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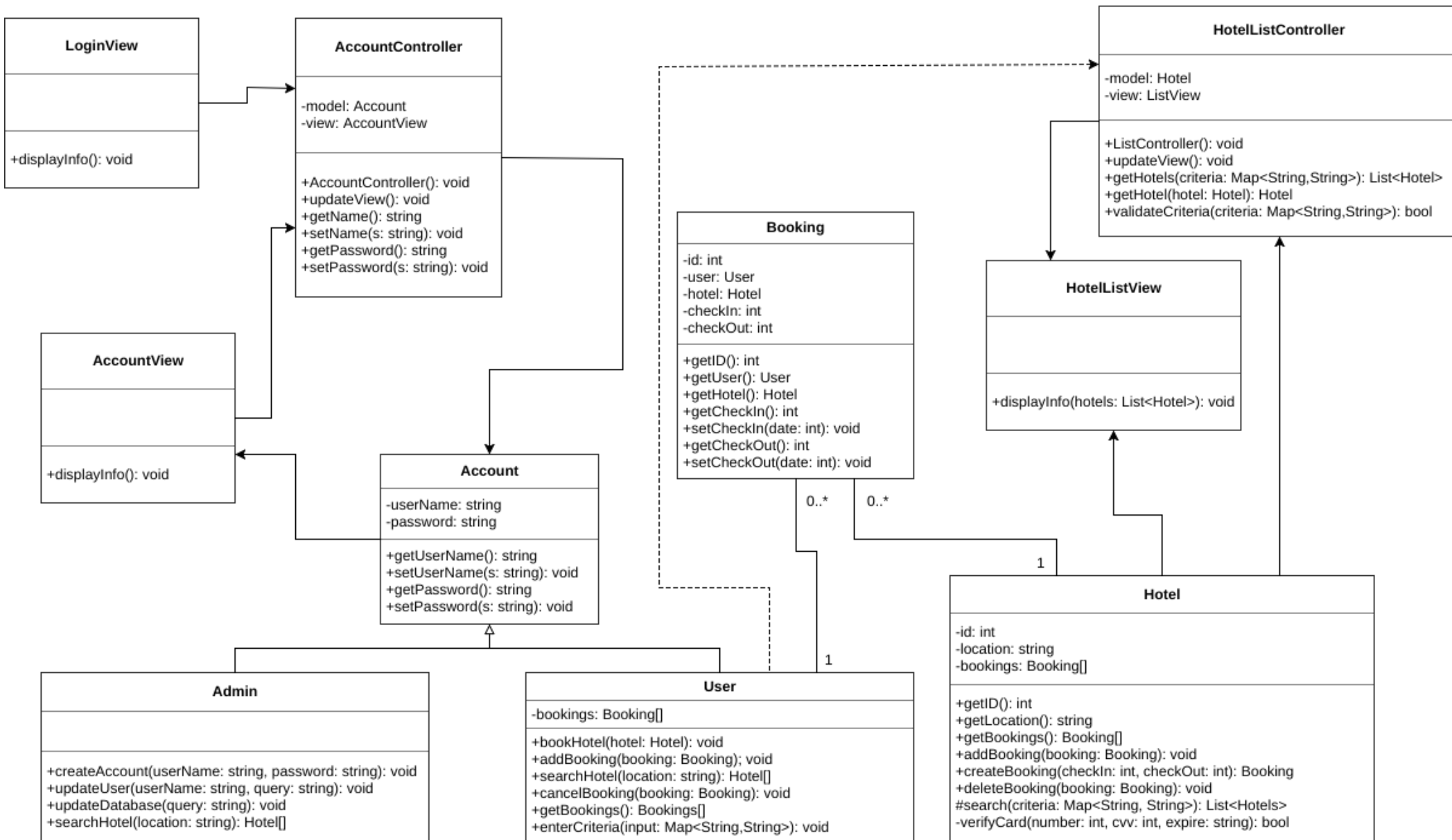
CSCI 4448 Team 11 Hotel Reservation Refactoring

By adding the interface `Hotel_Interface`, we have encapsulated the system to only allow a few features to be accessible to users. This implements the **Facade** design pattern, depicted in green. Users need to be able to search hotels, but we don't want the `User` class interacting with `Hotel`, `Booking`, and `HotelListContoller` classes directly. Instead, a simple interface gives the user the needed functionality while hiding the subsystem that allows for the functionality. Ideally, the system is now easier to use.

We also added an interface for iterating through arrays, namely `HotelList` and `Booking`. This enables use of the **Iterator** design pattern, depicted with blue boxes. With this, we are able to more efficiently traverse through our arrays. The interface allows for this traverse in an elegant way, as we can iterate through various types of arrays under one umbrella iterator.

Our previous and new class diagrams follow on the next two pages.

Old Class Diagram:



New Class Diagram:

