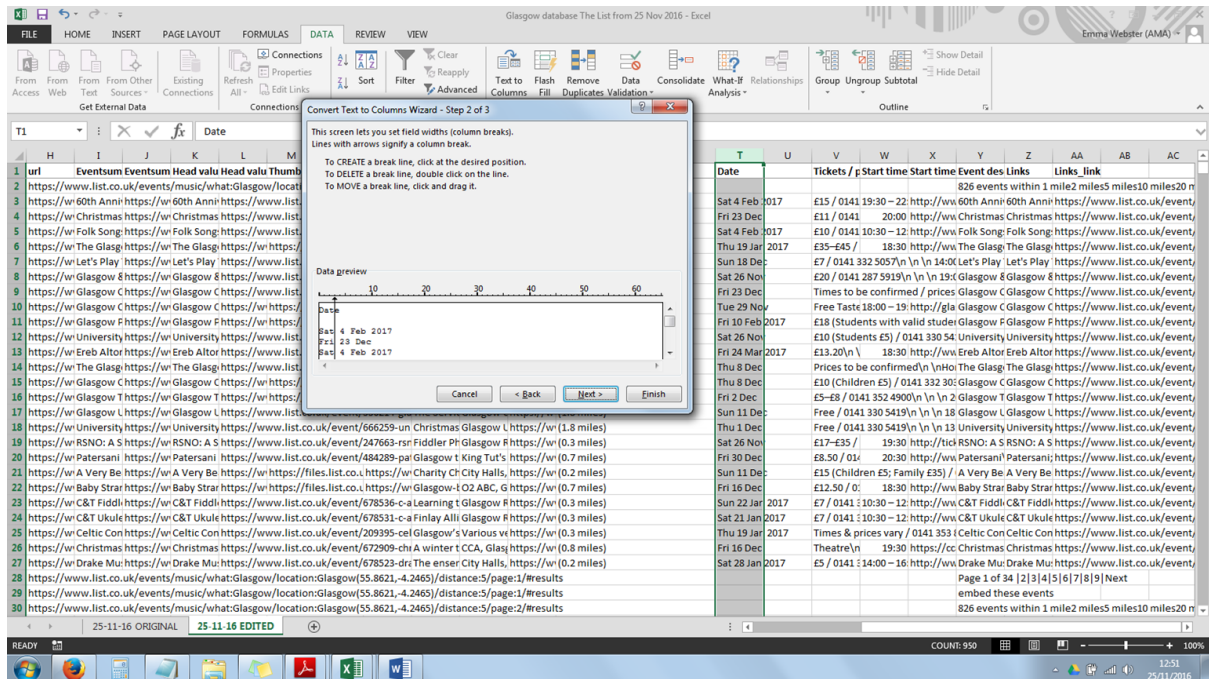


Figure 3: Convert Text to Columns wizard in Excel showing fixed width selection

- Click Finish – you should now have one column which contains, for example, the day of the week and another column which contains the date as a numeric value, e.g. 26/11/16. You can tidy up the formatting if needs be by highlighting the column and selecting Home >> Number Format >> Short date.

### Separating values using text to columns: delimited

Use this method to convert data separated by a symbol or space, e.g. £10 / 19:30 where the symbol is /

- Insert extra column to right of date column.
- Highlight entire column.
- Data >> Text to columns.

In the Text to columns wizard, select 'delimited' ('Separated by' in Calc) and click OK.

- On the next page, select the appropriate delimiter, e.g. Other: / and click Finish.

You may get a warning message that there is text in other columns – if this is the case, it is usually because there are cells in the original column which contains more than one of the delimited, which will then overwrite any existing text in the next column, which you don't want. If this happens, go back to step one and insert five or so extra empty columns (you can delete unused ones afterwards) – insert enough extra columns to fit the extra delimiters until the error message at step 4 disappears.

You can also use Data Wrangler to split data more easily (see below).

### Delete duplicates – method 1 (Excel 2007 and later)

Excel contains a useful built-in feature called Remove Duplicates.

- Highlight the cells you wish to check for duplicates, click Data >> Data Tools >> Remove Duplicates.

2. Select the column which contains the duplicate values and whether it has headers – unselect the columns(s) which doesn't contain duplicate values. Click OK. Excel will remove the duplicate values and leave the unique values.
3. Sort the data into alphabetical order to check by eye that there are no duplicate venues. You can also use Conditional Formatting >> Highlight Duplicate Values to check and/or sort by postcode to find any further duplicates. You may also wish to use OpenRefine to ensure that your data does not contain near-misses, e.g. 'The Old Fire Statio'n vs 'Old Fire Station'.
4. Delete the extraneous rows underneath your data by highlighting the cells you wish to delete, right click and click on Clear Contents. When you next Save the document the rows will have been deleted.

### **Delete duplicates – method 2 (Open Office Calc or Excel 2003 and earlier)**

There is no automatic function to remove duplicate rows in Open Office. Follow these steps to delete all rows that have duplicate values in column A.

1. Select all cells of the current data range. On most systems, you can click any cell inside the data range, then press Ctrl+\* on the numeric keypad.
2. Sort the data range by column A.
3. Choose Data - Sort.
4. Click an empty cell in the first row. Let's assume it is cell C1. Enter the formula:
5. =IF(A1=A2;1;0)
6. This will display 1 if the current row has the same value in column A as the next row. It will display 0 if the values are different.
7. Copy the formula down for all rows of the data range.
8. Drag the lower right edge of the cell C1 down to the last row.
9. Now the formulas must be replaced by their values to freeze the contents.
10. While the column C is still highlighted, press Ctrl+C to copy all selected cells to the clipboard.
11. Press Shift+Ctrl+V to open the Paste Special dialog box.
12. In the Selection area, enable only the Numbers command; disable the other Selection commands. Click OK.
13. Select the whole data range including the new column C and sort the range by column C.
14. Choose Data - Sort.
15. Select all rows which have a value 1 in column C, then press Del key.
16. Optional steps: Delete column C. Select the remaining rows and sort them again by column A.



## Refining your data using Open Refine

Another option for finding duplicates and for refining data is to use the free Open Refine software (fka Google Refine) – you need to download it first -

<http://openrefine.org/download.html>

We recommend that you watch the Explore Data video here for basic tips -

<http://openrefine.org/index.html>

A curated list of tutorials can be found here -

<https://github.com/OpenRefine/OpenRefine/wiki/External-Resources>

1. In Create Project, browse to and upload the relevant file.
2. Check for clusters of venue names in order to edit at the same time, e.g. changing The Old Fire Station to just Old Fire Station – this is very useful as venue names invariably include or don't include 'The' at the front!
3. In the dropdown menu in the relevant column, select Facet >> Text Facet
4. Select the Cluster button at the top right of the left-hand pane or to go to Edit Cells >> Cluster and Facet
5. You will have to adjust both Method and Distance Function to find clusters – this is somewhat trial and error but the example shows the results for Method = 'nearest neighbour' and Distance Function = 'PPM'. You may also wish to increase the radius setting in order to find all the possible clusters.

