

Proof of concept repository:

<https://github.com/isaacharrison01/FOAR705POC>

User stories/Quality assurance:

1. Analyse key themes of sources
 - a. As a student I am able to successfully determine the key themes, commonalities and links within and between my sources using Voyant tools.
2. Store sources
 - a. As a student I am able to successfully store my sources in a way that significantly aids my research using Zotero, particularly through the extraction and usage of the analysis results from Voyant tools .
3. Extract sources
 - a. As a student I am able to successfully extract sources and their metadata from their online origin to Zotero.
4. Upload sources
 - a. As a student I am able to successfully upload my collection of sources from Zotero to Voyant tools at once, using Voyant server and the Zotero to Voyant export add-on.
5. Tag, label and annotate sources
 - a. As a student I am able to successfully tag, label and annotate my sources on the basis of both Voyants analysis and my own ongoing personal preferences.
6. Extract bibliography of sources
 - a. As a student I am able to successfully extract the bibliography of my collection of sources automatically.

Instructions for running proof of concept:**Required downloads:****Download Zotero:**

1. Download Zotero for relevant platform from: <https://www.zotero.org/download/>
2. Open file
3. Once set up screen opens, click next
4. Choose standard installation, then click next
5. Choose preferred location to install, then click upgrade
6. Choose launch Zotero now, then click finish

Install Zotero connector extension:

1. Install Zotero connector extension for either Chrome, Firefox or Safari using this link (below Zotero download link): <https://www.zotero.org/download/>
2. In window that opens up, click to add extension
3. Extension should appear next to search bar

Download 'Zotero Voyant Export' extension:

1. Click link: <https://github.com/corajr/zotero-voyant-export>
2. Click on 'View all of README.md'
3. Click on Auto-updating (latest release of the XPI)
4. Open Zotero
5. Select tools menu -> Add-ons -> click the gear icon in the upper right and then select "install Add-on From File" -> open the downloaded XPI file
6. 'Zotero Voyant Export' should now appear in your Add-ons
7. Make sure to enable and keep it highlighted by left clicking once on the green puzzle piece.

Download VoyantServer:

1. Download VoyantServer from <https://github.com/sgsinclair/VoyantServer/releases/tag/2.4.0-M28>
2. Click on 'VoyantServer2_4-M28.zip'
3. Decompress using zip using data compression tool such as winrar
4. Once decompressed, click on the 'VoyantServer.jar' file in the folder
5. Make sure Java is installed.
6. If using Mac, right click on the VoyantServer.jar file and choose Open from the menu, you will then need to click on Open in the dialog which opens.
7. Once VoyantServer runs, a control panel opens up (of which should look like the image pictured below)
8. This should also automatically launch your default browser with the Voyant Tools home screen (keep this open). If not, click 'Open Web' on Voyant Server.

Pipeline/workflow instructions:

1. Open up Zotero
2. Click on the tan folder icon in the top left corner
3. Name it 'test folder'
4. Click OK
5. Go to browser which you added the Zotero extension to earlier
6. Copy this link into your browser: <https://doaj.org/subjects>
7. Go to 'Social Sciences' tab and click 'View Journals/Articles'
8. Right click and 'open in new tab' for the first 3 articles that appear.

9. Open up full pdf of each article (this process will vary for different articles)
10. On each of these pdf's hover over Zotero connector extension which should then display 'Save to Zotero' -> click on the extension
11. Each source should be saved with the title, authors, date and a link to the pdf when clicking on the arrow button next to the relevant source. This is alongside other varying levels of metadata, which may include abstracts and tags which will be displayed in the 'Info, Notes, Tags, Related' tab.
12. Right click on 'test folder'
13. Select 'Export to Voyant...'
14. Export as zip file to documents folder.
15. Go to the tab opened automatically (or manually) by Voyant Server
16. Click 'Upload'
17. Go to Desktop, choose 'test folder.zip'
18. Click 'Open'
19. Click on 'Document Terms' in the upper right side of the screen.
20. Click on 'Terms' in the upper left side of the screen.
21. If words or characters which are part of the metadata appear, go to 'Define options for this tool' in the upper left side of the screen (move cursor slightly to the left of the lower question mark in this part of the screen and this option will appear)
22. Click edit list
23. Input any numbers, words or characters which represent metadata or are irrelevant to the substantive content of the source eg. pp, et, al.
24. Click save.
25. Click confirm.
26. Observe the 'terms' tab which displays the most common words amongst all three sources
27. Open Zotero and 'add new standalone note' (in between the paper clip and magic wand icons)
28. Retype the first 10 results from the 'Terms' tab in Voyant in the standalone note you just created.
29. Now right click on 'Test folder' collection
30. Select 'Create bibliography from collection...'
31. Select 'Elsevier - Harvard (with titles)' from list of citation style options.
32. Select 'Bibliography' output mode.
33. Select 'Copy to Clipboard' as output method.
34. Click OK.
35. Open word document (or other document writing program of your choosing)
36. Right click
37. Select 'Paste'
38. Now go back to Voyant in your browser.
39. Click on the 1st document (Labelled as 1) in the 'Documents' tab in the lower left quadrant of the screen

40. Using the 'Reader' function in the upper middle quadrant of the screen, observe what source this 1st document represents in Voyant tools (It may take some scrolling to find the title of the source, if this is not visible you will need to open the pdf of each source in 'test folder' and correspond it accordingly).
41. Go back to the document where you extracted the bibliography to
42. Number the source which document number 1 represents in Voyant tools, with the number 1.
43. Repeat steps 39-42 for the documents 1 and 2.
44. Go to Zotero.
45. Highlight source 1 by clicking on it once with the left side of the mouse.
46. Observe the first five terms from document one as found in the 'Document terms tab' in Voyant tools.
47. Enter as 'tags' separately within the tags tab for source 1 in Zotero by clicking 'add' under the tags tab.
48. Repeat steps 44-47 for documents 1 and 2 individually.

Errors and solutions documented at the end of learning journal (dated 17/11/19)

Version control/data management:

1. In writing for my proof of concept exercises, data-carpentry and learning journal I used google docs. This allowed me to have everything automatically saved as I type and I have had no issues with data loss due to this.
2. Github was also used in order to save previous versions of my work within this subjects at various points in time. This was so that when I changed my work throughout the course, adding and deleting information, I would be able to backtrack to previous versions incase I had deleted something of import.