**OBJECTIVE:**

The main objective of our SpiceJet platform is to provide an easy way to book a Flight Ticket.

* This platform is basically aimed to provide the customer, the complete information of the flights, where it is running according to which the customer can book the tickets.
* Then he gets an intimation SMS as he booked a number of tickets and manages bookings.
* There is a facility of providing a refund to the customer immediately after the cancellation of the ticket but there is some deduction from the booking amount.
* SpiceJet provides an economy and business flights and private flights
* It provides Cargo to SpiceShuttle
* It provides a wide range deal to Add-ons
* It Offers Hotels to SpiceHolidays
* It Offers SpiceClub to SpiceScreen
* The goals of our system are

1. To provide service for the customer at anytime and anyplace through online and intimated through SMS.
2. To minimize the number of staff at the ticket box.
3. To save time and money.

**In Scope of Testing:**

In this we are going to discuss the following

* Login and Signup
* Flight Booking
  + Search Flights
  + Check-In
  + Flight Status
  + Manage Booking
* SpiceShuttle
* Charter
* Cargo
* Add-ons
* Deals
* Hotels
* SpiceHolidays

**Out Scope of Testing:**

In this we are going to discuss the following

* About us
* Contact us
* Travel Info
* Investors
* Spice Route Magazine
* Connect With us
* Chat via Whatsapp
* Download our mobile app
* Hyperlink’s
  + Home
  + Privacy Policy
  + Terms and Conditions
  + GST Information
  + Sitemap

**Expected Implementation**

* Usage of all testing types
* Usage of test design techniques
* Usage of Valid and Invalid data
* Test Case design in integration and system level testing

**PROJECT MODULES:**

**Login/Signup Modules:**

This module is for both types of user (mobile and computer). In this module according to the type of user (mobile and computer) the further links and operations will be provided.

**Mobile modules:** As soon a visitor registers himself as a customer, the customer can now book the flight tickets and pay for them online.

**Computer modules:** As soon a visitor registers himself as a customer, the customer can now book a flight ticket and pay for them online.

**Member login as**

* Travel Agent login
* Sub Agent Login (Agent Plus)
* Corporate Accounts
* SME Traveller

**Flight Booking Module:**

In this module flight ticket(s) are booked by a customer. This module contains all the information regarding the availability of seats and non-availability of seats. As soon as the customer confirms his/her respective seat(s) the remaining seats will be updated accordingly.

* Search Flights
* Check-In
* Flight Status
* Manage Booking

**SpiceShuttle**

**Charter**

**Add-ons**

* **SpiceMAX**

Designed for customers who want more comfort and convenience, but are not willing to pay the huge premium for business class, SpiceJet customers opting for SpiceMax seats will enjoy best in-class leg room, with at least 6 inches more leg room to relax compared to standard seats and with priority check-in at dedicated ...

* **Hot Meals**

SpiceJet brings all your favourite Hot meals and snacks such as sandwiches, cookies, and beverages with an added ingredient- Extra Safety. We at SpiceJet value your safety more than anything. Thus, we have employed strict protocols to ensure the food on the flight is prepared, packed, and handled with extreme caution.

* **Seat + Meal Combo**

Designed for customers who want more comfort and convenience with meal combo. spicejet brings all your favourite meals with a safe and tasty combo, providing healthy food and clean seats.

* **You-1st**

ADD PRIORITY SERVICES PACK INCLUDING PRIORITY CHECK-IN/BOARDING/BAGGAGE DELIVERY TO YOUR BOOKING

* **International Connection Baggage**

International travelers can pre-purchase their excess baggage when they connect onto domestic SpiceJet flights while flying in from /to other international flights within 24 hours of their travel.

* **Visa Services**

Your favourite airline now brings you closer to your favourite international destinations. Apply for Visa online with the simplest and most convenient visa application process click on the destination below to apply.

* **MyFlexiPlan**

SpiceJet brings to you another innovative add-on service 'My Flexi Plan'. This add-on service gives you the flexibility of cancelling or changing the ticket(s) to suit your travel plan.

* **Spice Assurance**

Your time is of utmost importance to us, which is why we go the distance to ensure that we are always on time. And starting this Friday, 24th April, 2015, we are going one step further. Introducing spice assurance, our promise that we will fly you to your destination on time, because we know how a baggage loss or a delayed/cancelled flight can affect your travel plan.

* **Friends and Family**

Presenting a Friends and Family Special.Now travel with your friends and loved ones and get up to 25% off on base fare when you book for 4 or more people together.

* **Senior Citizen Discount**

There is no retirement age for fun. With spicejet, senior citizens get upto 14% off on flight tickets. Travel and keep that retirement exciting.The senior citizens discount team is valid to enjoy their old age with spicejet.