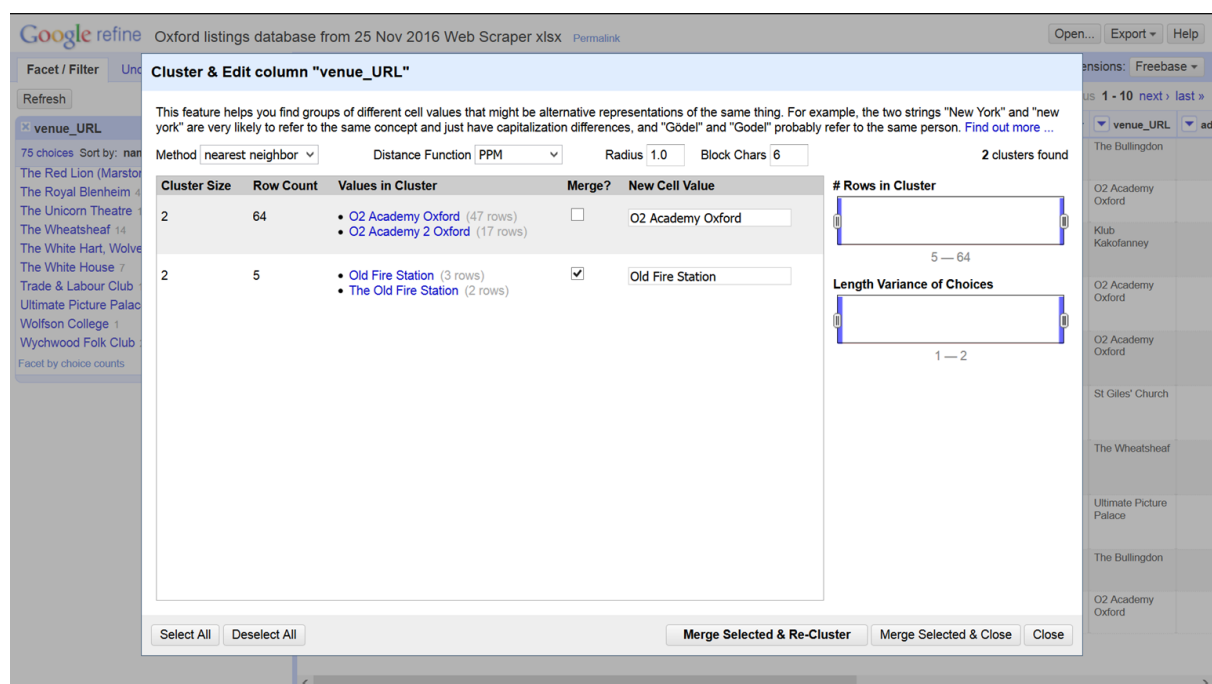


Figure 4: Using Cluster & Edit in Open Refine

6. Amend the New Cell Value as required and when you're ready to merge, select the clusters and click Merge Selected and Re-Cluster.

☞ You can see from the example above that 'O2 Academy Oxford' and 'O2 Academy 2' Oxford are listed separately – they are actually separate venues so should not be merged! Keep an eye out for similar venues in your census city as it may be that a venue hosts more than one live music at the same time.

7. You may need to refine other columns, e.g. day of week to ensure that all days appear consistently, 'Monday' rather than 'Mon', for example.
8. When you have finished refining your data, select Export at the top-right of the screen and then the relevant file type, e.g. Excel, then Open.

### Tidying data using DataWrangler

DataWrangler is another useful free tool for tidying up data –

<http://vis.stanford.edu/wrangler/app/> – the free online version is fairly basic but also fairly intuitive – more guidance can be found here – <http://www.visualcinnamon.com/2013/11/data-wrangler-tutorial-turning-ugly.html>

Ents24 tends to download dates and times into the same row with no spaces inbetween, e.g. '30<sup>th</sup> Marat' where 'Mar' and 'at' have run into each other – see Figure 5.

Event	Date	Venue
Paradise	Thu 30th Marat 7:30pm	Rutherg
Better V	Wed 19th Aprat 7:30pm	Royal C
Heavy Fire	Wed 8th Marat 7:00pm	O2 ABC
ull	Sun 11th Decat 6:30pm	Audio
inatra	Sat 25th Marat 7:30pm	Royal C
i	Sat 18th Febat 7:30pm	Fraser C
row	Sun 16th Apr	The Gar

Figure 5: Ents24 can concatenate (join) dates and times together

This can easily be fixed using DataWrangler.

1. Open the .csv file from Web Scraper in Excel.
  - ☞ DataWrangler can only process 1,000 rows and 40 columns at a time so you may need to separate out your data – you can, however, copy/paste the steps recorded in the Script pane to do so.
2. Copy the cells which contain the data you require, i.e. event\_title, date, etc.
  - ☞ With ents24, do not copy the first two columns as the data in these is usually very messy!).
3. Open DataWrangler and Paste the data into the box – press Wrangle.
4. DataWrangler should tabulate your data – if it does not, you will need to go back to Excel and ensure that your columns do not contain extraneous data which is confusing the Wrangler.
5. To separate out dates and times, choose 'Split' and position your cursor before 'at 7.30pm' in the first row, then 'at 6.00pm' in the third row – you should see that in the left-hand pane, options appear for what you want the Wrangler to do with the data. The more examples you can give, the more options it comes up with.

