**Challenges and difficulties for Air Ticket booking application**

1. Biggest challenge is Builder pattern to create the passenger object and Flight object.
2. Factory pattern is implemented to create instance
3. Faced difficulties while the populating the available flight list
4. Faced difficulties while selecting the flight, after that I have sorted the flights with the price range and flight names
5. Implemented Observer design pattern to send notification for booking and cancelling the tickets.
6. Implemented jUnit testcases for booking the tickets and getting the flights.

My first attempt was failed for implementation of the builder pattern for flight and passenger object. My second attempt was failed because of the following: Implementation of the observer design pattern. When I used to retrieve the list of flights or when I used to select the flight then I was not able to get the result properly. I also faced difficulties while populating the available list of flights and after selecting the flight. It is also important that for booking the tickets and generating the report then which design pattern would be used and for which purpose. With the help of this course now I can able to implement the booking app with any of these patterns. The concept of Observable objects has been used for sending notifications. I have used it for bookings and cancelations in my application.