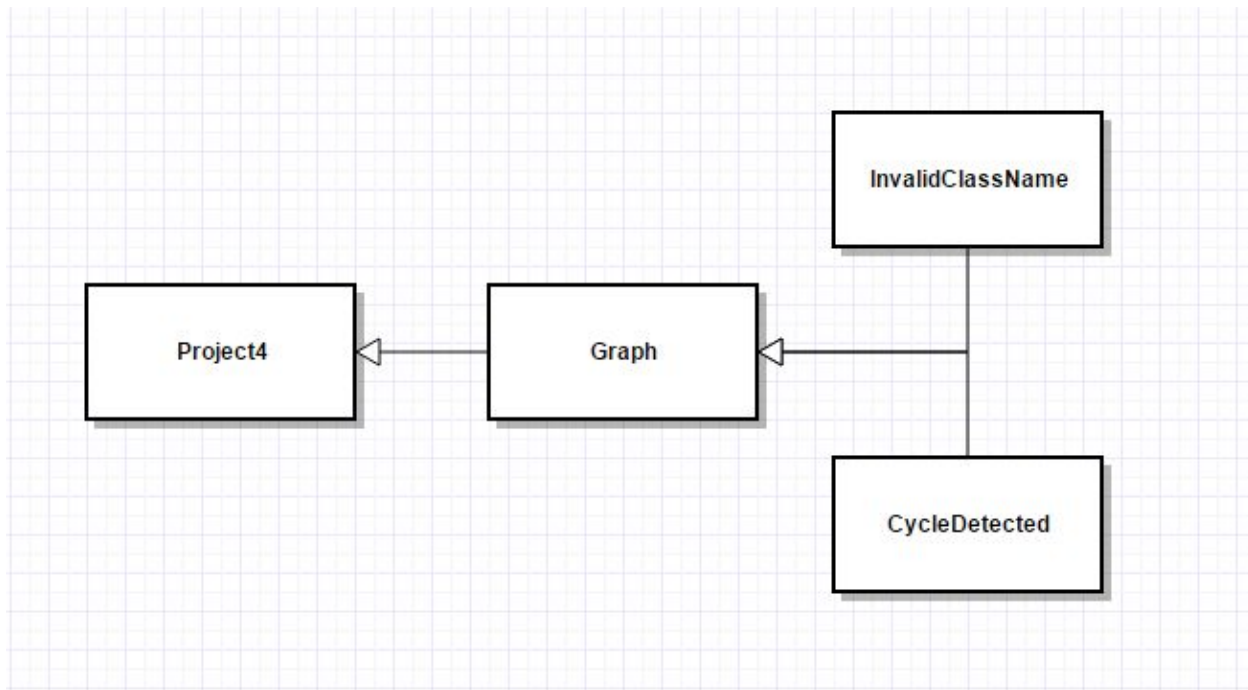


Project 4

UML Diagram