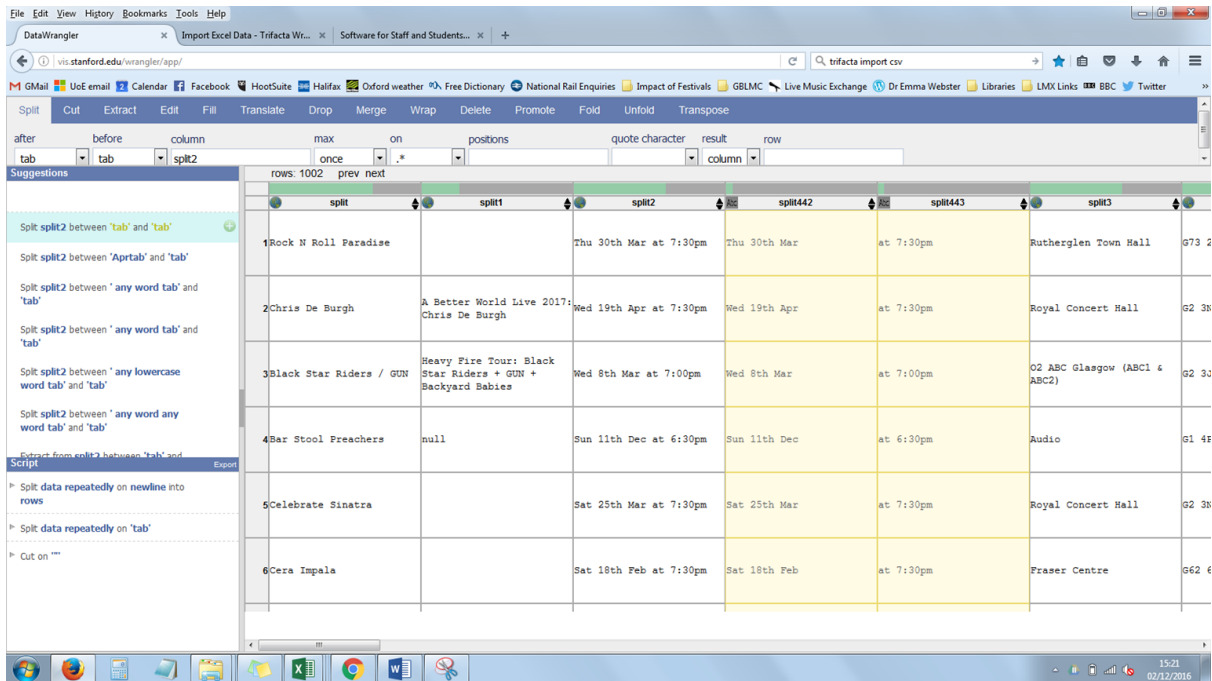


Figure 6: Using Split function in Data Wrangler

6. As you move your cursor over the different options in the Suggestions pane you can see what the wrangled data will look like – when you're satisfied then click the green plus button to the right of the option to carry out the action.
7. You may also want to split the day of the week from the data – again, use split to separate this data into separate columns.
8. You may wish to delete 'at' from the time column – split the data and then delete the column containing the word 'at'.
9. Finally, you may wish to cut the 'st', 'nd', 'rd', and 'th' from the date so that Excel recognises this column as date – use 'Cut' to do so.

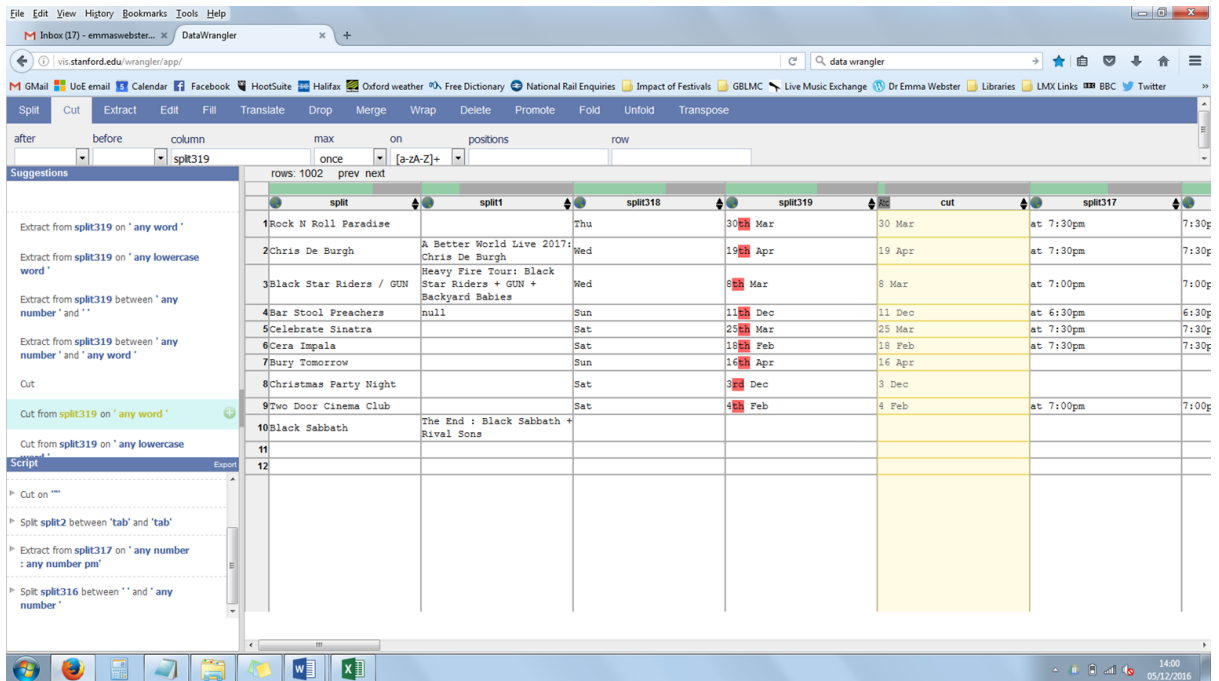


Figure 7: Using Cut function in Data Wrangler

10. To correct or undo any actions, click the red minus button in the Script pane.
11. Once you have finished tidying up your data you can copy/paste back into Excel.

# Guide to web scraping

You will need to scrape data each month for the three months prior to the Census date so as to build a comprehensive list of local venues. Web scraping is one way of collecting data from listings sites such as The List or Songkick. Note that many live music events are not listed on listings sites and so you will need to supplement the web scraping with checking local 'street press' and/or venues' social media accounts.

There are various web scrapers available – some are free, intuitive and user-friendly but set limits on number of URL searches allowed (see [import.io](http://import.io) and [Parsehub](http://Parsehub.com), for example). [Portia](http://Portia.io) is less easy to use but has fewer limits.

## Using Web Scraper

*The following was correct at the time of writing in April 2017 but both the Web Scraper tool and listings sites are run by third parties and are therefore subject to change.*

