

Further Development and Extensibility FAQ

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Q: What if I would like to use a different algorithm?

A: *In DuckDuckGroup.py, the method subprocess.run() is used to make system calls which will run our provided algorithm on a CSV file that is in the format specified above. To use a different algorithm, you must meet the following conditions:*

1. Set up your CSV in a generic format such as that of the test file provided.
2. If condition 1 is well met, our CSV reader should transform the input CSV into an output text file which your algorithm understands.

When the conditions above have been met, all that is left is to go into DuckDuckGroup.py and change the arguments of calls to subprocess.run(), replacing "algo.java" with "different-algorithm.py", etc. Note that depending on what language the algorithm is written in, you may need to change what kind of command line arguments get executed. For example, algorithms written in java and C will have to be compiled before they are run.

Q: I like the output file of the CSV Reader. How do I use the CSV Reader that you have written?

A: *Both our CSV Reader and Categories generator are contained in their own files. Simply copy CSVReader.py and/or Categories.py and so long as your parameters are appropriate and you understand how and which of the columns of the input CSV file are manipulated, they should work with very little modification!*

Q: What do the sliders do?

A: *For now they are a work in progress. In a future version, we hope to incorporate weighting into the criteria so that the user can adjust which criteria matches have greater/lesser impact on the grouping. Of course, these slider values will have to be obtained and sent back to the algorithm for such functionality to work.*

Q: I think I have a sense of how I could make this better. Any tips before I start?

A: *In the newest version, our app has sliders and an upload form to show what a future iteration of this project may look like. How to connect those sliders*

values to the program as well as how the application responds to other user interactions is a puzzle for all of us to solve. We recommend familiarizing yourself with Flask, HTML, and javascript. In particular, mastering use of request and session and fully understanding how DuckDuckGroup.py interacts with app.html are key to augmenting the app with your desired features.

Q: Pip is not installing flask correctly. What could be the issue?

A: Use `sudo pip3 install flask`