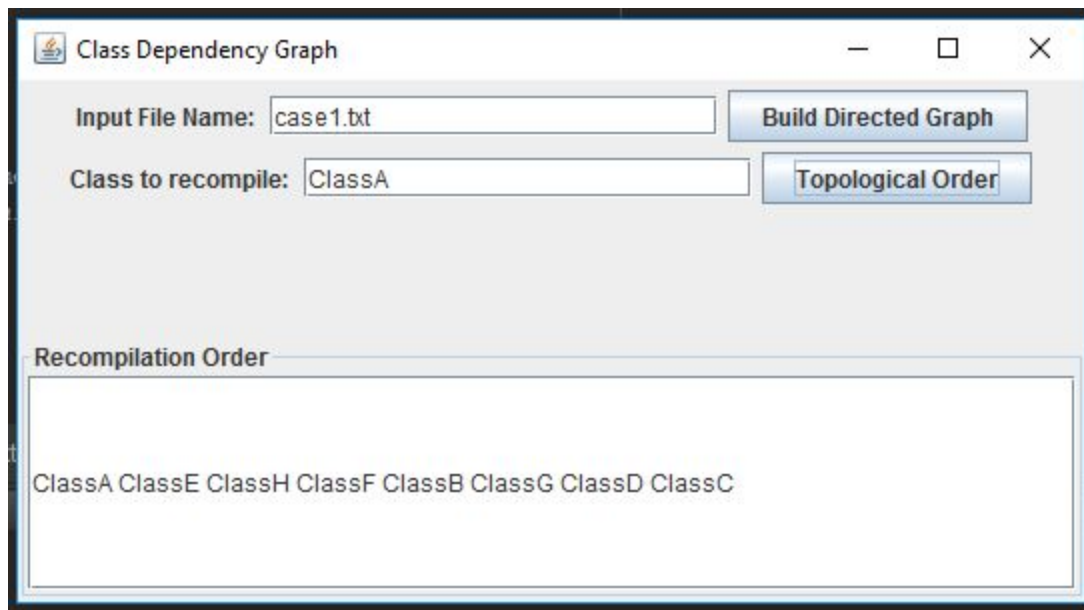
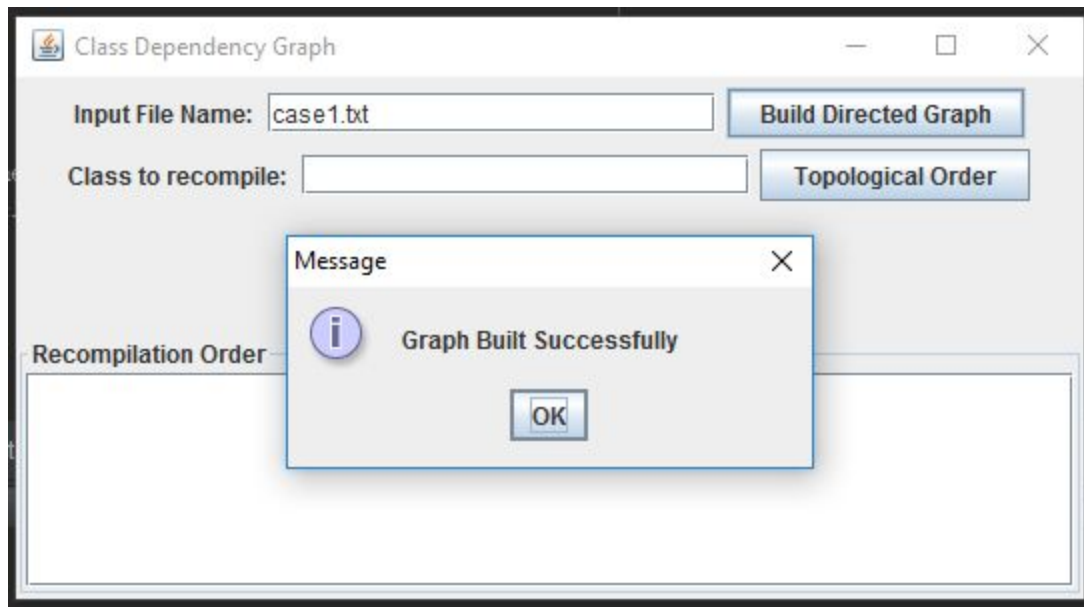