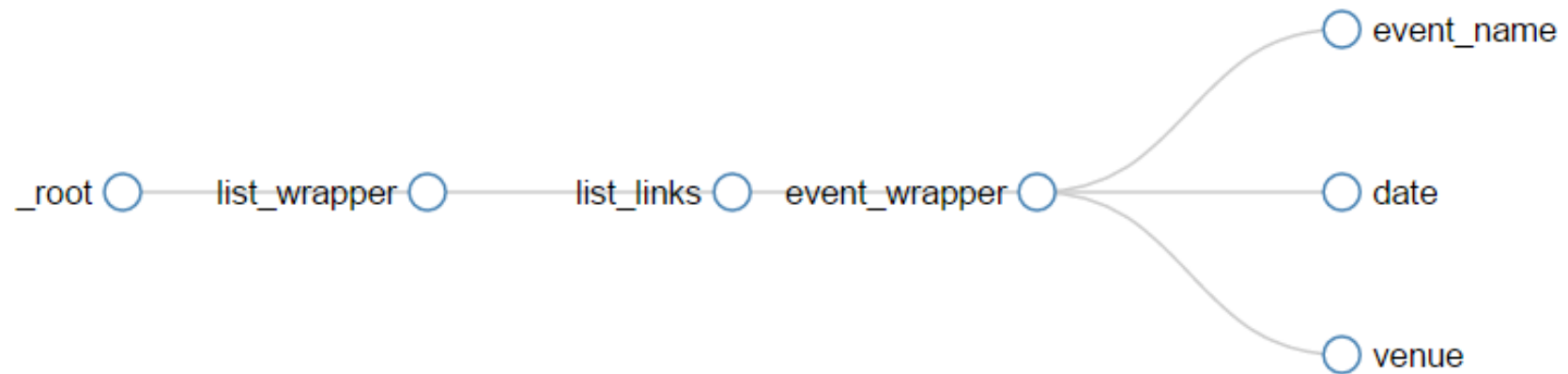
[Web Scraper](http://webscraper.io) is a free Google Chrome extension – it can take some time to get the hang of but, unlike some commercial web scrapers, allows for unlimited scrapes. You first need to download it to Chrome then access it in Developer Tools (F12 in Chrome) - <http://webscraper.io/>

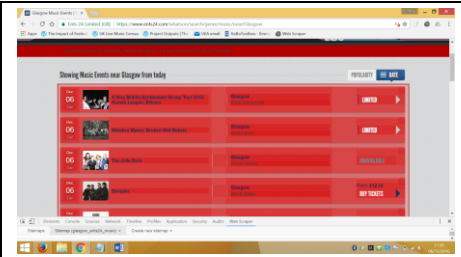
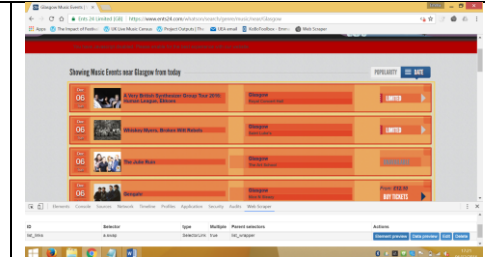
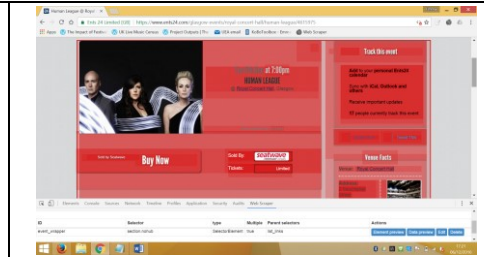
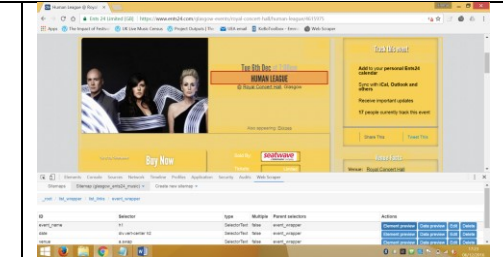
The basic principle of Web Scraper is to instruct the tool where to look for data, then to tell it what to scrape on an individual event's page. There are video tutorials here – <http://webscraper.io/tutorials> – and documentation here - <http://webscraper.io/documentation>

1. Open up Web Scraper and Create New Sitemap >> Create Sitemap.

Name it appropriately and then copy/paste the URL of the site you wish to scrape – the recommended method is to use the exact URL for the listings where possible, i.e. navigate to music listings in Glasgow (<https://www.ents24.com/whatson/search/genre/music/near/Glasgow/order/date>) rather than the site's main URL (<https://www.ents24.com>).

Many listings sites work on the principle of a main listings page which displays each event in a list which contains links to individual pages for each event. You need to tell the Web Scraper to first locate the 'wrapper' which contains the links on the main listings page, second to tell it to look for the links to the events' unique URLs, third to click through to an event's unique webpage and identify the 'wrapper' which contains the details of the event, and then finally locate the individual details of the event, e.g. event name, date, venue, etc.



			
list_wrapper	list_links	event_wrapper	Event details, e.g. event_name, etc.
Wrapper which contains links to the events' unique URLs	Links to events' unique URLs	Wrapper which contains event details on its unique page	Event details, e.g. event name, date, venue, etc.

2. Add New Selector to locate the 'list wrapper' with ID: list\_wrapper and Type: Element.
3. Click on Selector to then locate the wrapper, as per Figure 1.

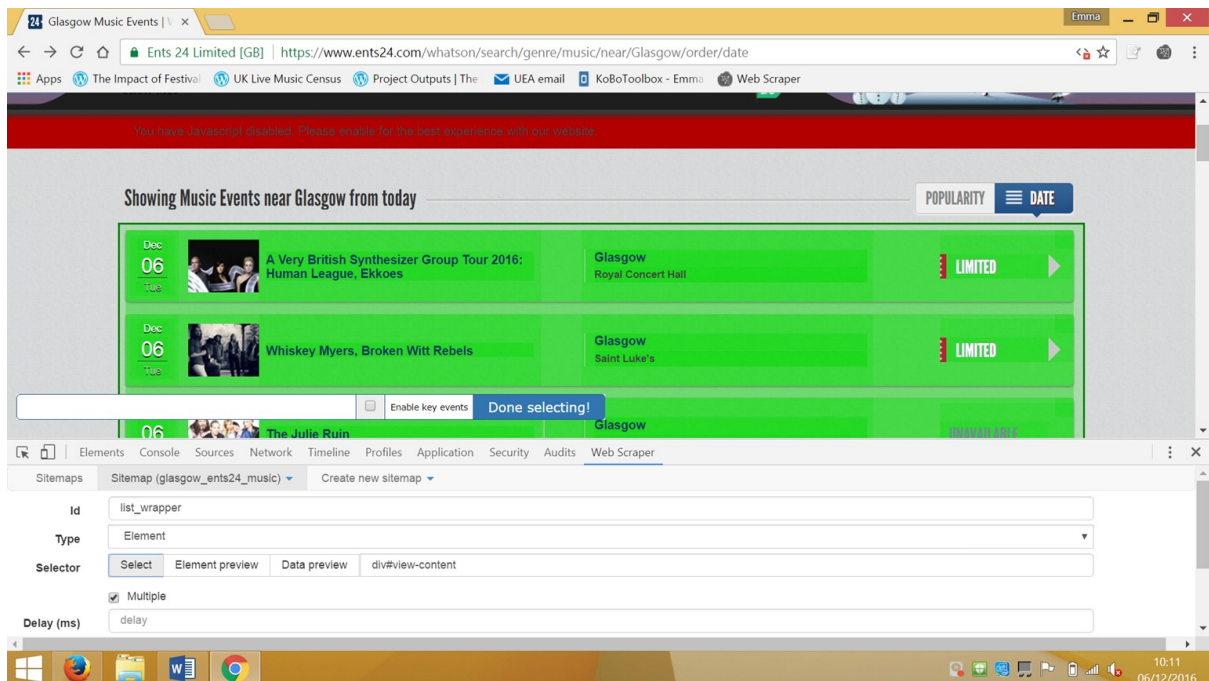


Figure 1: Selecting the 'list wrapper' in Web Scraper

4. Click the blue Done Selecting button once you have selected the wrapper (it will change from green to red).

☞ Ensure that you include the pagination buttons in your list wrapper (see Figure 2).

