

Flight Ticket Booking System (Use Case)

Copyright 2020
Pegasystems Inc., Cambridge, MA
All rights reserved.

This document describes products and services of Pegasystems Inc. It may contain trade secrets and proprietary information. The document and product are protected by copyright and distributed under licenses restricting their use, copying, distribution, or transmittal in any form without prior written authorization of Pegasystems Inc.

This document is current as of the date of publication only. Changes in the document may be made from time to time at the discretion of Pegasystems. This document remains the property of Pegasystems and must be returned to it upon request. This document does not imply any commitment to offer or deliver the products or services provided. This document may include references to Pegasystems product features that have not been licensed by your company. If you have questions about whether a particular capability is included in your installation, please consult your Pegasystems service Consultant.

PegaRULES, Process Commander, SmartBPM® and the Pegasystems logo are trademarks or registered trademarks of Pegasystems Inc. All other product names, logos and symbols may be registered trademarks of their respective owners. Although Pegasystems Inc. strives for accuracy in its publications, any publication may contain inaccuracies or typographical errors. This document or Help System could contain technical inaccuracies or typographical errors. Changes are periodically added to the information herein. Pegasystems Inc. may make improvements and/or changes in the information described herein at any time.

This document is the property of:
Pegasystems Inc.
1 Rogers Street
Cambridge, MA 02142
Phone: (617) 374-9600
Fax: (617) 374-9620
www.pegasystems.com

Document Name: Flight Ticket Booking System
Date: 03-Feb-2021

Table of Contents

Contents

1. Flight Ticket Booking System.....	6Hrs
--------------------------------------	------

1. Flight Ticket Booking System - 12 Hours

Use case ID	UC-28	Version	1.0
Use Case Name	Flight Ticket Booking System		
Platform Details	Pega 8.4	Time for completion	6 Hrs
Created By:	Nikhila V	Last Updated By	Kiran
Date Created		Last Revision Date:	20 th April, 2022
Concepts Covered	<ol style="list-style-type: none"> 1. Case Design (Primary & Alternate stages) 2. Routing – Worklist 3. Multistep form 4. Create PDF 5. Data Transform 6. Correspondence 7. Views 8. Validation 9. Child Cases 10. Delegation 		
Description	<p>AirZ company want to develop application for online flight booking for the customers. In this use case in order to book the flights tickets online the user can call to CSR(Customer Support Representative) or login as guest to book tickets by entering the booking details, customer Details and do the payment. On completion of the payment customer will receive the ticket details through an email.</p> <p>Another way is that customer can call to CSR for new registration and can complete the booking process Or customer can also book tickets through the existing account details. When customer calls to the CSR for booking the tickets, if he/she is an existing customer they will be asked to provide customer Id. Based on the customer id they will be able to book the ticket. In the booking process, customer name will be on the booking page where in all the ticket booking details need to be provided and has to be confirmed. Upon confirmation the payment sub case will be initiated. On completion of the ticket booking, a Booking ID will be generated. Booking ID (first 3 letters of First Name and 4 digits of random number) along with the booking details will be sent to the customer through an email.</p> <p>If the customer is new, then CSR will be asked to provide the customer Details. Upon confirmation of the details the customer will be registered successfully and will be generated with Customer ID. Customer ID will be sent to the customer through an email. Then will proceed with the booking process. When the customer login he/she can book ticket by providing the booking details. On completing the booking details the customer can go to the payment subcase and can complete the payment. On completion of payment, booking ID will be generated. Flight ticket along with the booking id and booking details will be sent to the customers.</p> <p>Customers can also cancel the tickets by launching the cancellation case type. In cancellation, it will ask the user to provide the Booking id. Based on the id provided booking details will be fetched and customer will be asked to confirm cancellation, Upon confirmation, booking cancellation mail will be sent to the customer. Customer can book tickets by calling to CSR. CSR can book, cancel and view the history of the tickets by specifying the customer ID given by the customer. Admin add, delete and update the flights.</p>		
Actors	<ol style="list-style-type: none"> 1. Admin 2. CSR 3. User 		

