CLS variable search tool (dev)

(work in progress please flag any anomalies)

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# CLS variable search tool (dev)

The CLS variable search tool is a combination of a Flask application, HTML and DataTables. See the setup below for both development and proposed production modes below.

In development mode the CLS variable search tool runs on the UCL desktop anywhere

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A diagram of a web hosting server

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# Running CLS variable search tool (dev)

NOTE: The CLS variable search tool needs to be run on the D@UA-Legacy UCL desktop (right hand option on login page below). Flask will not currently run on the newly upgraded Desktop@UCL Anywhere desktop (left hand option on login page below)

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The folder containing the file for the CLS variable search tool (development version) is

r'S:\IOECLS\_Data\_Management\\_Metadata\CLS\_variable\_search\_tool\_dev'

To run the CLS variable search tool (development version)

open Anaconda Prompt from the SEARCH bar

A black and blue stripe

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A black rectangle with white border

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Type

S:

cd S:\IOECLS\_Data\_Management\\_Metadata\CLS\_variable\_search\_tool\_dev

flask --app cls\_variable\_search\_flask.py --debug run

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Open Chrome or other browser and type in the address bar

<http://127.0.0.1:5000>

The CLS variable search tool opens

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If any issues (or no output appears) look at the Anaconda window (as above) for errors. Also right click on the CLS variable search tool webpage and select ‘Inspect’ (bottom-most option) and click on the ‘Console’ tab (2nd from left) and see if any errors.

# CLS variable search tool (dev) folders

## CLS variable search tool (dev) main folder

The main folder for the CLS variable search tool is as below. This folder contains:

* readme documentation (this file)
* syntax to run the CLS variable search tool (dev)
* Python syntax files:
  + **cls\_variable\_search\_flask.py**
    - Runs the CLS variable search Flask application (run in Anaconda Prompt)
    - Reads the ‘\_list’ csv files created by Python syntax cls\_variable\_search\_create\_csv\_files.py and Excel file ‘topic\_list.xlsx’ and creates Python dictionaries which are sent to the ‘‘cls\_variable\_search\_index.html’ HTML file (in templates folder below) to create drop down select lists
    - Reads the ‘metadata\_datatables.csv’ file generated by Python syntax cls\_variable\_search\_create\_csv\_files.py and creates a Pandas dataframe to be queried as specified by the filters set in the CLS variable search tool.
    - Sends the query result rows as a JSON dictionary ’my\_table’ to the ‘cls\_variable\_search\_index.html’ HTML file to be displayed by DataTables.
  + **cls\_variable\_search\_create\_csv\_files.py**
    - to be run each time the metadata data dictionary changes and is copied across from the Data Safe Haven to the CLS variable tool folders
    - Ingests the metadata data dictionary and creates csv files as a basis for a Pandas dataframe and dropdown lists used in the Flask syntax file ‘cls\_variable\_search\_flask.py’.
    - NOTE in production mode this file may be run on the data safe haven and the files copied across to the server hosting the CLS variable search webpage

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## CLS variable search tool (dev) resources folder

The resources folder for the CLS variable search tool is as below.

This folder contains:

* Excel files ‘metadata\_datadict\_all.xlsx’ (output from the metadata database and copied over from the Data Safe Haven) and ‘topic\_list.xlsx’ (containing the topics and subtopic details as used in Closer Discovery). The topic\_list.xlsx file may need updating periodically..
* CSV files created by Python syntax ‘cls\_variable\_search\_create\_csv\_files.py’ in the main folder as above.

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## CLS variable search tool (dev) templates folder

The templates folder for the CLS variable search tool is as below.

This folder contains:

* HTML files:
  + ‘cls\_variable\_search\_index.html’
    - Called by the ‘cls\_variable\_search\_flask.py’ Flask application. Structures the content of the CLS variable search webpage and controls how DataTables presents the metadata.
    - Reads in the ‘\_list’ JSON dictionaries to create the filters drop down selection boxes.
    - Sends the filters selection results to the ‘cls\_variable\_search\_flask.py’ Flask application
    - Reads in the filter results ‘my\_table’ JSON dictionary generated by the ‘cls\_variable\_search\_flask.py’ Flask application and displays in DataTables.

NOTE new html files will be added to this folder for the CLS metadata guide and the CLS metadata download webpages

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## CLS variable search tool (dev) static folder

The static folder for the CLS variable search tool is as below.

This folder contains CSS stylesheet files, JavaScript files and font files used in the ‘cls\_variable\_search\_index.html’ HTML file in the templates folder above.

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# Creating the csv files ready for the CLS variable search tool

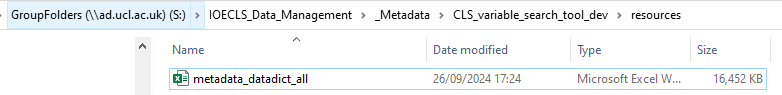
NOTE in production mode this step may be done on the DSH.

Copy the metadata data dictionary Excel file ‘metadata\_datadict\_all.xlsx' from the **Data Safe Haven** metadata\_sharing folder below

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To folder r'S:\IOECLS\_Data\_Management\\_Metadata\CLS\_variable\_search\_tool\_dev\resources on **UCL desktop anywhere**



Check that the csv file below if in the folder r'S:\IOECLS\_Data\_Management\\_Metadata\CLS\_variable\_search\_tool\_dev\resources

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In Spyder run

r'S:\IOECLS\_Data\_Management\\_Metadata\CLS\_variable\_search\_tool\_dev\ cls\_variable\_search\_create\_csv\_files.py’.

the ‘\_list’ csv files should appear in folder r'S:\IOECLS\_Data\_Management\\_Metadata\CLS\_variable\_search\_tool\_dev\resources

as well as csv file ‘metadata\_datatables.csv’ which will be ingested as the Pandas dataframe to be interrogated using the filters entered by the user in the CLS variable search tool.

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