Daniel Zakosek

Comp 256

Investigation

May 4, 2020

Investigation of those who have eating disorders

An ongoing problem in the world is there are so many people who have been developing many new allergies, and disorders when it comes to food. What brought my attention to this problem was my sister, she has an allergy to gluten which is in many foods for example bread, and rice are food she cannot eat unless she wants a sever reaction. With that being said, she spends majority of her time at a restaurant, market, or anywhere she can get food looking at the ingredients list making sure she is not allergic to anything on that list. She is not the only one, and there are many other allergies and disorders in the food industry that people do not know on what items they can and can’t have. I wanted to propose a program that takes in what some one is allergic to for example peanuts, lactose, gluten, and those who are diabetic, and I want it to return a list of foods so that when they go to the market they know for sure that these items they can or can’t have reducing their time spent at the market.. So, what algorithm do I need, or steps do I need to take in order to get this program running. First, I took this time to learn python so I have a small understanding of it hopefully it will help write it. First, I will I need to ask the input from the user, using the input() method, what their allergy or disorder is “gluten, peanut, lactose, diabetic”. Next, I will need a list of foods that can and can’t not eat for each of those inputs storing them as elements of arrays. Each of those inputs can be colored to be more organized. Then by implementing if statements to choose the right list based of the input, they gave me then, I can direct them to the right list helping them with what foods, they can and cannot eat. These arrays can be used as graphs, and in graph coloring. When they are being directed to the list to print out. The same elements with the same name but different list is considered a way of graph coloring. They represent the same object but in a different graph grouping them together. Each list is its own vertex containing objects and they are not link together because you can’t get from one list to the other without starting from the beginning. We can further organize the list by using graph coloring by marking the same types of food like crabs, protein, and greens using a 3 color graph. Depending on the color they get whatever type of food it is assigned to.

What hardships did I go through out this investigation was learning how to implement an input for python since it’s a new language for me. Another was learning how should print the list, I constantly asked myself should I make the list of foods they can eat or foods that they couldn’t. I kept asking people around me and I got mixed feedback on what I should do. My last hardship I went through was trying to find all these items that did or didn’t have peanuts, lactose, gluten and what would help those who are diabetic. Also, I was trying to base all these items at your typical grocery store, not having to go to a new or special store to get what you need.