

## **HW5 - Class Diagrams**

I have used classes in the frontend to represent the data needed for user interaction and display.

### **Provider Class**

The role of this class is to represent and manage provider-related information. It encapsulates attributes to control how they are accessed and modified. Additionally, it provides a method to standardize how provider information is presented in the UI. This class does not include setters because its attributes are not dynamically modified.

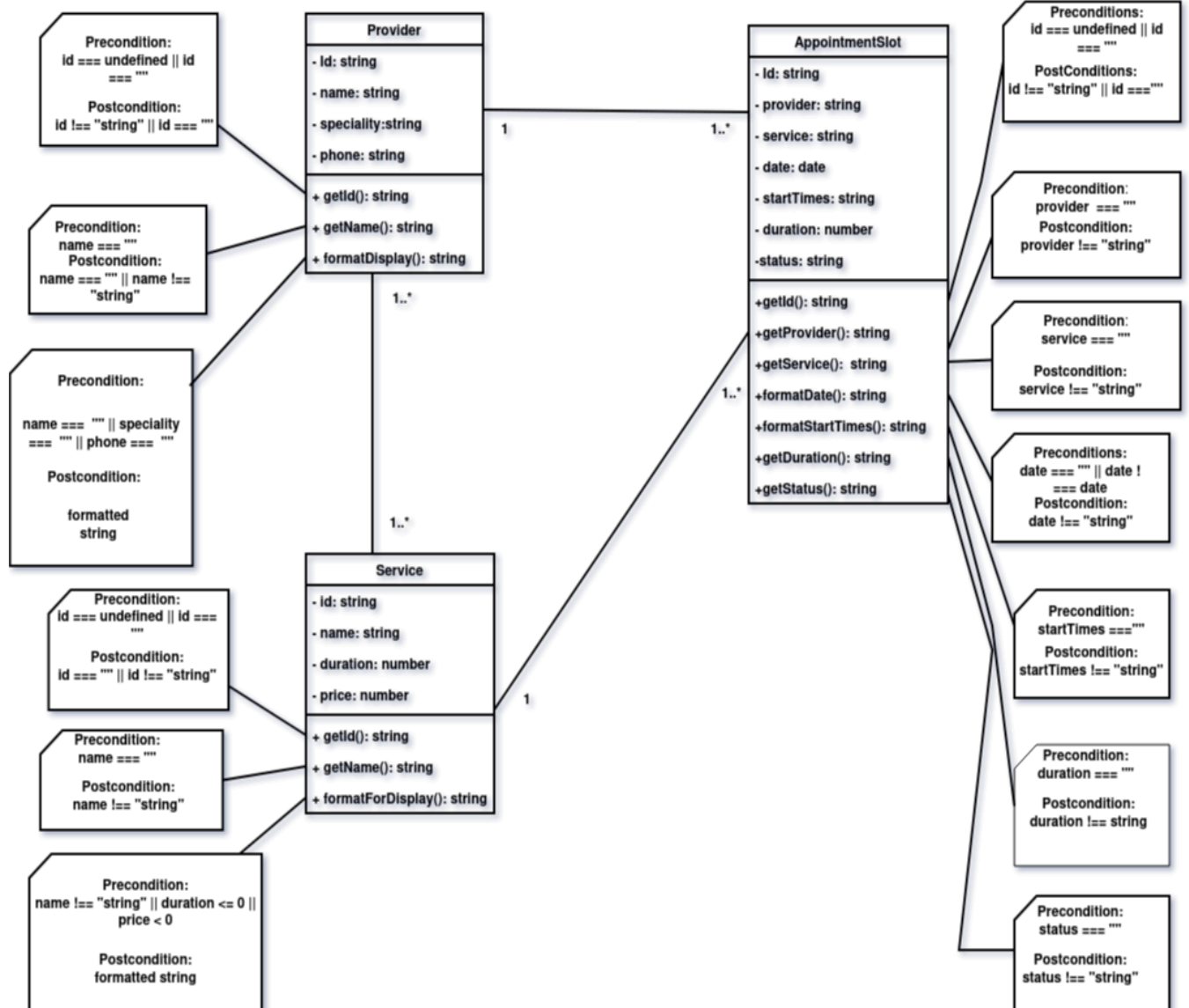
### **Service Class**

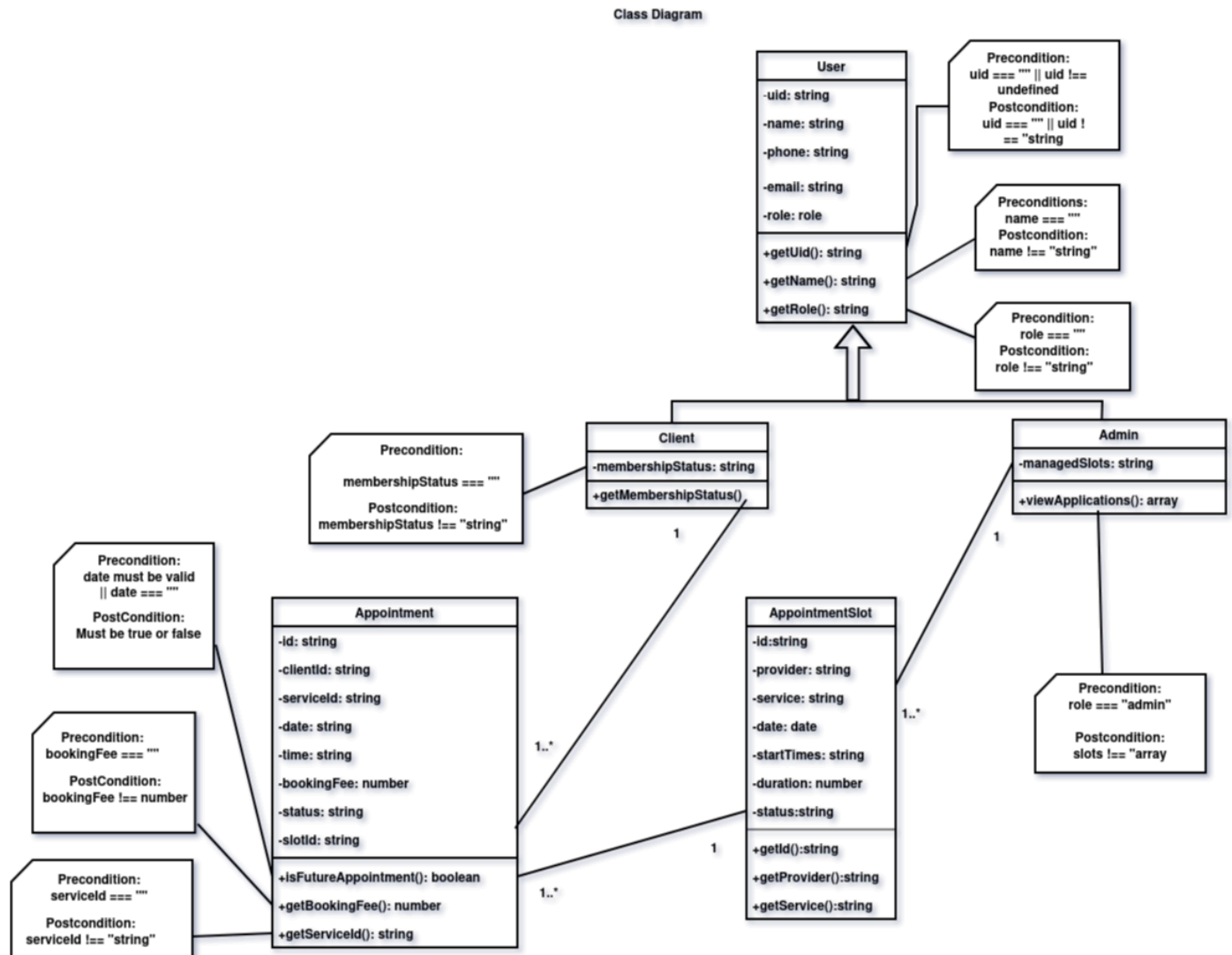
This class manages and represents service-related information. It ensures data integrity by encapsulating attributes and enforcing rules to prevent invalid or inconsistent data. It also formats service details into a user-friendly format for UI display. Like the Provider class, it does not include setters because its attributes are not dynamically modified.

### **AppointmentSlot Class**

This class manages the attributes and methods associated with appointment slots. It enforces validation to ensure the attributes contain valid data. The class is used by clients to book appointments and is generated by the admin.