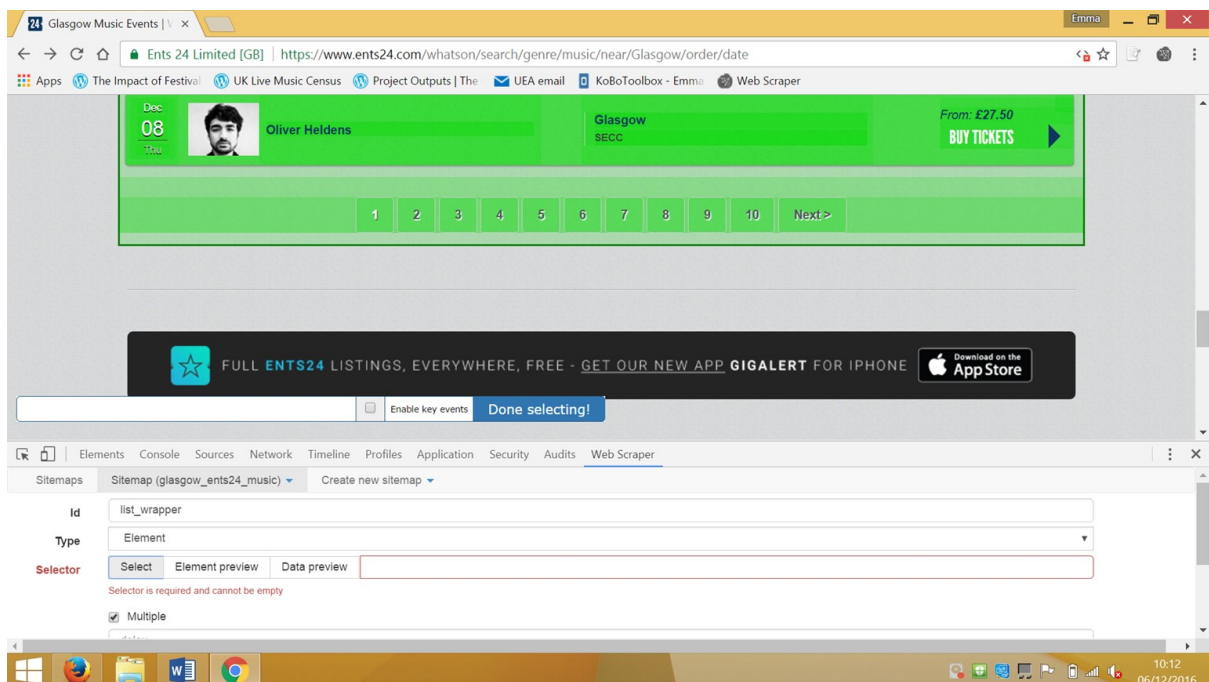


Figure 2: Bottom of list 'wrapper' highlighting pagination buttons



5. Ensure that 'Multiple' is selected, then Save Selector.
6. You now need to tell the Scraper to look for the individual listing links, so Add New Selector with ID: list\_links and Type: Links.
7. Click Select and then select the first few links – you need to select more than just the first link to tell Web Scraper that you want to select all of them (see Figure 3). Click Done Selecting when you are ready.

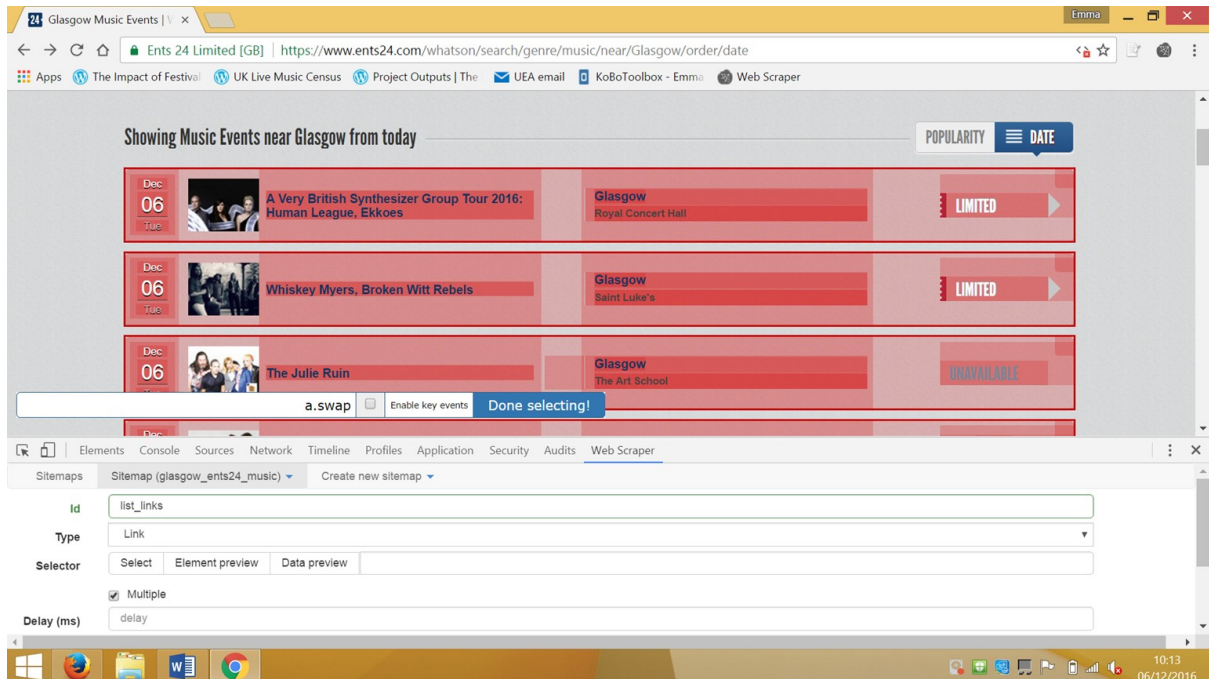


Figure 3: Selecting event listing URLs - select the top link and then two or three more until all turn green/red

8. Ensure that 'Multiple' is selected so that Web Scraper knows to look for more than one link, and that the Parent selector is link\_wrapper, then Save Selector.
9. You then need to click through to one of the individual event listings to tell the Scraper where to look and what to look for.
10. Click Add New Selector with ID: event\_wrapper and Type: Element.
11. Select the 'wrapper(s)' which contains the details you want to scrape and then Done Selecting when ready (see Figure 4).



