1.

a.

- The system downloaded was Code 2 UML
   https://sourceforge.net/p/code2uml/code/HEAD/tarball?path=/Code%202
   %20UML/src/net/sourceforge/code2uml/graph
- ii. A program to try and create a UML structure based on Java files
- iii. Source: 1325 Comments: 1876 Total: 3575 Type: java calculated using ATOM ide plugin line-count <a href="https://atom.io/packages/line-count#targetText=Press%20ctrl%2Dalt%2Dshift%2D,all%20files%20in%20the%20project.">https://atom.io/packages/line-count#targetText=Press%20ctrl%2Dalt%2Dshift%2D,all%20files%20in%20the%20project.</a>

b.

Found 5 files that possibly contain design patterns.
 C:\Users\Helix-FZBSPC2\Desktop\code2uml-code-r41-Code 2
 UML-src-net-sourceforge-code2uml-graph\code2uml-code-r41-Code 2
 UML-src-net-sourceforge-code2uml-graph\NodeComponentFactory.java
 Possible patterns: Factory

C:\Users\Helix-FZBSPC2\Desktop\code2uml-code-r41-Code 2
UML-src-net-sourceforge-code2uml-graph\code2uml-code-r41-Code 2
UML-src-net-sourceforge-code2uml-graph\NodeComponentFactoryImpl.j
ava

Possible patterns: Factory

C:\Users\Helix-FZBSPC2\Desktop\code2uml-code-r41-Code 2
UML-src-net-sourceforge-code2uml-graph\code2uml-code-r41-Code 2
UML-src-net-sourceforge-code2uml-graph\layouts\ConnectedComponent
Factory.java

Possible patterns: Factory

C:\Users\Helix-FZBSPC2\Desktop\code2uml-code-r41-Code 2
UML-src-net-sourceforge-code2uml-graph\code2uml-code-r41-Code 2
UML-src-net-sourceforge-code2uml-graph\layouts\GraphLayoutFactory.ja
va

Possible patterns: Factory

C:\Users\Helix-FZBSPC2\Desktop\code2uml-code-r41-Code 2 UML-src-net-sourceforge-code2uml-graph\code2uml-code-r41-Code 2 UML-src-net-sourceforge-code2uml-graph\layouts\GraphLayoutFactoryIm pl.java

Possible patterns: Factory

- ii. This tool looks for instances of design patterns by checking for class structures that fit design patterns. For this program, Factory patterns were found due to the interface class structure with the implementation of an interface created by an overarching factory class to create it.
- iii. I think the process of this tool is a correct way to find potential design structures in a quick amount of time and wouldn't do it a different way. If I had to make any changes I would make updates to show additional info so the user can understand why that class matched said design pattern.

2.

- a. To upload these files I did the following
  - i. Create a repository on Github.com
  - ii. Initialize the repository on creation with a readme file
  - iii. Cloned the repository to my desktop using git clone https://github.com/Jmman1/ESOF322.git with git bash
  - iv. Added previous HW assignments to the folder generated on my desktop
  - v. Navigated git bash to the new folder location
  - vi. Ran the following commands
    - 1. Git add \*
    - 2. Git commit -m "initial message"
    - 3. Git push

b.

- i. Ran the following commands
  - 1. Git add \*
  - 2. Git commit -m "adding dummy file"
  - 3. Git push

```
MINGW64:/c/Users/Helix-FZBSPC2/Desktop/ESOF322
Helix-FZBSPC2@DESKTOP-2Q3PKIR MINGW64 ~/Desktop/ESOF322 (master)
$ git add *
Helix-FZBSPC2@DESKTOP-2Q3PKIR MINGW64 ~/Desktop/ESOF322 (master)
$ git commit -m "adding dummy file"
[master 04cab4a] adding dummy file
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 DummyFile.txt
Helix-FZBSPC2@DESKTOP-2Q3PKIR MINGW64 ~/Desktop/ESOF322 (master)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 288 bytes | 288.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Jmman1/ESOF322.git
   14b5f51..04cab4a master -> master
Helix-FZBSPC2@DESKTOP-2Q3PKIR MINGW64 ~/Desktop/ESOF322 (master)
```

## Jonah Gilbertson and Grant Baker

