

Project Title : Airline Reservation System

Project Functionalities with Description :

• Functions Provided :

- 1) New User Signup
- 2) User Login
- 3) Flight Searching
- 4) Ticket Booking
- 5) Ticket Cancellation
- 6) Print Booked Tickets

- ❖ In this Project we are providing facility for searching Flights available from Different source and Destination. In which , System looks for suitable flights in Previously inserted database and displays table with relative Flight numbers and their Departure times .
- ❖ For Ticket booking , User can provide Date of Journey and can choose flight with most suitable timing.
- ❖ We are also allowing user to create Account in system, so that one can Login with secure password and can perform multiple tasks like ,
 - i. Print all Previously booked Tickets from that account
 - ii. Cancel Any Ticket with its Unique Number
 - iii. User can also book Multiple Tickets from same account at a time, just have to Provide details of each Passenger (Name , Age , Contact Number)
- ❖ And Instead of Searching for flight with Source and Destination , User can also book Tickets Directly with Flight Number .
- ❖ Once Tickets are booked all its relevant data is stored in file with passenger's and Flight's relevant data .
- ❖ While Cancellation , we have to provide username and password of account from which ticket was booked . And they are being compared with user data stored along with ticket Details.
- ❖ So , it makes system more secured and reliable

❖ Code Implementation :

- Here are some Previously inserted Flight Schedules in Flight.txt File
(Source Destination Departure Time Flight Number)



➤ First, we will show all Available flights and shows

Surat	Ahemdabad	14:30	84675
Surat	Ahemdabad	20:00	21645
Mumbai	Delhi	02:00	21584
Mumbai	Delhi	11:00	36254
Mumbai	Delhi	15:00	84587
Gandhinagar	Delhi	08:00	21352
Gandhinagar	Delhi	12:30	21768
Gandhinagar	Delhi	16:45	50305
Gandhinagar	Delhi	23:15	30215
Mumbai	Ahemdabad	07:30	90351
Mumbai	Ahemdabad	11:45	40352
Mumbai	Ahemdabad	19:15	41524
Ahemdabad	Delhi	08:45	23152
Ahemdabad	Delhi	14:30	23842
Ahemdabad	Delhi	19:00	71543

shows List of destination it

```

*****
* 1 : Search Flights *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit *
*****

Enter Your Choice :: 1

Enter Location from Where you want to board Flight :: mumbai

Enter Destination of your journey :: surat

*****
* Source | Destination | Flight Number | Departure Time *
*****

Sorry..There are no Flights available from mumbai to surat

*****
* 1 : Search Flights *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit *
*****

Enter Your Choice :: |

```

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Microsoft Windows [Version 10.0.22000.318]
(c) Microsoft Corporation. All rights reserved.

E:\College\Documents\OOP\Innovative\lastinnovative>java DemoFlight

*****
* 1 : Search Flights *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit *
*****

Enter Your Choice :: 1

Enter Location from Where you want to board Flight :: Mumbai

Enter Destination of your journey :: Delhi

*****
* Source | Destination | Flight Number | Departure Time *
*****
* Mumbai | Delhi | 21584 | 02:00 *
* Mumbai | Delhi | 36254 | 11:00 *
* Mumbai | Delhi | 84587 | 15:00 *
*****

*****
* 1 : Book Flight from List *
* 2 : Go To Previous menu *
*****

Enter Your Choice :: |

```

- We can also Search Flight with Flight number. Here we are searching for Flight number : 36254

```
*****
* Source | Destination | Flight Number | Departure Time *
*****
* Mumbai   Delhi       21584       02:00       *
* Mumbai   Delhi       36254       11:00       *
* Mumbai   Delhi       84587       15:00       *
*****

*****
* 1 : Book Flight from List *
* 2 : Go To Previous menu  *
*****

Enter Your Choice :: 2

*****
* 1 : Search Flights *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit *
*****

Enter Your Choice :: 3

Enter Flight Number : 36254

*****
* 1 : Sign up *
* 2 : Login *
* 3 : Go To Previous menu *
*****

Enter Your Choice :: |
```

- After Choosing Flight it gives option of Signup or Login for further Ticket Booking process.
- For Signup we have entered "User1" as username and "User1@123" as Password (we are using readPassword() method, so entered password is not visible on screen for security purpose)
- After Signup or Login we have to enter number of tickets we want to book for this flight. And for Date is we Enter wrong date (like 30/2/2022) or date from past (like 25/2/2018) it shows error of Invalid date until user enters valid date .

