

User Guide

Data Used

1. City of Windsor:

- a. All the information regarding the hospitals was used from the City of Windsor Open Data website. The file name is: **Hospitals.csv**

2. Windsor-Essex County Health Unit:

- a. To get the information about COVID-19 in Windsor, Ontario our group used the WECHU to get all the information about COVID-19 cases.

Classes:

1. Test Class

This is the driving class for our program. It contains the main function that will instantiate an Information object and call upon the `getInformation()` method to get the open data tool started.

2. Information Class

After the data tool has started, the `getInformation()` method is called and prompts the user with four different options. First option being the number of confirmed cases in Windsor, Ontario by date. Second is the case counts and the statistics. Third being the hospitals and information about them and lastly the option to exit the tool. The user will type the number corresponding to the option to select it and the program will display the information. For options one and three the user must the file path to load the file and display the information. If the user selects options from one to three and it displayed the information, then the program asks if they would like to see the menu again or to exit.

3. CasesFile Class

After selecting option 1 and entering the file path an object `CasesFile` is instantiated in the Information class and method `getCasesFromFile()` is called. Once this method is called in the `CasesFile` class I used a `BufferedReader` to read the information from the CSV file and store it into a String array. After this it displays the total cases with the date in which the cases were confirmed.

4. HospitalFile Class

Like the `CasesFile` class this will do the same exact operation except it will take information from the String array and call up the `hospitalRecord` method to create a new object of type `HospitalInformation` and add that to an `ArrayList` of type `HospitalInformation`. Once this is done, it calls on the `toString` from the `HospitalInformation` object and prints each hospital with all the necessary information in Windsor, Ontario by calling the `printHospitalInformation` method.

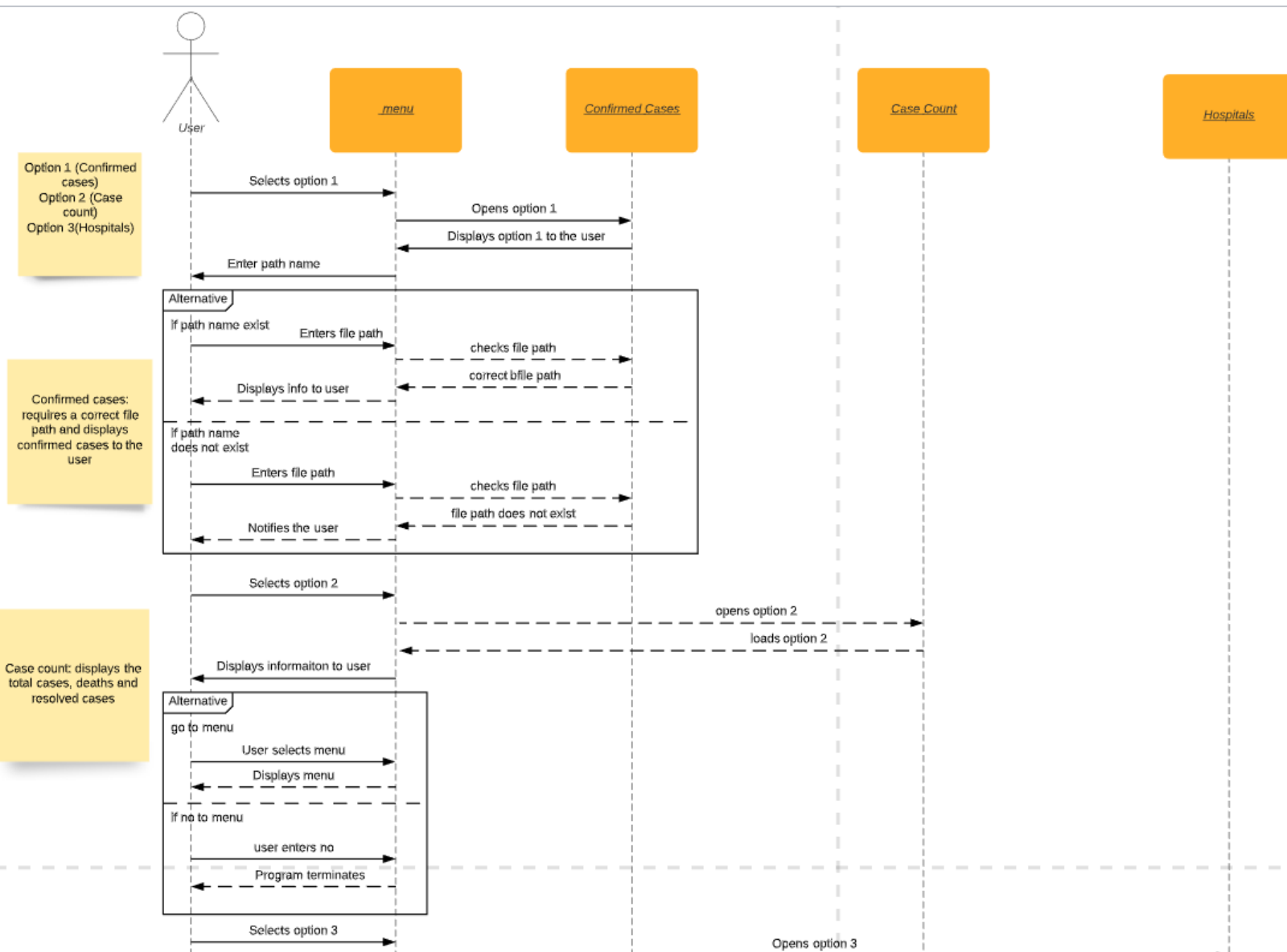
Furthermore, within the printHospitalInformation method the user will be asked if they would like to calculate the distance from their location to any Hospital the select. If they do proceed, the user has to enter their X and Y coordinate. After this, the distance from their location to the hospital they selected is calculated and displayed.