Test Table

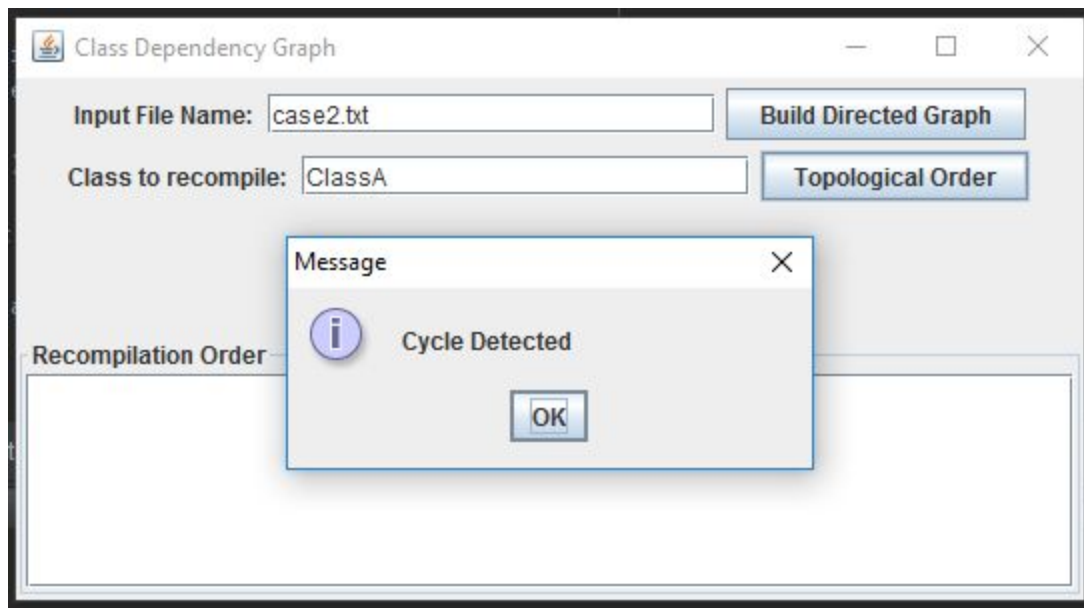
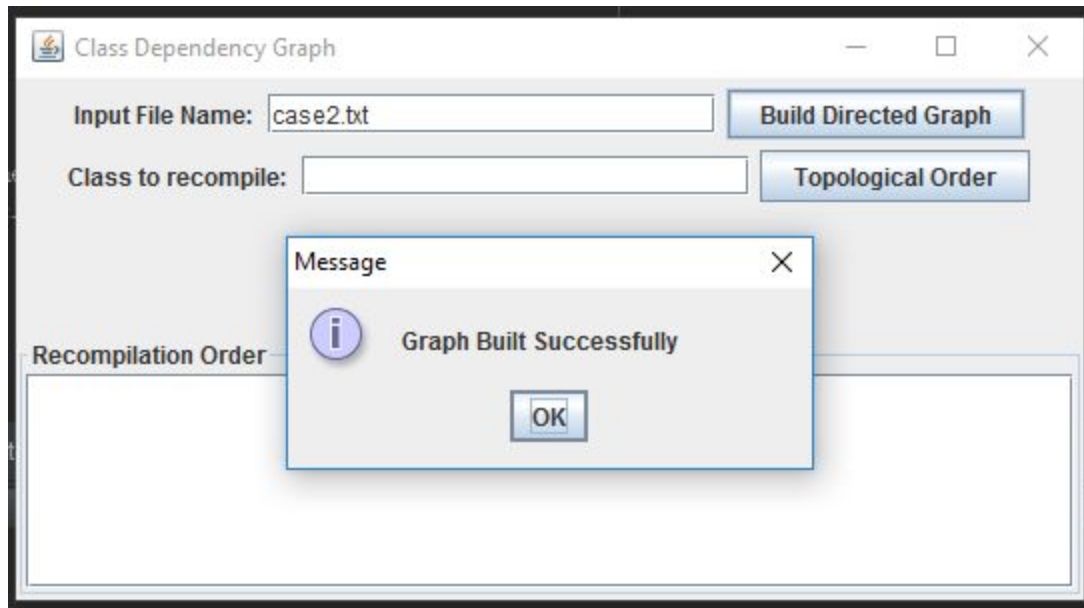
Cases	Input File Name Input	Class to Recompile Input	Expected Output
1	case1.txt	ClassA	Message: Graph Built Successfully ClassA ClassE ClassH ClassF ClassB ClassG ClassD ClassC
2	case2.txt	ClassA	Message: Graph Built Successfully Message: Cycle Detected
3	case3.jpeg	NA	Message: File did not open
4	case4.txt	class1234	Message: Graph Built Successfully Message: Invalid Class Name