Trigger	1. Case is instantiated when a Customer start searching for Flights for ticket Booking.
Preconditions	<ol style="list-style-type: none"> 1. User can be logged in with pre created operator ids. 2. Sample data: as provided in the table below 3. The 'Date of Travel' should be pre-populated with the current date and time 4. Initially the 'Return Date' field should NOT appear on the screen; it should appear only when the 'Two Way' selected for 'Flight Booking' 5. 'Button' format should match exactly as shown in the UI mock-up 6. Date fields should match the format shown in UI mock-up 7. 'Special Note' should NOT appear initially, it is required field only when the 'Special instructions for the staff in flight' check box selected
Post conditions	<ol style="list-style-type: none"> 1. All fields are mandatory; System should not allow to submit the form if any of the field is not provided with value. 2. Once user submits the form, all the values should be persisted into 'Booking' data type, it is not worktable, client want to save into Data Type and as local data storage.
Normal Flow	<ol style="list-style-type: none"> 1. User first selects the options to login as a guest user, existing user or new user. 2. When user selects the existing user he/she will be promoted to specify the customer id and then he/she will selects the value for 'Flight Booking' field (can be 'One Way' or 'Two Way'); if 'Two way' selected 'Return Date' field should appear. 3. Then selects the 'Departure City', next selects the 'Destination City'; Please note, the city selected in 'Destination City' drop down should not be same as in 'Departure City' drop down. For Example; if Departure City is 'Hyderabad' then Destination city cannot be 'Hyderabad' 4. Next goes to select 'Date of Travel' and 'Return Date'; 'Return Date' should always greater than the 'Date of Travel' 5. On Selecting the dates, Departure and destination city he/she will select the submission for flight search and it will display the list of flights available 6. Now he/she will be selecting one flight from the available list and will specify the Number of adults, infants (below 2 years) and children (2-12 years), he/she will select the Travel class (Business, Economy, premium Economy). 7. Next they will be provided with an option for extra baggage chargers which they can opt. 8. On submitting the Details payment sub case will be initiated where he/she will be completing the payment. In the payment subcase he/she can opt for payment modes credit card, debit card, net banking, and UPI options and can complete the payment. 9. On completing the payment he/she will be receiving the Booking confirmation mail along with the Booking ID
Alternative flow	N/A

UI Mock up

Login Details

Login

☒ Customer Login ☐ Guest Login

Login Details

☐ New User ☒ Existing User

Login Info

CustomerID

Password

●●●●●●●●●●●●●●

Cancel

Submit

Collect Booking Details

CustomerName

sarath

Trip Type

☐ One-way ☒ RoundTrip

Destination City

Select.. ▾

Departure City

Select.. ▾

Departure Date

Return Date

Class

Select... ▾

Cancel

Save

Submit

Email Template for Booking Confirmation

Dear <<.CustomerName>>

Your Booking have been done Sucesfully.

Booking ID <<.BookingID>>

Booking Details is as follows

<<include CollectBookingDetails>>

Data fields matrix

Flight Details

Data Fields	Type
Departure City	Text
Destination City	Text
Flight ID	Text
Departure Time	Date time
Arrival Time	Date Time
Flight Duration	Decimal (calculated)

Exceptions	<ol style="list-style-type: none"> 1. All fields are mandatory 2. Store the Booking details for reporting purpose in localsource 3. Booking ID and Customer ID should be Generated Automatically
Additional Requirements	<ol style="list-style-type: none"> 1. While booking tickets user can opt for travel insurance if he/she opts it they will be sent with the insurance details 2. Admin can see the existing flights along with seats Booked 3. Admin should be able to add / delete / update the city names shown in the Departure and Destination city drop downs. 4. Admin should be able to Add/Delete/Update flights, through the seats are booking (only timing can be changed) 5. Admin need to see the reports the count of booking search for a date, grouped by particular date and time 6. Number of Passengers booked in the last week 7. One city to another city how many Flights are Booked 8. All Dates are future dates 9. Implement proper validation for the fields and restrict users to move to next screen unless they enter proper inputs.
Notes and Issues	<p>Create following sample operators for testing the application</p> <ul style="list-style-type: none"> • CSR@AirZ • Admin@AirZ • Usesr@AirZ

City Names for Departure or Destination

- Hyderabad
- Bangalore
- Chennai
- Delhi

Below table list the Flight Details. In the user interface screen of flight search, the below details from the table should be appearing as a list.

