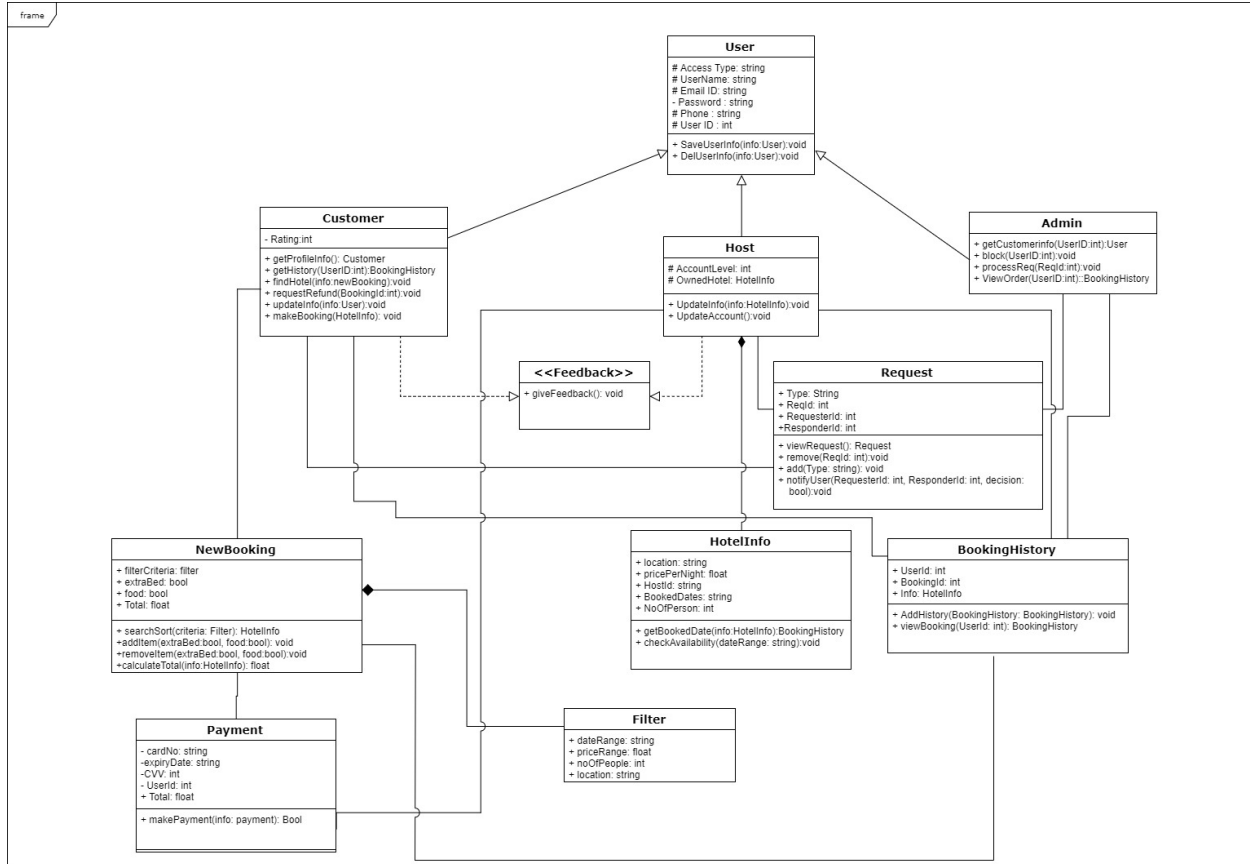
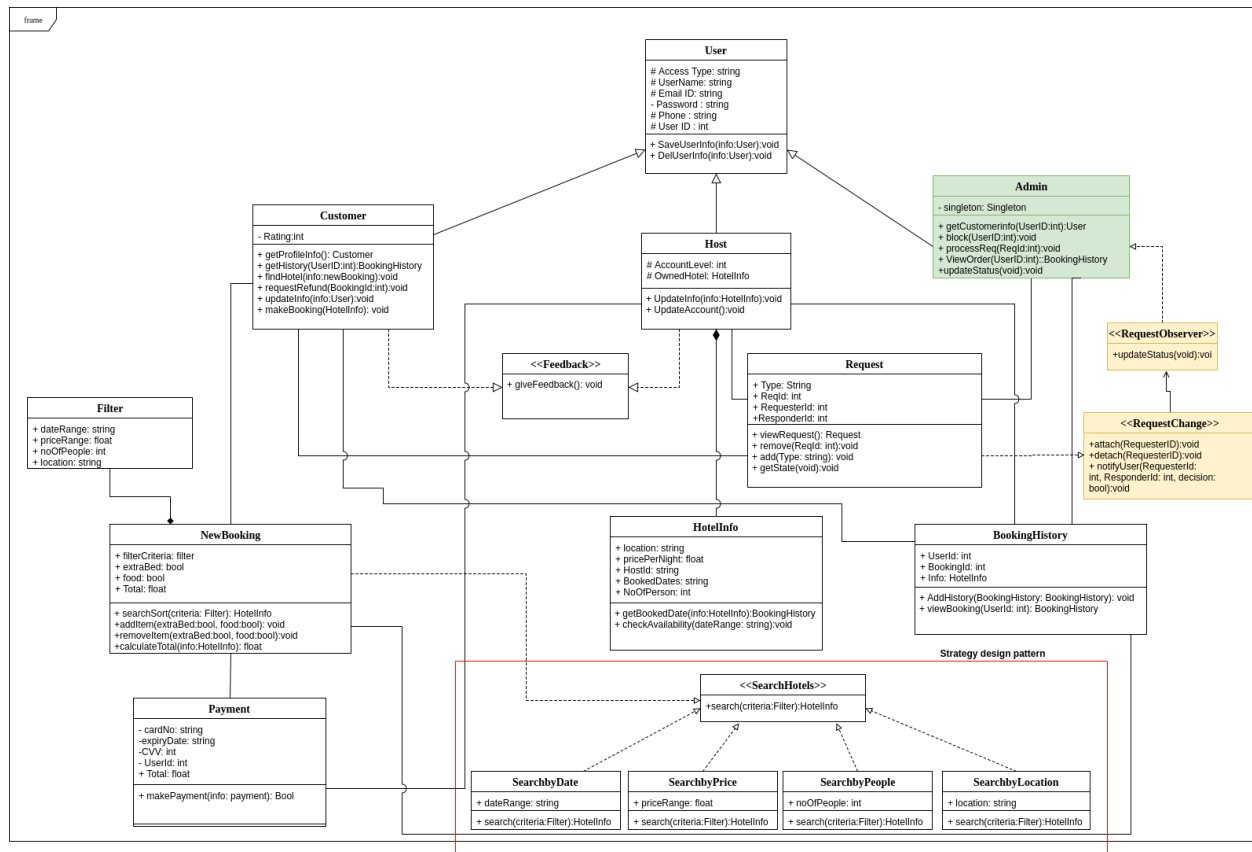


Buff Beds Part – 3

Original Class Diagram



Refactored Class Diagram



Peach Color - Observer Pattern

Green Color – Singleton Pattern

Observer pattern: The observer design pattern is applied to the request use case which is used by the host to request changes to his/her profile. This is done because before implementing this the host had no way to get to know the status of his request. Through this change the host will be able to get the status of his/her request.

Singleton pattern: The admin class is made Singleton as for security reasons there should only be a single administrator account. Before this change it would have been possible to create many admin accounts.

Strategy pattern: While searching for a hotel, a user can search based on Date, Price, Number of people allowed or Location. Depending on the type of search, different algorithm would be used. For this purpose, the strategy design pattern has been used. When searching for a hotel, the interface Search is used, which has four realizations depending on the type of search, Search by Date, Search by Price, Search by People, and Search by Location.