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# Middleware Assignment

## Creating a simple application using CORBA

### **Group members**

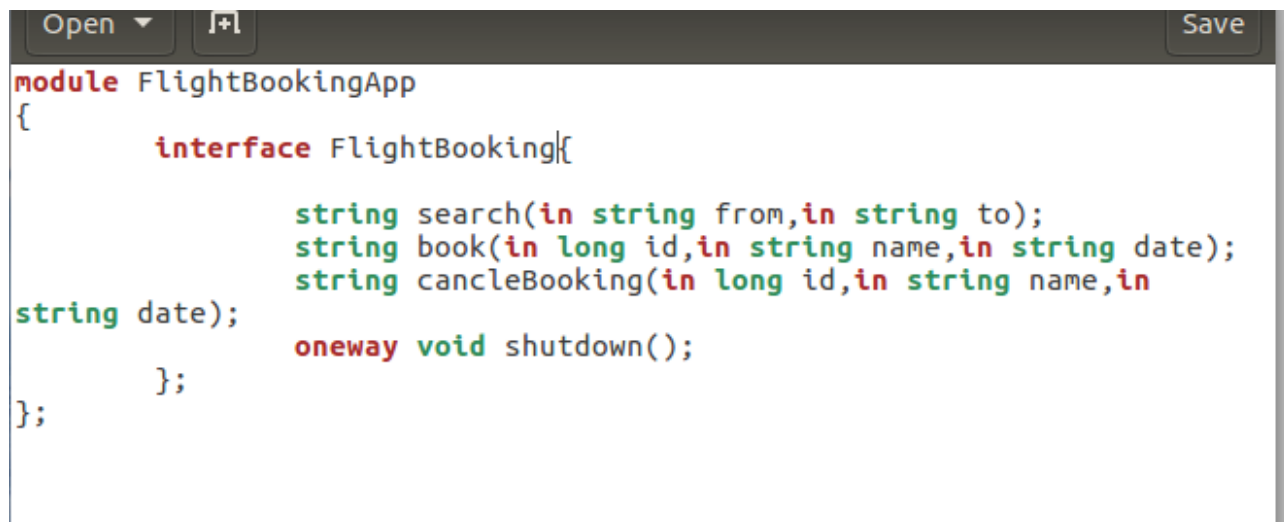
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We developed a simple flight booking application using corba object oriented middleware.  
There are 3 main functionalities.

1. Search flights.  
User can search flights available by providing necessary details.
2. Book seats.  
User can book seats on a specific flight by providing a specific flight id, their name and booking date.
3. Cancel bookings.  
User can cancel the bookings by providing booking id , name and the booking date.

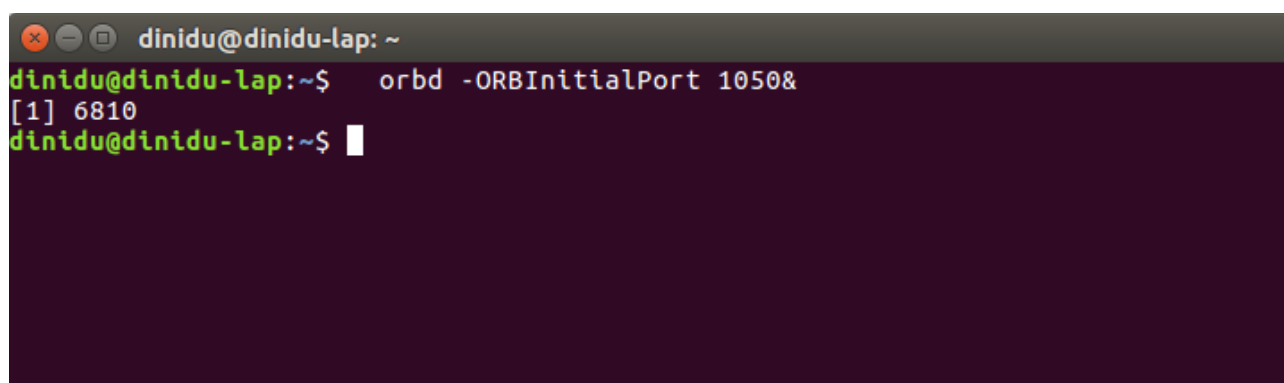
The idl file is shown below.



```
module FlightBookingApp
{
    interface FlightBooking{
        string search(in string from,in string to);
        string book(in long id,in string name,in string date);
        string cancleBooking(in long id,in string name,in
string date);
        oneway void shutdown();
    };
};
```

