This structure chart breaks down the overall program into component parts that I plan to make for my program and how each of them will work.

Sends input

City input

Validated record

Package type input

Validate record

Package types that are same as input are taken

Record of distances compared to input

Cities that don’t have same package type are ignored

Module 1: Adding new records to the table.

This module’s main purpose is to allow the user to add a new record to the table, which will be done by taking in the inputs of the city, the package type and the hotel option, which then will be stored in the database as one of the records.

Module 2: Updating any records

If information regarding one of the current records needs changing, this module can be used to update that specific record that needs changing. This is broken down into 3 different functions, the first getting the input of the record that needs to be changed, the second checking to see if this record is a valid one that exists in the table and the third that gets the inputs for the city, the package and the hotel so that they can be changed to more suitable information.

Module 3: Orders the records in ascending distance from initial city

This module is broken down into one main function and 6 different smaller function parts which are required as one finds the cities with the same package and the other finds the distance between the inputted city and the rest of the cities that still exist in the record.

With the first part, the user would input the package type they want, and the program would check to see if this package type exists in the table, then removes all the other records that don’t have the same package type as the requested one. After this, the city the user wants to start from is inputted, and the database is checked to see if that specific city exists in the database. Afterwards, the distances of all the other cities that are still available are compared with the inputted city, then the city along with its distance from the inputted city are stored in a list. The list is then ordered in ascending order so the user knows which cities are nearby to them.

Module 4: Interface for the program.