

Lab 05: Selection

Due date: By the end of your lab session of the week of Monday, September 19th

Goals

- To learn to write decision-making programs using **if-else** statements

Description

In this lab, you will develop a program that recommends to the user a list of restaurants based on the user's preferences. The recommendation process follows the decision tree shown in **Figure 1**. The execution of the program follows one path of the decision tree based on the user input.

Your task is to implement this decision tree using if-else statements. To achieve this, your program should prompt the user for his/her answers to each of the questions in the tree nodes, and use this information to decide which path to follow using if-else statements. When the program execution reaches a leaf of the tree, the program should display the restaurants recommendations by printing on the console one of the String constants declared in the *Restaurants.java* class.

Restaurants.java class is available on the wiki page of the course in the "lab assignments" section. You are required to download this file from the wiki page at the start of your lab session and implement the decision tree in the main method defined in the same file.

Start by first creating a new module in intelliJ and name it "lab05". Then, go to the "lab assignments" section on the course wiki, and download the "Restaurants.java" file. Place this file in the src folder of the module you just created. Create a main method in the *Restaurants* Class that has the implementation of the decision tree in Figure 1.

Turning in Your Work

You **must** turn in all your work. You will be turning in the "lab05" folder that contains only ""Restaurants.java" file. Use the following command for this purpose.

```
$turnin -c cs180=COMMON -p lab05 lab05
```

Rubric

A correct implementation of the decision tree is worth 40 points. The correct usage of the constants defined in *restaurants.java* is worth 10 points.

