To solve this design and development challenge, I made several unique classes to handle each task required for the program. To run the main body of my code, I created a class called CodeDriver. This CodeDriver was then called by the Main class to run the code.

To keep track of occupants and households, I created two classes called Home and Person. After doing this, I then created the class ReadFromFile. This class read from the input file, and then built up an ArrayList called people of type Person to keep track of the occupants of each building.

Once I had parsed out the occupants from the input file, I created a class called HouseAddressTable. This class used a hash table (which I used because of its quick lookup time) to find unique households based on addresses from the list of occupants.

Once I had all this information, I used a class called SortPeople to sort the list of people above the age of 18 by last name and then first name. I implemented a simple quicksort algorithm to accomplish this. I then wrote all the information to an output file using the InfoWriter Class.