Bengaluru	Chennai	6E 105	19:25	20:15
Bengaluru	Chennai	6E 233	06:30	07:25
Bengaluru	Chennai	6E 356	17:00	18:05
Bengaluru	Chennai	6E 541	09:20	10:30
Bengaluru	Chennai	6E 6012	15:55	17:00
Bengaluru	Chennai	6E 6212	11:10	12:10
Bengaluru	Chennai	6E 805	18:05	19:05
Bengaluru	Chennai	6E 237	14:40	15:40
Bengaluru	Chennai	6E 258	13:35	14:35
Bengaluru	Chennai	6E 258	14:00	15:05
Bengaluru	Chennai	6E 729	19:25	20:15
Bengaluru	Delhi	6E 201/6E 3102	09:40	15:15
Bengaluru	Delhi	6E 344/6E 6616	08:35	15:30
Bengaluru	Delhi	6E 6339/6E 6616	06:45	15:30
Bengaluru	Delhi	6E 713/6E 6616	05:10	15:30

Bengaluru	Delhi	6E 822/6E 822/6E 6616	05:45	15:30
Bengaluru	Hyderabad	6E 262	12:05	13:15
Bengaluru	Hyderabad	6E 466	15:40	16:40
Bengaluru	Hyderabad	6E 7173	09:30	11:00
Bengaluru	Hyderabad	6E 822/6E 822/6E 822	05:45	13:00
Bengaluru	Hyderabad	6E 149	20:40	21:50
Bengaluru	Hyderabad	6E 186	07:20	08:30
Bengaluru	Hyderabad	6E 233/6E 269	06:30	10:45
Bengaluru	Hyderabad	6E 233/6E 591	06:30	13:00
Bengaluru	Hyderabad	6E 233/6E 624	06:30	15:10
Bengaluru	Hyderabad	6E 233/6E 6468	06:30	14:15
Bengaluru	Hyderabad	6E 233/6E 7102/6E 7102	06:30	15:50
Bengaluru	Hyderabad	6E 266	06:10	07:20
Chennai	Delhi	6E 557/6E 557/6E 6616	06:40	15:30
Chennai	Delhi	6E 797/6E 6616	07:55	15:30
Chennai	Delhi	6E 987/6E 6616	05:25	15:30
Chennai	Delhi	6E 237/6E 452	16:10	21:55
Chennai	Delhi	6E 237/6E 639	16:10	23:35
Chennai	Delhi	6E 238/6E 396	12:50	22:10
Chennai	Delhi	6E 2588	15:35	18:40
Chennai	Hyderabad	6E 271/6E 262	09:20	13:15
Chennai	Hyderabad	6E 271/6E 466	09:20	16:40
Chennai	Hyderabad	6E 232/6E 266	21:25	07:20
Chennai	Hyderabad	6E 6217/6E 186	22:35	08:30
Chennai	Hyderabad	6E 6217/6E 266	22:35	07:20
Chennai	Hyderabad	6E 156	20:55	22:20
Chennai	Hyderabad	6E 269	09:30	10:45
Chennai	Hyderabad	6E 271/6E 638	09:20	19:20
Chennai	Hyderabad	6E 271/6E 684	09:20	18:10
Chennai	Hyderabad	6E 302	16:25	17:40
Delhi	Bengaluru	6E 2128/6E 958	04:35	16:50
Delhi	Bengaluru	6E 179/6E 5329	08:25	15:30
Delhi	Bengaluru	6E 179/6E 6177	08:25	17:35
Delhi	Bengaluru	6E 129/6E 848	17:30	02:20
Delhi	Bengaluru	6E 185/6E 848	20:35	02:20
Delhi	Bengaluru	6E 191/6E 848	17:05	02:20
Delhi	Bengaluru	6E 197/6E 848	19:30	02:20
Delhi	Bengaluru	6E 843/6E 848	18:50	02:20
Delhi	Bengaluru	6E 167/6E 5329	07:35	15:30
Delhi	Bengaluru	6E 171/6E 5329	04:55	15:30
Delhi	Chennai	6E 2128/6E 275	04:35	16:20
Delhi	Chennai	6E 2128/6E 512/6E 512	04:35	16:45