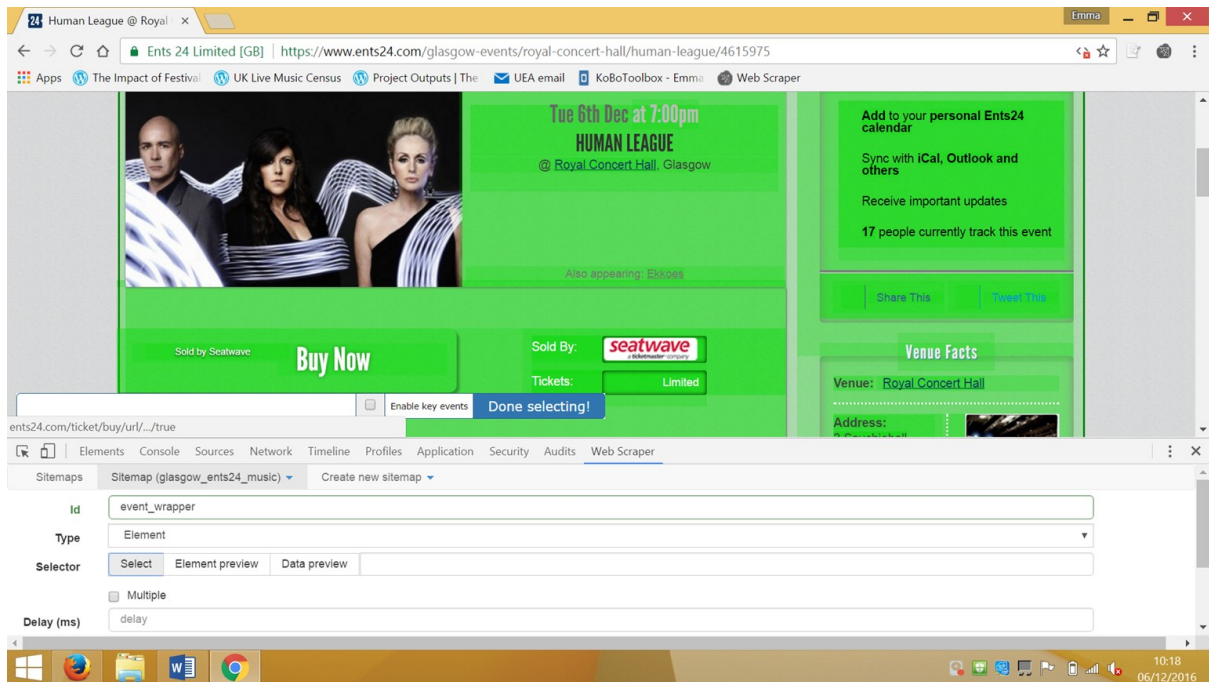


Figure 4: Selecting the 'event wrapper' on an event page - the wrapper will first show as green and then turn red when selected - click Done Selecting! when you are ready

12. Ensure that 'Multiple' is selected so that Web Scraper knows to look for more than one, and that the Parent selector is list\_links, then Save Selector.

13. Then to tell the Scraper what data you want to scrape (e.g. event name, data, venue, etc.) – you will need separate selectors for each one.

14. Add New Selector, e.g. ID: event\_name, Type: Text (see Figure 5).

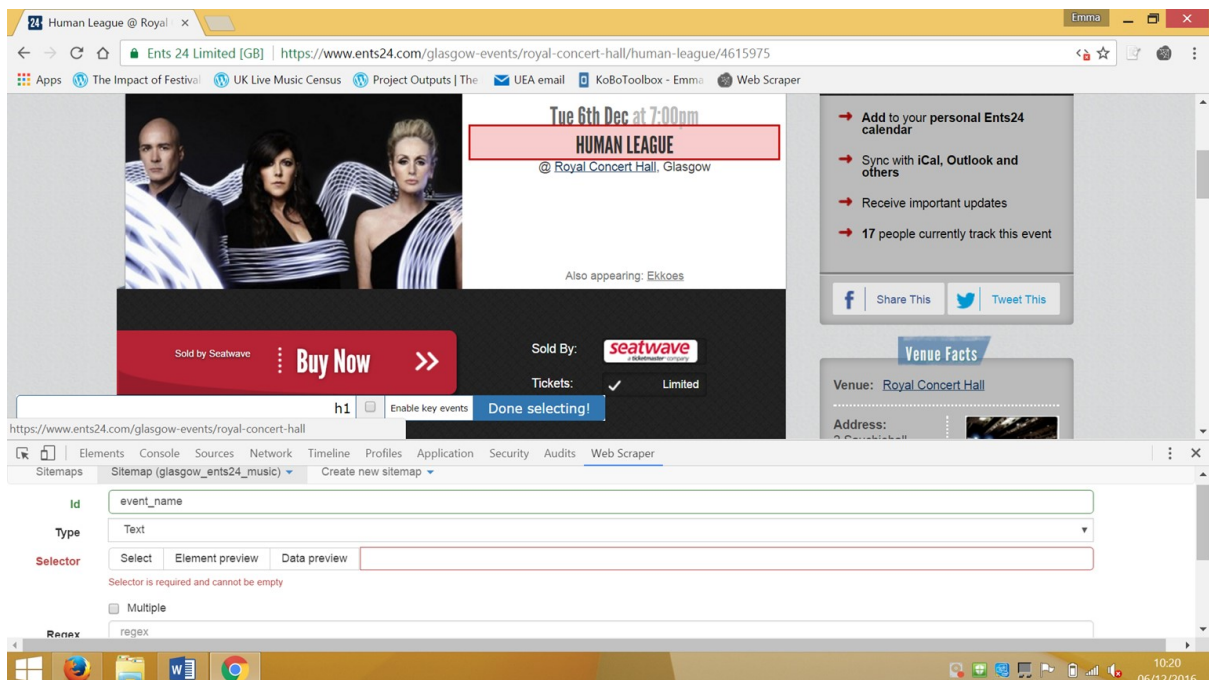


Figure 5: Selecting event details - here Human League is selected as the event\_name - you can see in the selection box the element's name, i.e. 'h1'

15. Ensure Multiple is NOT selected, set the Parent selector to event\_wrapper and Save.
16. Create Text Selectors for the date, showtimes, description, venue, venue address, ticket price, organiser name, and any other information you think will be useful.