```
Enter Flight Number : 36254

*****
* 1 : Sign up      *
* 2 : Login        *
* 3 : Go To Previous menu *
*****

Enter Your Choice :: 1

User Name :: User1

Set Your Password ::

Enter Confirm Password :

You have to Enter 'Confirm Password' Again.. :
*****
You Have Successfully Signed up
*****

Enter Total number of Passengers for Ticket Booking : 2

Enter Date (DD/MM/YYYY) : 30/02/2022

You have entered Invalid Date..

Enter Date (DD/MM/YYYY) : 25/02/2018

You have entered Invalid Date..

Enter Date (DD/MM/YYYY) : 15/12/2021
-----
```

- We are entering details of Two Passengers (David and John) and it shows “Tickets for 2 passengers are booked successfully”.

```
-----
Please Provide Passenger's Details Below :
-----
Name : David
Age : 32
Contact Number : 9135436465
-----

Please Provide Passenger's Details Below :
-----
Name : John
Age : 28
Contact Number : 9554321665
-----

Ticket for 2 passengers are Booked Successfully..
-----

*****
* 1 : Search Flights      *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit                *
*****

Enter Your Choice :: |
```

- Then we are searching flight from Ahemdabad to Delhi and booking Ticket by Sign up in another Account.

```
*****
* 1 : Search Flights *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit *
*****

Enter Your Choice :: 1

Enter Location from Where you want to board Flight :: ahemdabad

Enter Destination of your journey :: delhi

*****
* Source | Destination | Flight Number | Departure Time *
*****
* Ahemdabad | Delhi | 23152 | 08:45 *
* Ahemdabad | Delhi | 23842 | 14:30 *
* Ahemdabad | Delhi | 71543 | 19:00 *
*****

*****
* 1 : Book Flight from List *
* 2 : Go To Previous menu *
*****

Enter Your Choice :: 1

*****
* 1 : Sign up *
* 2 : Login *
* 3 : Go To Previous menu *
*****

Enter Your Choice :: 1
```

- For new Account we have kept username as “User2” and first entering password “User2@123” and for confirm password entering different password than that several times. So it gives error “You have to Enter Confirm Password again : ”.
- And after entering correct confirm password we are booking one Ticket of Mike in Flight number : 71543 on 25/01/2022

```
User Name :: User2

Set Your Password ::

Enter Confirm Password :

You have to Enter 'Confirm Password' Again.. :

You have to Enter 'Confirm Password' Again.. :
*****
You Have Successfully Signed up
*****

Enter Flight Number : 71543

Enter Total number of Passengers for Ticket Booking : 1

Enter Date (DD/MM/YYYY) : 25/01/2022

-----
Please Provide Passenger's Details Below :
-----
Name : Mike

Age : 20

Contact Number : 9753145685

-----

Ticket for 1 passenger is Booked Successfully..
-----
```

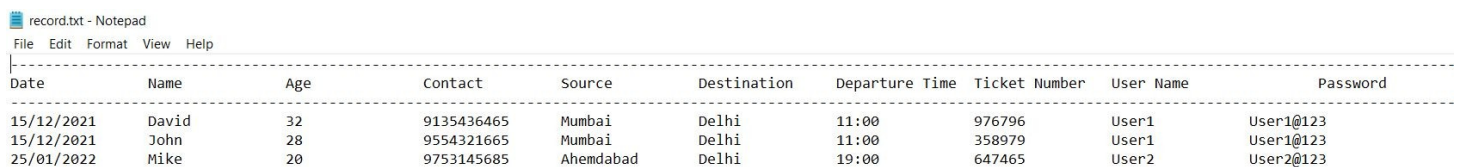
- In UserDetails.txt file Both new Accounts are added along with their



