Cluster Viewer Documentation

Project GitHub:

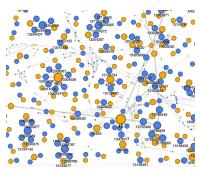
https://github.com/jinnkafka/ResearchProject

Project Description:

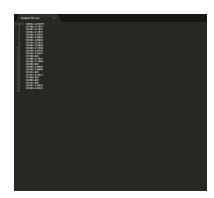
Given a CSV files contains thousands lines of relational numbers, the Cluster Visualizer (CV) parses all the numbers and generate multiple CSV files that representing a smaller subset of the original CSV numbers. More importantly, these subsets are all clusters from the original numbers.



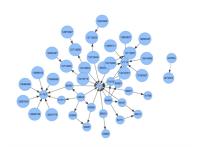
Original Large Database



Original Graph Visualization



Individual Cluster Database



Individual Cluster Visualization

Step-by-Step Instruction:

1. Download DataCluster.java from the project's Github repository. At line 29:

```
BufferedReader in = new BufferedReader(new FileReader("reducedCell.csv"));
```

Replace "reducedCell.csv" with the name of your file, and make sure your CSV file is in the same folder as DataCluster.java.

The best way to run DataCluster.java is inside an Integrated Development Environment (IDE) such as Eclipse or IntelliJ. If running on a terminal, the user will need to compile the project first before running.

Before running the program

```
Package Explorer ☒ ☐ DataCluster.java ☒
                                                                                                                                                                                                                 ► 201_lab3
► 201_lab4
          //Create a HashMap to store every single item, key is the item, value is a list HashMap<Integer, ArrayList> idToConnectlist = new HashMap<Integer, ArrayList>();
                                                                                                                                                                                                                                                            //Read in and Parse the reducedCell.csv file

try {
    BufferedReader in = new BufferedReader(new FileReader("reducedCell.csv"));
    String str;

while (Cctr = in.readLine()) != null) {
    //Rorsing the numbers on every line, reverse idl and id2 to get cluster from different direction
    String1 tokens = str.split(",");

///Sines new fileReader("reducedCell.csv"));
            | Car201_lab6 | Car201_lab7 | 
                  © CSC201Factory_Exp

DataCluster

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DataCluster

B (default package)

→ DataCluster (ava

B (default package)

→ DataCluster (ava

Cluster 10.csv

Cluster 11.csv

Cluster 11.csv

Cluster 11.csv

Cluster 11.csv

Cluster 11.csv

Cluster 11.csv

Cluster 12.csv

Cluster 13.csv

Cluster 13.csv

Cluster 14.csv

Cluster 15.csv

Cluster 16.csv

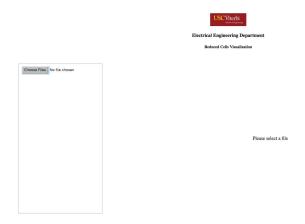
Cluste
                                                                                                                                                                                                                                                              int id2 = Integer.parseInt(tokens[1]);

//Put the number and its corresponding number into map
if (idToConnectlist.get(id1) == null){
    ArrayList<Integer> list = new ArrayList<Integer>();
    list.add(id2);
    idToConnectlist.put(id1, list);
} else {
    (idToConnectlist.aet(id1),add(id2);
                                                                                                                                                                                                                                                                                                                                                                                    (idToConnectlist.get(id1)).add(id2);
                                                                                                                                                                                                             Problems Declaration Solutine Console X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ■ × ¾ 🔒 🚮 🚱
                                                                                                                                                                                                                 Compose Sign Declaration Securities Outline Console Stateminated> DataCluster [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0,31.jdk/Contents/Home/bin/java (Apr 29, 2016, 10:15:26 AM) generating cluster1.csv...generating cluster3.csv...generating cluster4.csv...generating cluster5.csv...generating cluster5.csv...generating cluster5.csv...generating cluster5.csv...generating cluster5.csv...generating cluster6.csv...generating cluster6.csv...generating cluster6.csv...generating cluster6.csv...generating cluster6.csv...generating cluster7.csv...generating cluster7.csv...generating cluster8.csv...
                  DataStructure
DataCluster
```

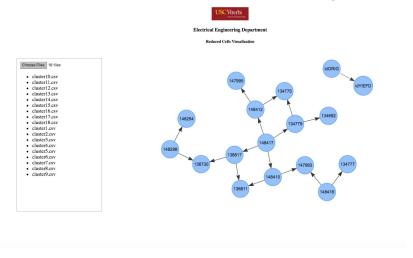
After running the program

If the generated files are not showing in the project folder after running the program, simply refresh the project folder.

2. Go to http://www-scf.usc.edu/~chenjin/ClusterViewer/reduced cells graph.html



And then click "Choose Files" button on top left corner. Choose all the CSV files you want to view. Click on the individual file name to see the graph visualization.



Since the project doesn't have a database, every time user:

- Refresh the webpage
- Upload new files

will erase all the existing files. The user will need to upload the files again to view the graphs.

Questions and Suggestions:

Please email chenjin@usc.edu, or leave an issue ticket on the project Repository, if you have any questions and suggestions. Thank you for using Cluster Viewer!