☞ Some events occur more than once and the event listing may include more than one date – for the date selector in these cases, you should therefore ensure that Multiple is selected.

Once you have finished, you are nearly ready to test your scraper.

☞ Test it before you add in the pagination selector (see below) to ensure that it is behaving as expected. You can also click on Data Preview at each step to ensure that the data being scraped is correct.

17. Click Sitemap >> Scrape. The Scraper will then trawl through each individual URL to scrape the data you selected in the 'event-wrapper'.

Once it has finished, the Web Scraper pane will show your data – at this point you can see whether you need to refine any of your selectors to give you the correct results. At this point, the Web Scraper community message boards can be useful –

<https://groups.google.com/forum/#!forum/web-scraper>

For an explanation of the overall principles of pagination, see the Pagination tutorial – <http://webscraper.io/tutorials>

18. Ensure you are on a listings page which contains the list of links and the pagination buttons.
19. Add New Selector, ID: pagination, Type: Link.
20. Select two or three pagination buttons to select all of them. Ensure Multiple is selected (see Figure 6).

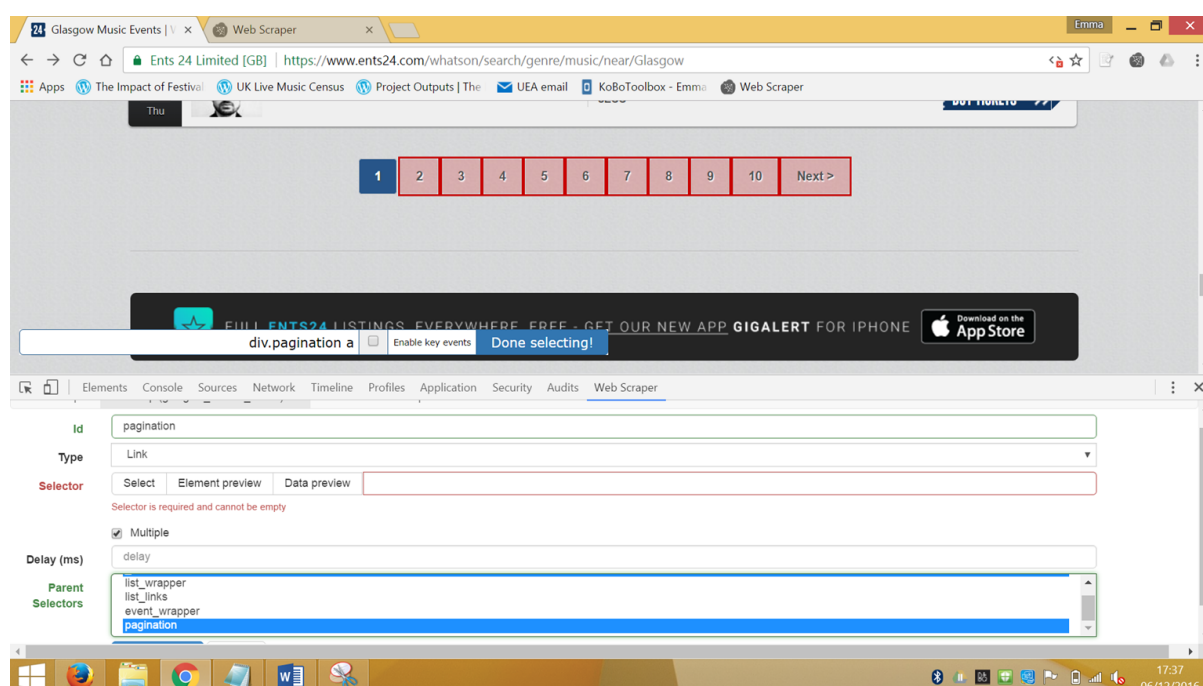


Figure 6: Setting up pagination - note the selection of both \_root and pagination as Parent Selectors (hold down Ctrl to select more than one)

21. Select both ‘\_root’ and ‘pagination’ as Parent Selectors (hold down the Ctrl button to select more than one). Save Selector.

22. Edit the `list_wrapper` selector so that its parent is 'pagination', not '\_root', i.e. the pagination link selector is made a child to itself it will recursively discover all pagination pages. Your Sitemap will now look like Figure 7.



Figure 7: Sitemap showing pagination link selector as child to itself

23. Scrape the data. As the Web Scraper is now scraping potentially hundreds of individual event URLs this can take some time. It is worth checking back to ensure that it hasn't got stuck – if this happens one or more of the selectors will need to be refined.

☞ You will need to scrape the data at regular intervals to ensure that you are collecting sufficient amounts of data for your locale. Bear in mind that some events have a much longer lead time than others and so we recommend that you re-scrape every two weeks – you can remove duplicates later.

24. Download the data – while there is an option to Export data as CSV, this can sometimes cause formatting issues in Excel and other software so it is recommended instead that you **copy all the data from the Browse function instead and paste into Excel or similar.**

## Listings website examples

The following gives examples of listings sites with overview of set-up using Web Scraper.

☞ It is very likely that your town/city has other sources of live music listings than the above list, so do ensure that you set up a Scraper for all relevant listings sites.

☞ Also bear in mind that these are examples from the UK so you will need to identify listings site relevant to your own region/country.

### Songkick

Use recursive pagination links to scrape all pages (although only if enough events to warrant pagination, otherwise delete this selector). Start URL should be your town/city, e.g.

[http://www.songkick.com/metro\\_areas/24620-uk-st-albans](http://www.songkick.com/metro_areas/24620-uk-st-albans)

Example sitemap – Manchester

```
{
  "selectors": [
    {
      "parentSelectors": ["pagination"],
      "type": "SelectorElement",
      "multiple": true,
      "id": "list_wrapper",
      "selector": "div.component.events-summary",
      "delay": ""
    },
    {
      "parentSelectors": ["list_wrapper"],
      "type": "SelectorLink",
      "multiple": true,
      "id": "list_links",
      "selector": "p.artists a",
      "delay": ""
    },
    {
      "parentSelectors": ["list_links"],
      "type": "SelectorElement",
      "multiple": true,
      "id": "detail_wrapper",
      "selector": "div.event-header div.col-8",
      "delay": ""
    },
    {
      "parentSelectors": ["detail_wrapper"],
      "type": "SelectorText",
      "multiple": false,
      "id": "event_title",
      "selector": "h1.h0 a",
      "regex": "",
      "delay": ""
    },
    {
      "parentSelectors": ["detail_wrapper"],
      "type": "SelectorText",
      "multiple": false,
      "id": "venue",
      "selector": "span.name a",
      "regex": "",
      "delay": ""
    },
    {
      "parentSelectors": ["detail_wrapper"],
      "type": "SelectorText",
      "multiple": false,
      "id": "date",
      "selector": "div.date-and-name p",
      "regex": "",
      "delay": ""
    },
    {
      "parentSelectors": ["_root", "pagination"],
      "type": "SelectorLink",
      "multiple": true,
      "id": "pagination",
      "selector": "div.pagination a",
      "delay": ""
    }
  ],
  "startUrl": "http://www.songkick.com/metro_areas/24475-uk-manchester",
  "_id": "map_manchester_songkick"
}
```

### The List

Use recursive pagination links to scrape all pages (**although only if enough events to warrant pagination, otherwise delete this selector**). Start URLs should be your town/city and type of event ('music', 'clubs' and 'musical' (in 'theatre')), therefore you will need more than one sitemap. The List is set up so that individual event listings contain all tour locations rather than each individual event having its own unique URL, therefore this sitemap needs to be set up to pull data from the main links page rather than going into each individual event.

