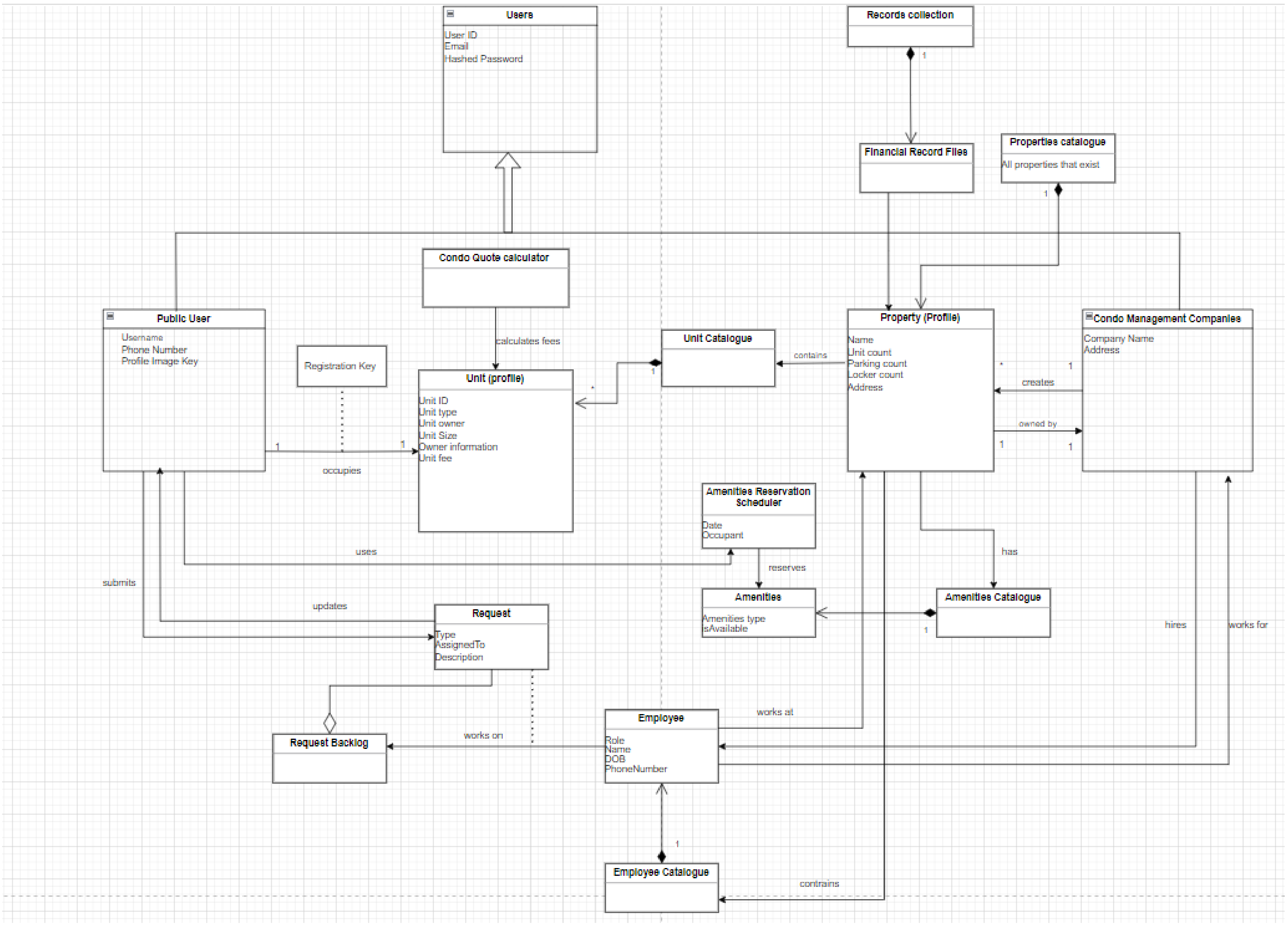
Software Architecture Document

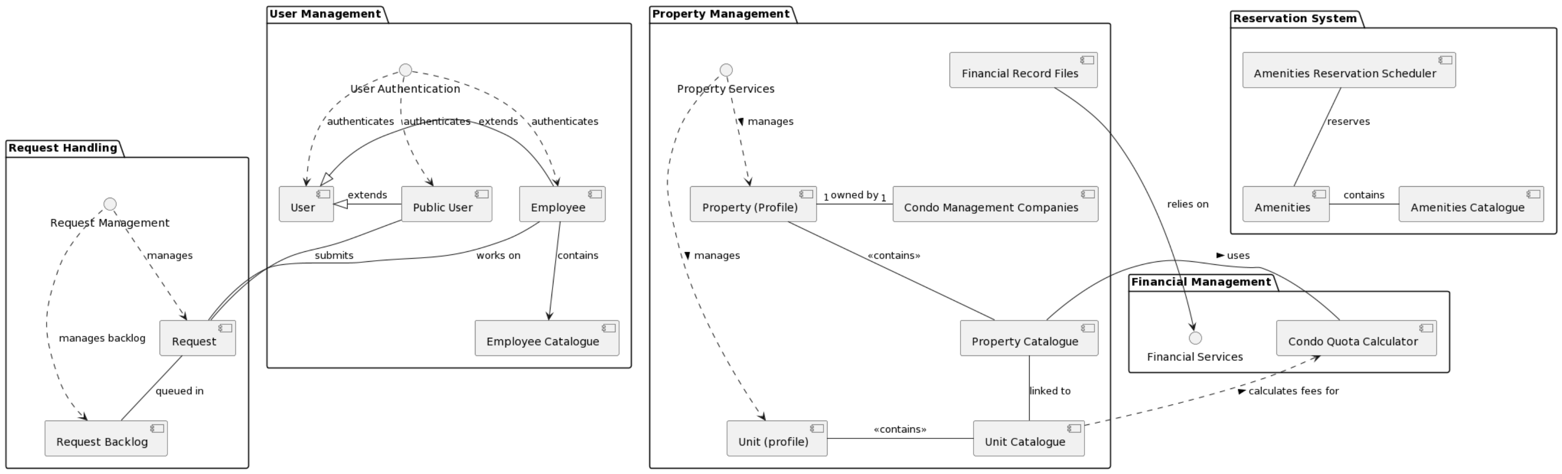
Domain Model



This domain model represents our current system and its entities, as well as the flow of data between said entities. The domain model helps to provide a strong foundation upon which the team can develop the architecture envisioned. It helps clear up ambiguities and keeps the entire team on the same page regarding the structure of our system.

Many of the requirements and/or features can be mapped in this model. For example, in the case of reserving a sauna room (reserving an amenity), a “Public User” will be interacting with the “Amenities Reservation Scheduler”, which in turn will reserve an “Amenity” that can be found in the “Amenity Catalogue”. All of our other user stories and required features can be mapped similarly on this diagram. In the case that a feature is not supported by this diagram, that will change in the near future during further sprints.

