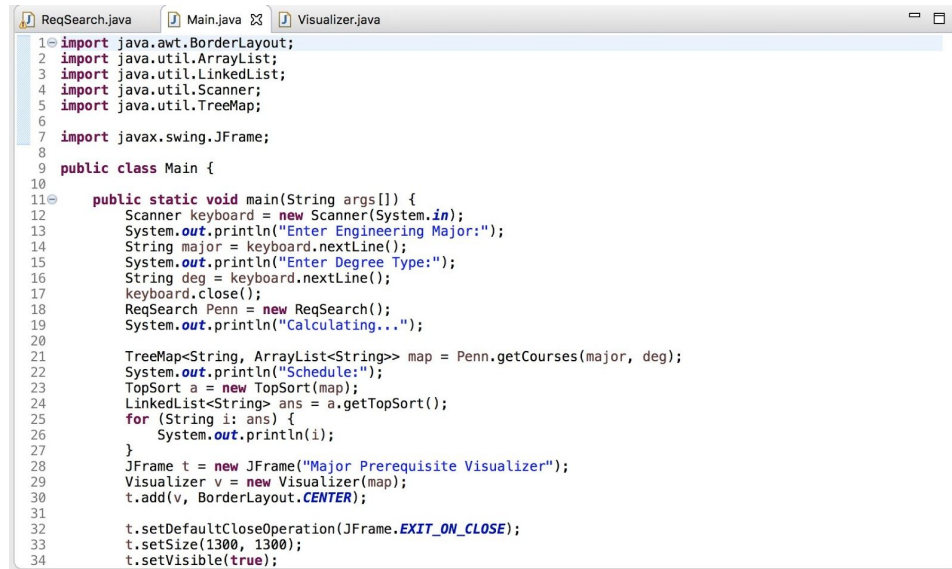


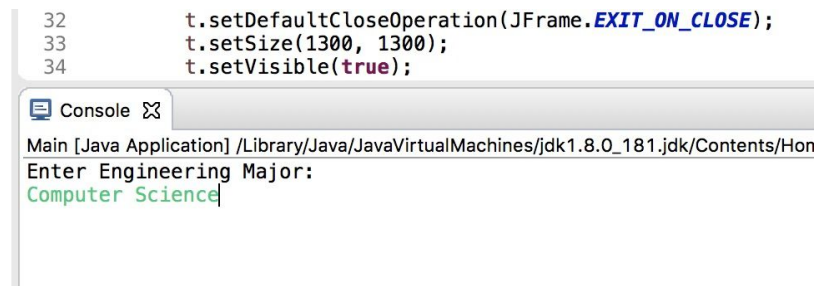
User Manual for Course Planner

1. Download files and import them into your program.
2. Download Jsoup and make sure Jsoup works with your program.
3. Open Main.java



```
1 import java.awt.BorderLayout;
2 import java.util.ArrayList;
3 import java.util.LinkedList;
4 import java.util.Scanner;
5 import java.util.TreeMap;
6
7 import javax.swing.JFrame;
8
9 public class Main {
10
11     public static void main(String args[]) {
12         Scanner keyboard = new Scanner(System.in);
13         System.out.println("Enter Engineering Major:");
14         String major = keyboard.nextLine();
15         System.out.println("Enter Degree Type:");
16         String deg = keyboard.nextLine();
17         keyboard.close();
18         ReqSearch Penn = new ReqSearch();
19         System.out.println("Calculating...");
20
21         TreeMap<String, ArrayList<String>> map = Penn.getCourses(major, deg);
22         System.out.println("Schedule:");
23         TopSort a = new TopSort(map);
24         LinkedList<String> ans = a.getTopSort();
25         for (String i: ans) {
26             System.out.println(i);
27         }
28         JFrame t = new JFrame("Major Prerequisite Visualizer");
29         Visualizer v = new Visualizer(map);
30         t.add(v, BorderLayout.CENTER);
31
32         t.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
33         t.setSize(1300, 1300);
34         t.setVisible(true);
35     }
36 }
```

4. Run the program. The program will ask for the major you wish to choose.
5. Type in desired major.



```
32         t.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
33         t.setSize(1300, 1300);
34         t.setVisible(true);
35     }
36 }
```

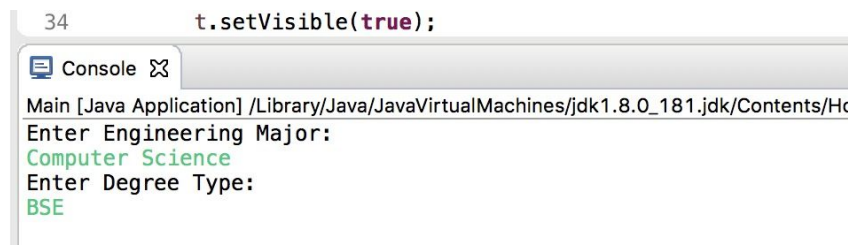
Console

Main [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_181.jdk/Contents/Home

Enter Engineering Major:

Computer Science

6. The program will ask for what type of degree the major is (BAS or BSE).



```
34         t.setVisible(true);
35     }
36 }
```

Console

Main [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_181.jdk/Contents/Home

Enter Engineering Major:

Computer Science

Enter Degree Type:

BSE

7. The program will take time to calculate at this screen, so just wait for a few moments.

```
33      t.setSize(1300, 1300);
34      t.setVisible(true);
```

Console

Main [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_181.jdk
Enter Engineering Major:
Computer Science
Enter Degree Type:
BSE
Calculating...

8. The program should return a new window that shows which classes are prerequisites to other required classes. Below is an example for Computer Science (BSE).