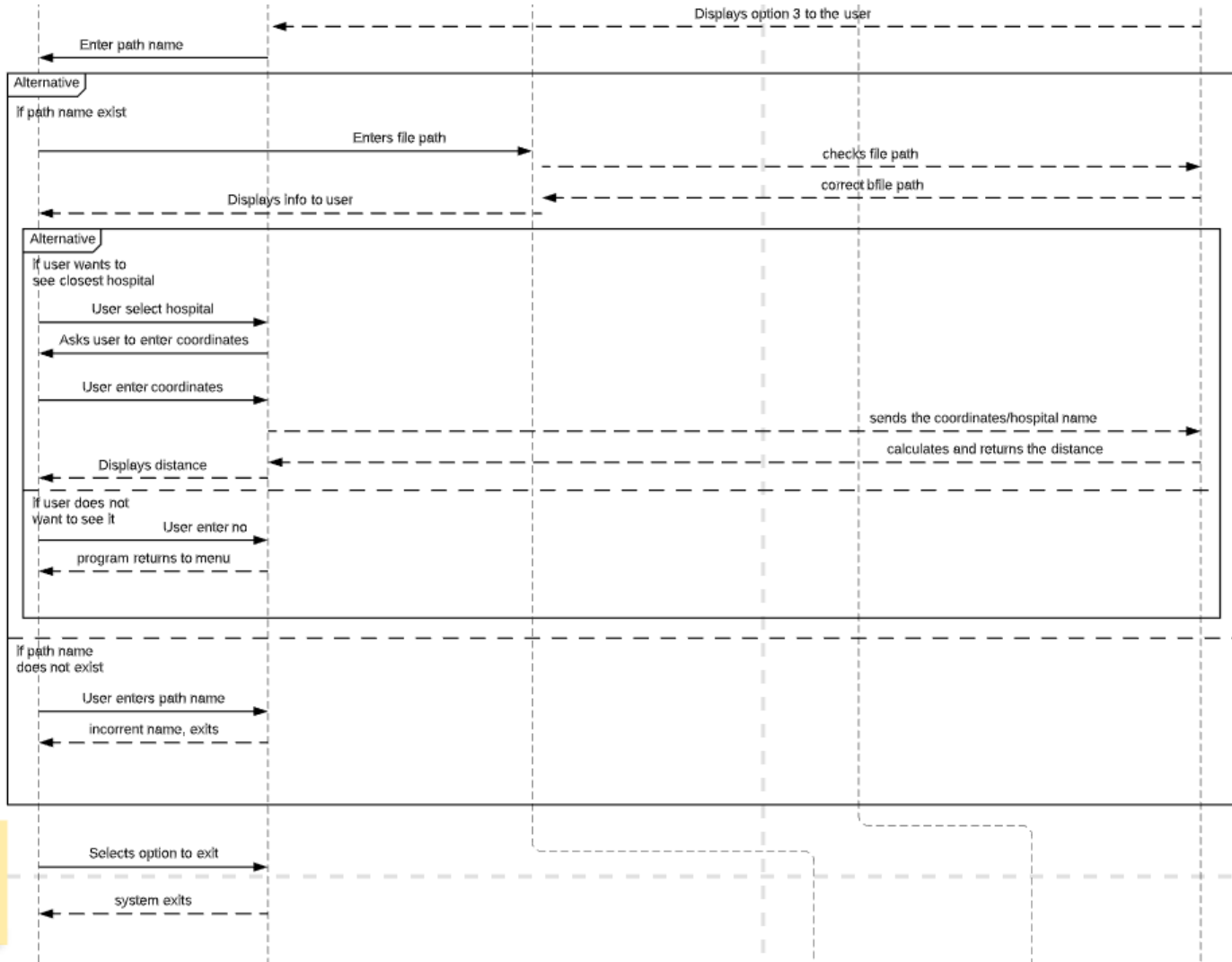
5. HospitalInformation Class

This class contains information about the Hospital that is in the Hospitals.csv file. In the HospitalFile class when the method hospitalRecord instantiates an object of HospitalInformation it sends all the information contained within the Hospitals.csv file to contractor of HospitalInformation class to initialize all the information.

Sequence and Class Diagrams

Sequence Diagram:





Class Diagram