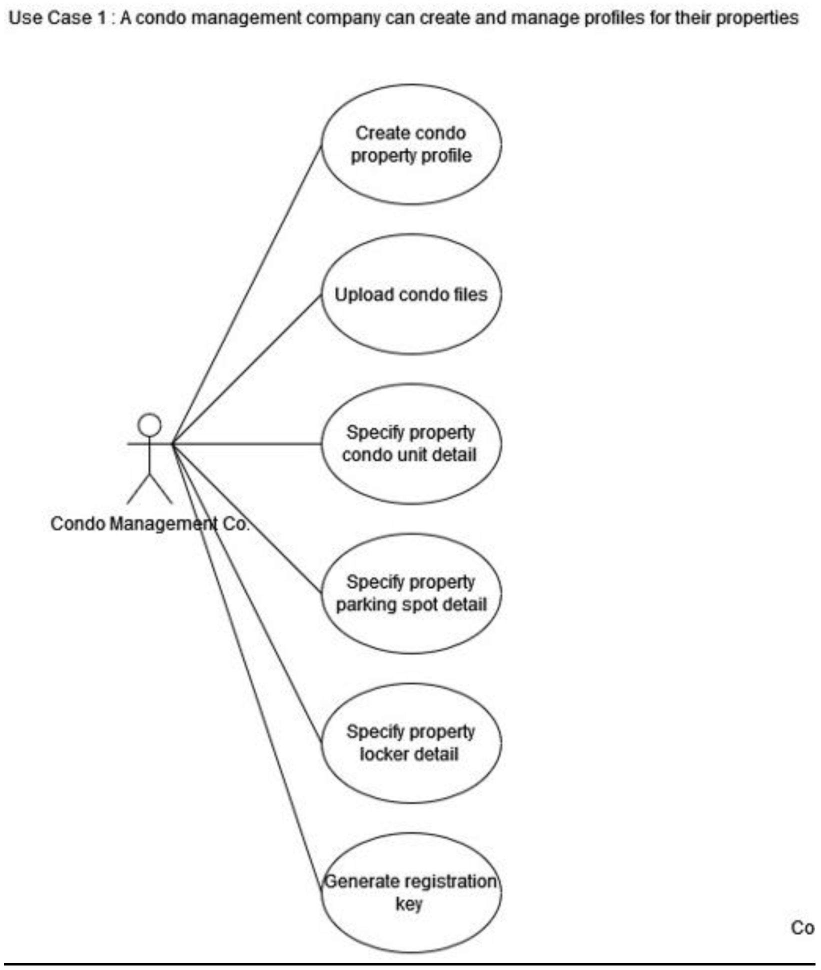
Component Diagram



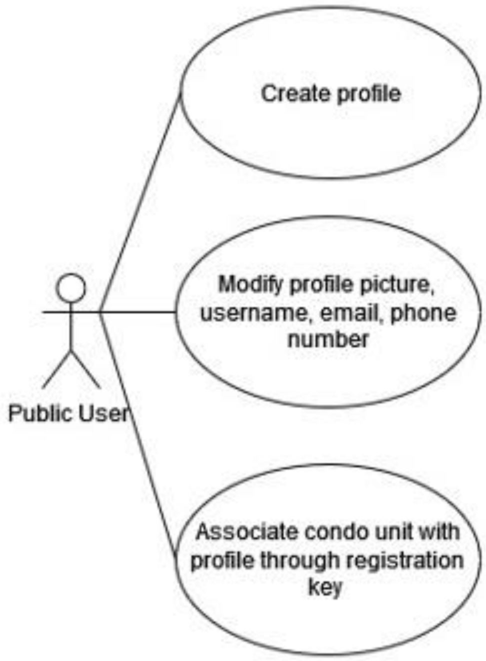
A component diagram represents a high level abstraction of the different components and working parts of our system. It is less specific in terms of components and how they are designed in comparison to the domain model, but it is far more interested in the interactions between components. Our system can be broken down into five major parts: “Request Handling”, “User Management”, “Property Management”, “Financial Management”, and “Reservation System”.