```
User1 User1@123
User2 User2@123
```

passwords.

- In record.txt file data of all three Tickets are added along with user name and password of account from where it was booked.



Date	Name	Age	Contact	Source	Destination	Departure Time	Ticket Number	User Name	Password
15/12/2021	David	32	9135436465	Mumbai	Delhi	11:00	976796	User1	User1@123
15/12/2021	John	28	9554321665	Mumbai	Delhi	11:00	358979	User1	User1@123
25/01/2022	Mike	20	9753145685	Ahemdabad	Delhi	19:00	647465	User2	User2@123

- After that on main menu, we are printing booked tickets. For that we have to Login to account from where Tickets were booked. Where If we enter wrong Password on first attempt it shows Error : “You Have entered INCORRECT Password ..” and asks user to enter correct password.
- After Successfully Log in it shows Tickets of David and John which were booked from account of User1.

```

*****
* 1 : Search Flights *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit *
*****

Enter Your Choice :: 4

User-Name : User1

Password :

You Have Entered INCORRECT Password..

Please Again Enter Your Password :

*****
You Have Successfully Logged in
*****

*****
* Ticket Number : 976796 *
* Name : David Age : 32 Contact Number : 9135436465 *
* Date : 15/12/2021 Time : 11:00 *
*****
* Source : Mumbai Destination : Delhi *
*****

*****
* Ticket Number : 358979 *
* Name : John Age : 28 Contact Number : 9554321665 *
* Date : 15/12/2021 Time : 11:00 *
*****
* Source : Mumbai Destination : Delhi *
*****

```

- After Successfully Log in it shows Tickets of David and John which were booked from account of User1.

```

*****
* 1 : Search Flights *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit *
*****

Enter Your Choice :: 4

User-Name : User1

Password :

You Have Entered INCORRECT Password..

Please Again Enter Your Password :

*****
You Have Successfully Logged in
*****

*****
* Ticket Number : 976796 *
* Name : David Age : 32 Contact Number : 9135436465 *
* Date : 15/12/2021 Time : 11:00 *
*****
* Source : Mumbai Destination : Delhi *
*****

*****
* Ticket Number : 358979 *
* Name : John Age : 28 Contact Number : 9554321665 *
* Date : 15/12/2021 Time : 11:00 *
*****
* Source : Mumbai Destination : Delhi *
*****

```

- In login , if anyone enters new user name it shows : “You have to Sign up first, User name doesn’t exist..”.
- And for Cancellation we have to simply login into account from where Ticket was booked and Enter Ticket number (can get by printing ticket) .

```

*****
* 1 : Search Flights *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit *
*****

Enter Your Choice :: 2

User-Name : User3

You Have to Sign up First ..

User Name doesn't exist..

*****
* 1 : Search Flights *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit *
*****

Enter Your Choice :: 2

User-Name : User1

Password :

*****
You Have Successfully Logged in
*****

Enter number of Ticket That You want to Cancel : 358979

-----
Ticket : 358979 is Cancelled Sucessfully..
-----

```

- If user Enters Invalid ticket number it shows : “You have Entered INVALID Ticket number..”.

```

*****
* 1 : Search Flights *
* 2 : Cancel Booked Tickets *
* 3 : Book your Ticket with Flight Number *
* 4 : Print Booked Tickets *
* 5 : Exit *
*****

Enter Your Choice :: 2

User-Name : User1

Password :

*****
You Have Successfully Logged in
*****

Enter number of Ticket That You want to Cancel : 385645

You Have Entered INVALID Ticket number..

```


➤ After Successful cancellation of ticket, its data will be removed from record.txt file.

record.txt - Notepad

File Edit Format View Help

Date	Name	Age	Contact	Source	Destination	Departure Time	Ticket Number	User Name	Password
15/12/2021	David	32	9135436465	Mumbai	Delhi	11:00	976796	User1	User1@123
25/01/2022	Mike	20	9753145685	Ahemdabad	Delhi	19:00	647465	User2	User2@123