Cases	Actual Output	Pass/Fail
1	Message: Graph Built Successfully ClassA ClassE ClassH ClassF ClassB ClassG ClassD ClassC	Pass
2	Message: Graph Built Successfully Message: Cycle Detected	Pass
3	Message: File did not open	Pass
4	Message: Graph Built Successfully Message: Invalid Class Name	Pass

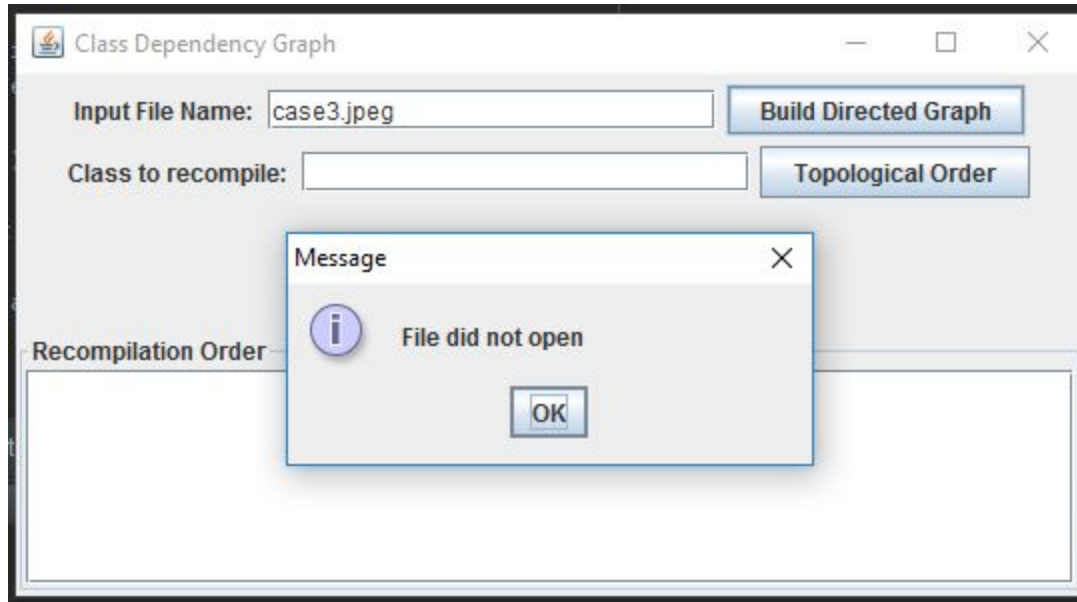
Case 1 - Testing graph without cycles



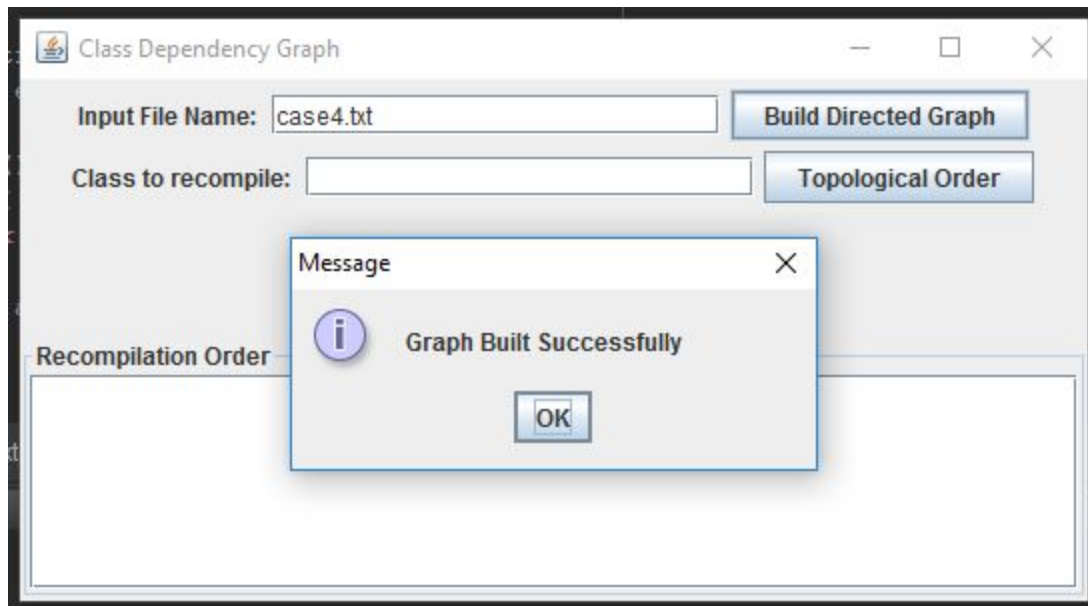
Case 2 - Testing a graph with cycles

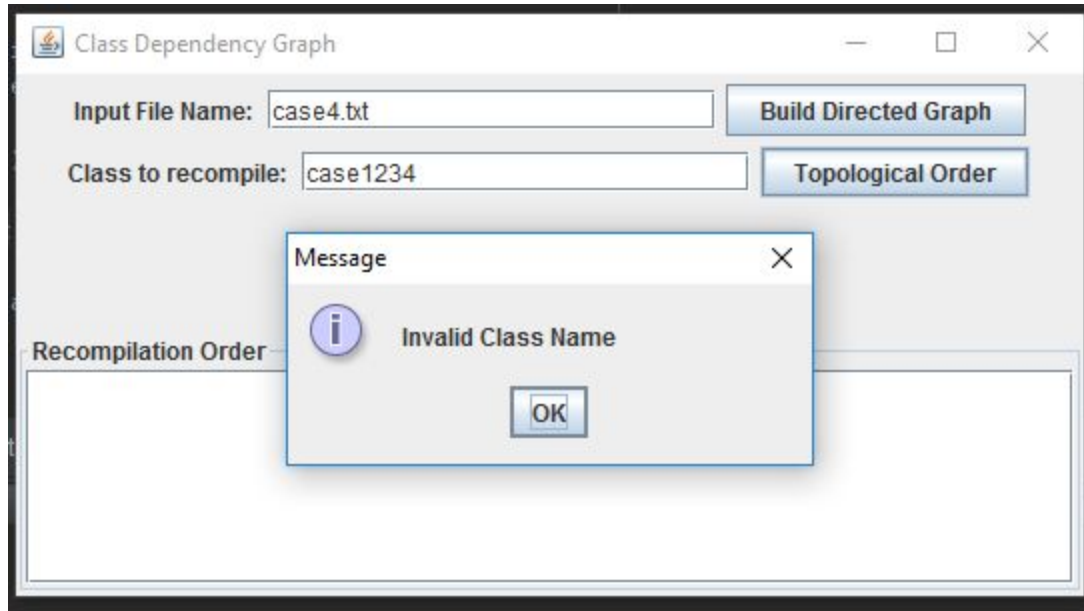


Case 3 - Testing for invalid file name



Case 4 - Testing for invalid class name





This project for me was definitely the hardest, and while I still feel like it wasn't perfect as there was something weird going on with my exception catching, I still feel like I learned a great deal. I understand a bit better how graphs work and node type elements in general and how they make up a graph. I received help from some classmates which helped me get some of the main algorithms but then worked through much of it myself adjusting code and testing to see how it worked. While doing this project I constantly felt like I was hitting a wall, so I would just test random stuff and in so doing became more and more familiar with various methods and what they did, so I did take that positive bit away from it. Creating a GUI which was something I was still a little shaky with before class started is now the easiest part of the project. After finishing this project, I learned that I am thinking more like an object oriented programmer now more than ever because I am really starting to think about elements of a program as objects that are altered by methods. This seems like a simple concept but wasn't really second nature to me like it is now until after finishing this last project. You will find some errors in my test cases as I altered some code while doing the testing and just got to a point where I said to myself that I am done and I will let you grade it and let me know what I was doing wrong, so I can learn the lesson that way.