## Demonstration

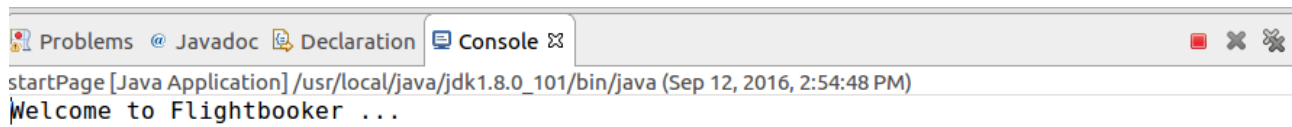
Running orbd in terminal,



```
dinidu@dinidu-lap: ~
dinidu@dinidu-lap:~$ orbd -ORBInitialPort 1050&
[1] 6810
dinidu@dinidu-lap:~$
```

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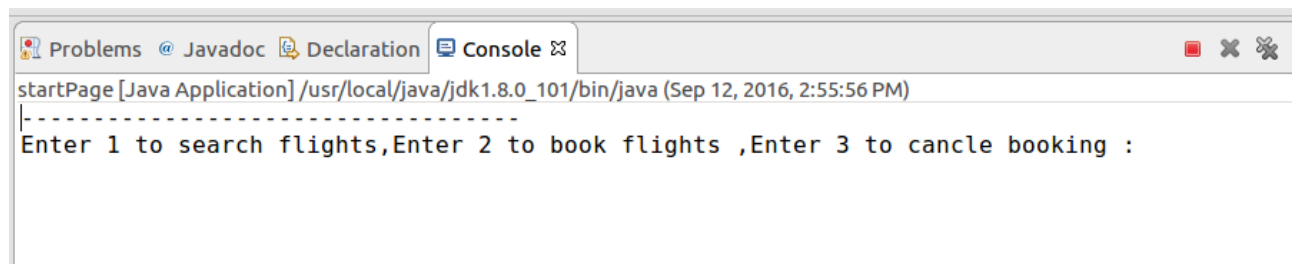
## Server running



The screenshot shows an IDE console window with tabs for Problems, Javadoc, Declaration, and Console. The Console tab is active, displaying the output of a Java application. The text in the console is: startPage [Java Application] /usr/local/java/jdk1.8.0\_101/bin/java (Sep 12, 2016, 2:54:48 PM) and Welcome to Flightbooker ...

```
startPage [Java Application] /usr/local/java/jdk1.8.0_101/bin/java (Sep 12, 2016, 2:54:48 PM)
Welcome to Flightbooker ...
```

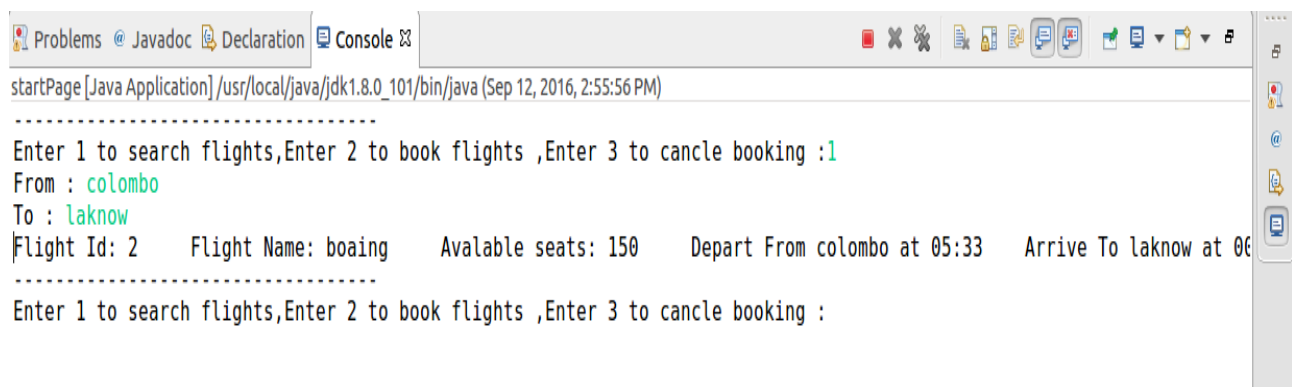
## Client running



The screenshot shows an IDE console window with tabs for Problems, Javadoc, Declaration, and Console. The Console tab is active, displaying the output of a Java application. The text in the console is: startPage [Java Application] /usr/local/java/jdk1.8.0\_101/bin/java (Sep 12, 2016, 2:55:56 PM) and Enter 1 to search flights, Enter 2 to book flights , Enter 3 to cacle booking :. There is a dashed line above the prompt.

```
startPage [Java Application] /usr/local/java/jdk1.8.0_101/bin/java (Sep 12, 2016, 2:55:56 PM)
-----
Enter 1 to search flights, Enter 2 to book flights , Enter 3 to cacle booking :
```

