For my database project, I would like to model a system that keeps track of the “goings on”, for lack of a better term, of a residential living complex. This living complex will include people from all walks of life, meaning that the residents will have different economic statuses, different family arrangements, different room types and different demographics (age, ethnicity, education level, gender, social status, etc.). This all being said, the living complex will have different styles of rooms, some rooms will be singles, doubles, triples, etc. in order to accommodate different family sizes and others will be suites for those residents who can afford and wish to live in them. In addition, the living area will have facilities such as a pool, an exercise room, recreation lounges, work/computer centers and a daycare. Finally, there will be multiple parking areas for the residents of the complex.

Entities I will model:

* Resident
* Residential Complex Building (1 to many with resident)
* Resident ID (1 to 1 with resident)
* Resident ID card / access pass (1 to 1 with resident, 1 to 1 with resident ID)
* Floor (1 to many with rooms, 1 to many with resident, 1 to 2 with work/computer centers, 1 to 1 with recreation lounges)
* Room (1 to N with resident as a room may have 0-N residents depending on its vacancy status)
* Pool (1 to many with resident, 1 to 1 with building)
* Exercise room (1 to many with resident, 1 to 1 with building)
* Recreation lounge (many to many with resident, 1 to 1 with floor)
* Work/computer center (many to many with resident, 2 to 1 with floor)
* Daycare (1 to many with resident, 1 to 1 with building)
* Monthly rent (1 to N with room considering vacant rooms do not have resident(s) to pay rent)
* Security Deposit (1 to N with room considering vacant rooms do not have resident(s) to pay a security deposit
* Employees (many to many with resident)
* Building manager (1 to many with residents, 1 to many with employees)
* Parking areas (many to 1 with building)