Delhi	Chennai	6E 2128/6E 563	04:35	10:40
Delhi	Chennai	6E 2128/6E 6014	04:35	12:25
Delhi	Chennai	6E 179/6E 5344	08:25	15:10
Delhi	Chennai	6E 179/6E 5391	08:25	20:45
Delhi	Chennai	6E 179/6E 768	08:25	16:40
Delhi	Chennai	6E 177/6E 407	02:15	12:50
Delhi	Chennai	6E 2042/6E 238/6E 238	05:45	12:20
Delhi	Chennai	6E 2134/6E 2134/6E 237	03:05	15:40
Delhi	Chennai	6E 2134/6E 2134/6E 2588	03:05	15:05
Delhi	Hyderabad	6E 179/6E 179/6E 381	08:25	15:55
Delhi	Hyderabad	6E 179/6E 179/6E 6309	08:25	19:45
Delhi	Hyderabad	6E 179/6E 5375	08:25	17:20
Delhi	Hyderabad	6E 179/6E 821	08:25	13:40
Delhi	Hyderabad	6E 2977/6E 7173	22:55	11:00
Delhi	Hyderabad	6E 2031/6E 262	06:55	13:15
Delhi	Hyderabad	6E 2031/6E 466	06:55	16:40
Delhi	Hyderabad	6E 2134/6E 262	03:05	13:15
Delhi	Hyderabad	6E 2134/6E 7173	03:05	11:00
Delhi	Hyderabad	6E 2297/6E 466	09:00	16:40
Hyderabad	Bengaluru	6E 381/6E 232	16:35	22:30
Hyderabad	Bengaluru	6E 381/6E 6217	16:35	23:25
Hyderabad	Bengaluru	6E 381/6E 806	16:35	20:35
Hyderabad	Bengaluru	6E 7174	15:50	17:20
Hyderabad	Bengaluru	6E 827	10:55	12:05
Hyderabad	Bengaluru	6E 997/6E 997/6E 997	15:45	22:15
Hyderabad	Bengaluru	6E 151	08:25	09:50
Hyderabad	Bengaluru	6E 188/6E 271	06:10	10:20
Hyderabad	Bengaluru	6E 188/6E 6011	06:10	15:10
Hyderabad	Bengaluru	6E 274/6E 232	18:00	22:30
Hyderabad	Bengaluru	6E 274/6E 6217	18:00	23:25
Hyderabad	Chennai	6E 381	16:35	17:50
Hyderabad	Chennai	6E 7174/6E 105	15:50	20:15
Hyderabad	Chennai	6E 827/6E 105	10:55	20:15
Hyderabad	Chennai	6E 827/6E 356	10:55	18:05
Hyderabad	Chennai	6E 827/6E 6012	10:55	17:00
Hyderabad	Chennai	6E 827/6E 805	10:55	19:05
Hyderabad	Chennai	6E 371/6E 233	22:20	07:25
Hyderabad	Chennai	6E 121	23:10	00:25

Hyderabad	Delhi	6E 151/6E 5035/6E 5035	08:25	15:40
Hyderabad	Delhi	6E 188/6E 528/6E 528	06:10	17:45
Hyderabad	Delhi	6E 242/6E 398	05:45	11:50
Hyderabad	Delhi	6E 242/6E 436	05:45	16:05
Hyderabad	Delhi	6E 311/6E 2588	09:55	18:40
Hyderabad	Delhi	6E 311/6E 311/6E 528	09:55	17:45
Hyderabad	Delhi	6E 311/6E 528/6E 528	09:55	17:45
Hyderabad	Delhi	6E 381/6E 2125	16:35	04:10
Hyderabad	Delhi	6E 381/6E 2622	16:35	03:00