# Class Diagrams





## Appointment Class

This class handles the details and behaviors of appointments. It ensures data integrity by encapsulating attributes and validating input when creating appointments. Additionally, it implements business logic, such as ensuring that appointments are scheduled for future dates.

## User Class

The User class serves as a base class that encapsulates common attributes and behaviors shared by all types of users.

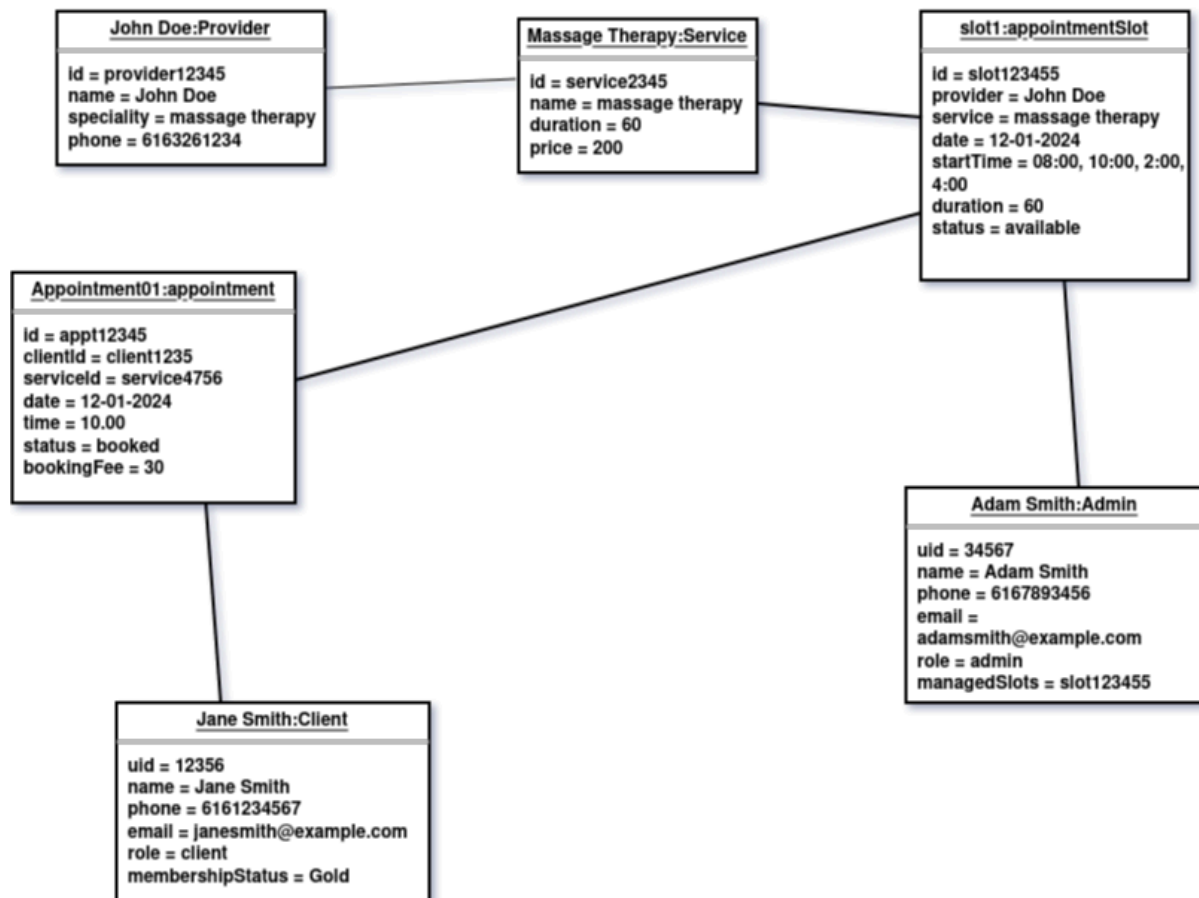
## Client Class

The Client class encapsulates attributes and behaviors specific to clients. It enables clients to interact with appointments, such as viewing or booking them.

## Admin Class

The Admin class encapsulates attributes and behaviors specific to managing appointment slots, clients, providers, and services. For this project, its focus is primarily on managing appointment slots.

Object Diagrams



## **References**

Fixed grammar with grammarly

Used course textbook