Use Case Diagrams

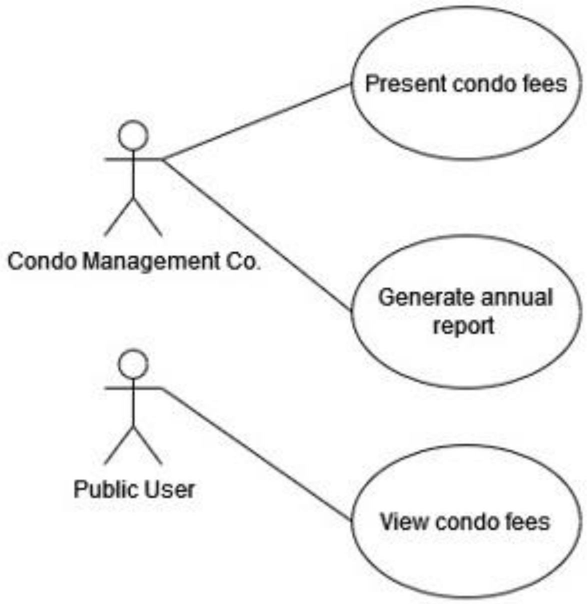
Use cases relevant to the current sprint’s features were selected and made into diagrams to better illustrate them.


Use Case 1 : A condo management company can create and manage profiles for their properties
Create condo property profile
Upload condo files
Specify property condo unit detail
Specify property parking spot detail
Specify property locker detail
Generate registration key
Condo Management Co.
Co

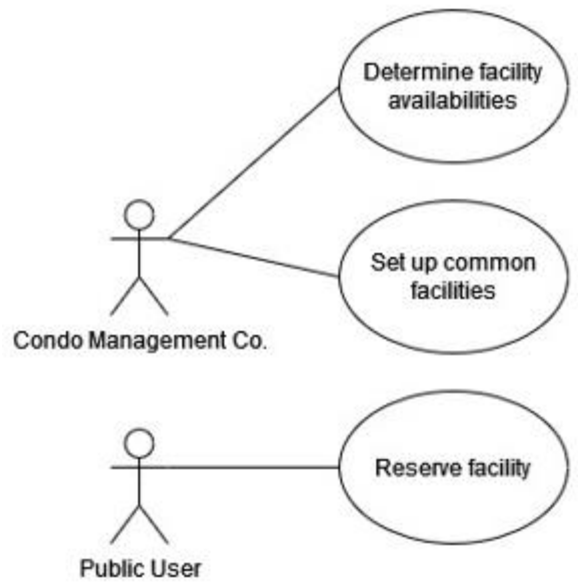
Use case 2: A public user can manage their condo profile


Create profile
Modify profile picture, username, email, phone number
Public User
Associate condo unit with profile through registration key

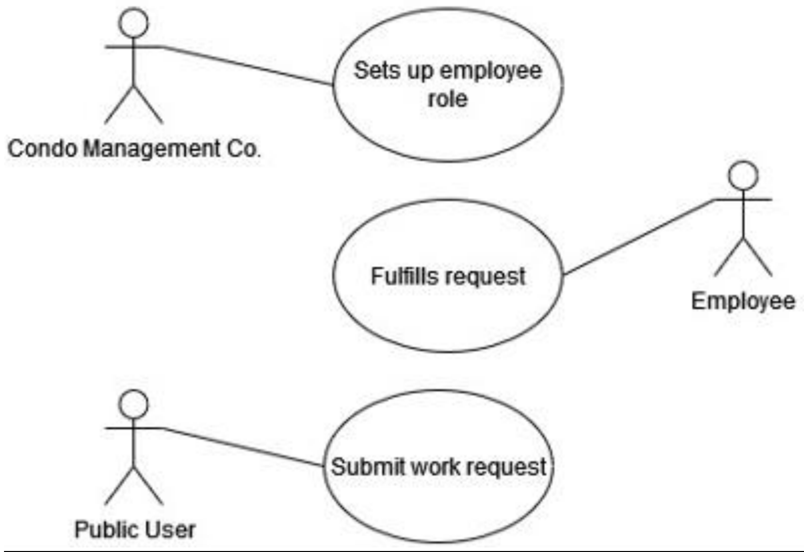
Use Case 3: Calculating condo unit financials