Example sitemap – Glasgow 'clubs'

```
{
  "selectors": [
    {
      "parentSelectors": ["pagination"],
      "type": "SelectorElement",
      "multiple": true,
      "id": "list_wrapper",
      "selector": "div.main",
      "delay": ""
    },
    {
      "parentSelectors": ["event_wrapper"],
      "type": "SelectorText",
      "multiple": false,
      "id": "event_title",
      "selector": "div.eventSummary a",
      "regex": "",
      "delay": ""
    },
    {
      "parentSelectors": ["event_wrapper"],
      "type": "SelectorText",
      "multiple": false,
      "id": "venue",
      "selector": "h3 a",
      "regex": "",
      "delay": ""
    },
    {
      "parentSelectors": ["event_wrapper"],
      "type": "SelectorText",
      "multiple": false,
      "id": "date",
      "selector": "div.byDate:nth-of-type(2) h4",
      "regex": "",
      "delay": ""
    },
    {
      "parentSelectors": ["event_wrapper"],
      "type": "SelectorText",
      "multiple": false,
      "id": "price_tel_no",
      "selector": "p.price",
      "regex": "",
      "delay": ""
    },
    {
      "parentSelectors": ["event_wrapper"],
      "type": "SelectorText",
      "multiple": false,
      "id": "time",
      "selector": "abbr.dtstart"
    }
  ]
}
```

```
span", "regex": "", "delay": "", {"parentSelectors": ["event_wrapper"], "type": "SelectorText", "multiple": false, "id": "description", "selector": "div.eventSummary
p", "regex": "", "delay": "", {"parentSelectors": ["list_wrapper"], "type": "SelectorElement", "multiple": true, "id": "event_wrapper", "selector": "div.resultsRow:nth-of-type(n+2)", "delay": ""}, {"parentSelectors": ["_root", "pagination"], "type": "SelectorLink", "multiple": true, "id": "pagination", "selector": "div.pagination
a", "delay": ""}], "startUrl": "https://www.list.co.uk/events/clubs/location:Glasgow(55.8621,-4.2465)/", "_id": "glasgow_the_list_clubs_2"}
```

Without pagination Brighton 'musical':

```
{"selectors": [{"parentSelectors": ["_root"], "type": "SelectorElement", "multiple": true, "id": "list_wrapper", "selector": "div.main", "delay": ""}, {"parentSelectors": ["event_wrapper"], "type": "SelectorText", "multiple": false, "id": "event_title", "selector": "div.eventSummary
a", "regex": "", "delay": ""}, {"parentSelectors": ["event_wrapper"], "type": "SelectorText", "multiple": false, "id": "venue", "selector": "h3
a", "regex": "", "delay": ""}, {"parentSelectors": ["event_wrapper"], "type": "SelectorText", "multiple": false, "id": "date", "selector": "div.byDate:nth-of-type(2)
h4", "regex": "", "delay": ""}, {"parentSelectors": ["event_wrapper"], "type": "SelectorText", "multiple": false, "id": "price_tel_no", "selector": "p.price", "regex": "", "delay": ""}, {"parentSelectors": ["event_wrapper"], "type": "SelectorText", "multiple": false, "id": "time", "selector": "abbr.dtstart
span", "regex": "", "delay": ""}, {"parentSelectors": ["event_wrapper"], "type": "SelectorText", "multiple": false, "id": "description", "selector": "div.eventSummary
p", "regex": "", "delay": ""}, {"parentSelectors": ["list_wrapper"], "type": "SelectorElement", "multiple": true, "id": "event_wrapper", "selector": "div.resultsRow:nth-of-type(n+2)", "delay": ""}], "startUrl": "https://www.list.co.uk/events/theatre/musical/location:Brighton(50.8431,-0.1336)/distance:5/", "_id": "map_brighton_the_list_musical"}
```

## The Skinny

Use Element Click to scrape all pages. Start URLs should be your town/city and type of event ('music' and 'clubs').

Example sitemap – Glasgow 'music'

```
{"startUrl": "http://www.theskinny.co.uk/whats-on/glasgow/music", "selectors": [{"parentSelectors": ["_root"], "type": "SelectorElementClick", "multiple": true, "id": "links_wrapper", "selector": "div.row div div.col div.panel a.overlay, div.row > div.col div.panel a.overlay, a.overlay", "delay": "2000", "clickElementSelector": "a.load-more", "clickElementUniquenessType": "uniqueHTML", "clickType": "clickMore", "discardInitialElements": false}, {"parentSelectors": ["links_wrapper"], "type": "SelectorLink", "multiple": true, "id": "links", "selector": "_parent_", "delay": ""}, {"parentSelectors": ["links"], "type": "SelectorElement", "multiple": true, "id": "detail_wrapper", "selector": "main", "delay": ""}, {"parentSelectors": ["detail_wrapper"], "type": "SelectorText", "multiple": false, "id": "event_title", "selector": "h1", "regex": "", "delay": ""}, {"parentSelectors": ["detail_wrapper"], "type": "SelectorText", "multiple": false, "id": "date", "selector": "p.flow-
text.event__header__date", "regex": "", "delay": ""}, {"parentSelectors": ["detail_wrapper"], "type": "SelectorText", "multiple": false, "id": "venue", "selector": "p.flow-text strong
a", "regex": "", "delay": ""}, {"parentSelectors": ["detail_wrapper"], "type": "SelectorText", "multiple": false, "id": "ticket_price", "selector": "p.flow-
text.event__header__date", "regex": "", "delay": ""}, {"parentSelectors": ["detail_wrapper"], "type": "SelectorText", "multiple": false, "id": "description", "selector": "div.flow-text
```

```
p","regex":"","delay":"","{"parentSelectors":["detail_wrapper"],"type":"SelectorText","multiple":f
alse,"id":"showtimes","selector":"p.flow-text strong:nth-of-
type(1)","regex":"","delay":""},"_id":"glasgow_theskinny_music"}
```