## Search flights.



The screenshot shows an IDE console window with tabs for Problems, Javadoc, Declaration, and Console. The Console tab is active, displaying the output of a Java application. The text in the console is: startPage [Java Application] /usr/local/java/jdk1.8.0\_101/bin/java (Sep 12, 2016, 2:55:56 PM), Enter 1 to search flights, Enter 2 to book flights , Enter 3 to cacle booking : 1, From : colombo, To : laknow, Flight Id: 2 Flight Name: boaing Avalable seats: 150 Depart From colombo at 05:33 Arrive To laknow at 06:33, and Enter 1 to search flights, Enter 2 to book flights , Enter 3 to cacle booking :. There are dashed lines above and below the flight details.

```
startPage [Java Application] /usr/local/java/jdk1.8.0_101/bin/java (Sep 12, 2016, 2:55:56 PM)
-----
Enter 1 to search flights, Enter 2 to book flights , Enter 3 to cacle booking : 1
From : colombo
To : laknow
Flight Id: 2 Flight Name: boaing Avalable seats: 150 Depart From colombo at 05:33 Arrive To laknow at 06:33
-----
Enter 1 to search flights, Enter 2 to book flights , Enter 3 to cacle booking :
```

---

## Book seats.

startPage[Java Application] /usr/local/java/jdk1.8.0\_101/bin/java (Sep 12, 2016, 2:55:56 PM)

```
.....
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :1
From : colombo
To : laknow
Flight Id: 2    Flight Name: boaing    Avalable seats: 150    Depart From colombo at 05:33    Arrive To laknow at 06
.....
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :2
Enter full name : Dinindu
Enter date(year/month/date) : 2017/12/12
Enter Flight id : 2
Succesfully booked Flight number 2 on 2017/12/12
your booking id is 0
.....
.....
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :
```

## After the booking was made. The number of seats have decremented.

```
.....
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :1
From : colombo
To : laknow
Flight Id: 2    Flight Name: boaing    Avalable seats: 149    Depart From colombo at 05:33    Arrive To laknow at 06
.....
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :
```

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## Cancel bookings

startPage [Java Application] /usr/local/java/jdk1.8.0\_101/bin/java (Sep 12, 2016, 3:07:26 PM)

```
-----
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :2
Enter full name : dinindu
Enter date(year/month/date) : 2017/12/12
Enter Flight id : 2
Succesfully booked Flight number 2 on 2017/12/12
  your booking id is 0
-----
```

```
-----
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :3
Enter booking id : 0
Enter Your name : dinindu
Enter booked date(year/month/date) : 2017/12/12
Your booking is canceled...
-----
```

```
-----
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :
```

## After cancellation available number of seats have incremented.

```
-----
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :1
From : colombo
To : laknow
Flight Id: 2    Flight Name: boaing    Available seats: 150    Depart From colombo at 05:33    Arrive To laknow at 00:00
-----
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :
```

## Try to search unavailable flights.

```
-----
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :1
From : colombo
To : australia
Sorry!! No Flights Found
-----
```

## Try to book unavailable flights.

```
-----
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :2
Enter full name : dini
Enter date(year/month/date) : 2017/10/10
Enter Flight id : 56
Sorry you can not book this flight!!!
-----
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :
```

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## Try cancel bookings with wrong data.

startPage [Java Application] /usr/local/java/jdk1.8.0\_101/bin/java (Sep 12, 2016, 3:07:26 PM)

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```
-----  
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :2  
Enter full name : dinindu  
Enter date(year/month/date) : 2017/12/12  
Enter Flight id : 2  
Succesfully booked Flight number 2 on 2017/12/12  
your booking id is 0  
-----
```

```
-----  
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :3  
Enter booking id : 0  
Enter Your name : dinindu  
Enter booked date(year/month/date) : 2017/12/12  
Your booking is canclcd...  
-----
```

```
-----  
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :3  
Enter booking id : 2  
Enter Your name : dinindu  
Enter booked date(year/month/date) : 2017/12/12  
Sorry you dont have a booking on 2017/12/12 with id 2  
-----
```

```
-----  
Enter 1 to search flights,Enter 2 to book flights ,Enter 3 to cacle booking :  
-----
```

---