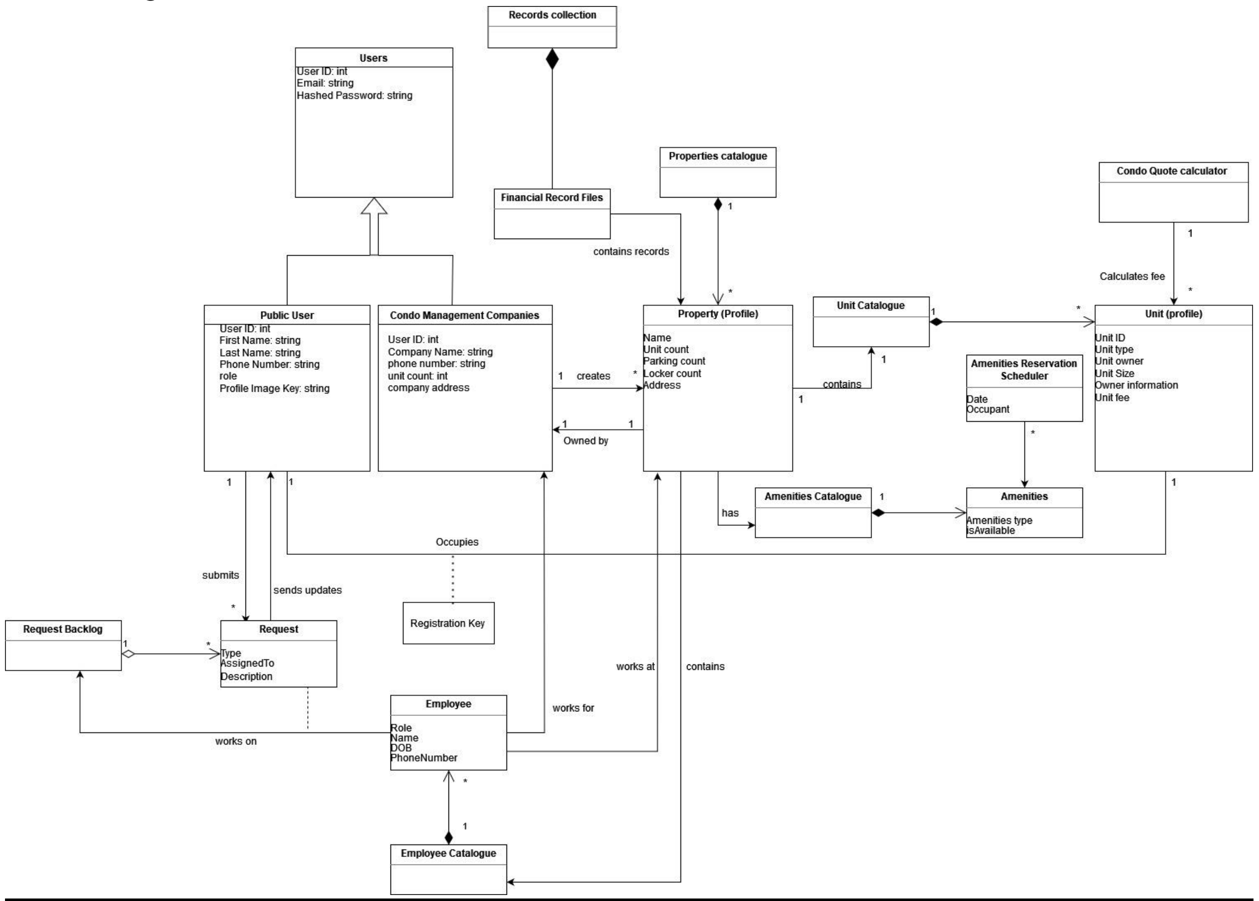
Use case 4: Common facilities can be reserved for usage



Use case 5: Work requests are treated according to type



Class Diagram



The class diagram breaks down our important classes along with their attributes and methods. This is also helpful for identifying associations and dependencies in our system. Again, we have a similar structure to the domain model but we are more interested in the specific methods and functions of each class. We can also still see the interactions between entities and map our features.