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CSC 2300

2/17/17

Histogram Project

Jamie and I used the population of 255 cities in the United States as our data for this project. After reading through the code for Histogram and HistogramInterface, we went input the data into a text file. Our biggest issue was figuring out how to get the program to read the file. We looked all over the Internet, repeatedly trying methods that eventually did not work until we found a solution from Stack Overflow (<http://stackoverflow.com/questions/3806062/how-to-open-a-txt-file-and-read-numbers-in-java>). After that, we ran the program, and it kept terminating. We asked Dr. Joyce what the issue might be, but after a closer reading of the code, we realized that we forgot a print statement, and then the histogram ran according to plan. Each star in the histogram represents 5 occurrences, and the ones column has the most by far which is most likely due to the fact that many cities either have around over one million inhabitants, or its number of residents is in the hundred thousands. There are no stars on the graph in the sevens column which was rather surprising. Overall, this project took us about an hour to complete.

**UseHistogram.java**

import support.\*;

import java.util.\*;

import java.io.\*;

public class UseHistogram{

public static void main(String[] args){

Histogram city = new Histogram(9);

try{

String name = "C:\\Users\\Katie\\workspace\\CSC 2300\\src\\CitiesPop.txt";

File file = new File(name);

Scanner scanner = new Scanner(file);

while (scanner.hasNextLine())

city.submit(Integer.parseInt(scanner.nextLine()));

scanner.close();

}

catch(FileNotFoundException e){

e.printStackTrace();

}

System.out.println(city.toString());

}

}

**Output:**

\* = approximately 5 occurrences

1: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

2: \*\*\*\*\*\*\*\*\*\*\*

3: \*\*\*\*

4: \*\*\*

5: \*

6: \*\*\*

7:

8: \*\*

9: \*