Scenario 2: Housing Authority

The Big City public housing agency has assigned you the task of keeping track of who is living in the agency’s developments over time. The agency needs a database that allows them to capture this information.

The city has three public housing developments. You want to record their names, locations, the year they opened, their height in stories, and the number of units. For each unit in the development, you want to keep track of the number of bedrooms, the number of bathrooms, whether the unit has a kitchen or living room, and the square footage.

You also need to keep track of the people living in each unit. The basic unit of residence is the household, and there is a limit of only one household per unit at a time (although multiple households would occupy the unit over time). Each household can be made up of one or more residents, and a resident can only be part of one household.

For each resident, record their name, date of birth, gender, and indicate whether or not they are they are the head of the household (more than one person can be the head of household).

You also want to keep track of when a household moved into and out of a unit. You want to be able to track households as they move from one unit to another or from one development to another. Therefore, you can describe the occupancy of a household in a unit as having a start date and an end date. If they are currently living in the unit, the end date would be left blank.