* **Student Discount**

We realize the struggles that the future of the country, the students, are facing. Some are stranded away from their homes while others are struggling to carry extra luggage while moving cities. To make flying easier for all students in these troubling times, SpiceJet is introducing special fares and offers. Traveling will now be safer, freer and more affordable

* **Extra Seat**

**It is designed to give access to customers to manage their booking if they have booked the flight ticket earlier, and also clear all their queries by providing with FAQ’s.**

* **Zero Cancellation**

Introducing SpiceJet Zero Cancellation, Trip cancellation extension powered by Liberty General Insurance Ltd. Now, planning your trip would be easier than ever. Add to your flight booking and get insured against cancellation fee if you change your travel plans. Cancel with ease, claim refund and get your money back.

* **Covid-19 RT-PCR Test**

**COVID 19 testing** ensure your journey remains seamless and hassle free. In our continued effort to do so, we have partnered with VFS Global to bring you an online platform to book COVID-19 RT-PCR test**.**

* **Indian Armed Forces Personnel**
* The Armed Forces discount is valid on bookings which are made online at [www.spicejet.com](https://www.spicejet.com/) or through our reservation numbers +91 (0)124 4983410 +91 (0)124 7101600 or through our limited airport ticketing counters (listed below) by opting for the discount.
* **International SIM Cards**

Now control your international roaming expenses with matrix international prepaid sim cards and keep a track of phone bills when abroad.At free of cost you will get unlimited data and free calls as well.

* **SpiceFlex**

The customer who opts for SpiceFlex fare will get unlimited free changes, if the change request is for the same fare type (SpiceFlex fare). In case the customer opts for a different fare type other than the SpiceFlex fare, a one-time free change would be allowed.

* **Govt. Employee**

This is about govt employees benefits and offers in spicejet.com. And most asked questions, and the replies as well.

* **Healthcare Professionals**

**A**

* **SpicePlus**

Travelling with safety, comfort, and convenience is a choice. With SpicePlus, you will not only choose to save time with Priority Services like Check-in, Boarding and Preferred Bag-out but will also fly in your zone of comfort with Preferred Seat, meals, and beverage.

* **Forex Services**

**A**

* **Activities**

Activities that we can do in spicejet are very good.Now choose from a wide range of the latest critically-acclaimed movies, hilarious stand-up acts, popular podcasts, daily news, amazing games. etc.

* **SpiceJet Luggage Assist**

**A**

* **FlyEarly**

SpiceJet, India's favorite domestic airline, cheap air tickets flight booking to 46 cities across India and international destinations.A flexible service built around you and your commitments. SpiceJet FlyEarly gives you the flexibility to reschedule and prepone your flight to an earlier one, on the same day

**Hotels**

In this module customers can make hotel room bookings. This module has all the information about hotels,their location,ratings etc. Customers can book flights and hotels together according to their travel plans.

* Hotels
* Flights+Hotel
* Manage bookings

**Deals**

In this module customers can see various deals on spicejet services. They can filter and choose suitable deals for them.

**Giftcards**

In this module e-gift cards are available for customers to purchase and gift to whomever they want. They can customize the gift card according to their wish.

**Spiceclub**

In this module customers can login/signup as spiceclub member. Customers can earn reward points on their purchases and bookings.

* Spiceclub assist
* Login/Signup

**Spice Screen**

When in flight users can connect to the spice screen using mobile and wifi. They can watch movies and shows, listen to news and podcasts and can book a cab on mid air.

**Payment Module:**

This is the most important module because it deals with the payment of the number of tickets booked by the user. The user can pay for the ticket(s) through online banking or credit/debit cards and the booking details will be sent to the respective user after successful payment.

**Testing Approach:**

Non-Functional Testing:

It consists of following parameters

**Reliability**: The system will consistently perform its intended function.

e.g.: The user information must be validated with his mobile number.

**Efficiency**: Unnecessary data will not be transmitted on the network and database server will be properly connected.

**Reusability**: The system can be reused in any organisation or site of the same group, by defining the organisation master definition under software license agreement.

**Integrity**: Only system administrators has right to access the database, not every user can access the information. Each user will be having rights to access the modules.

**Testing Approach:**

It consists of the following test approaches we are going to use:

1. **Unit testing**: Unit Testing is a test that tests each single module of the software to check for errors. This is mainly done to discover errors in the code of the online flight ticket booking. The main goal of the unit testing would be to isolate each part of the program and to check the correctness of the code. In the case of the online flight ticket booking system, all the web forms and the C# classes will be tested. There are many benefits for this unit testing:

• The unit testing facilitates change in the code.

• It allows testing to be done in a bottom-up fashion.

At the same time, unit testing has some disadvantages such as, it might not identify each and every error in the system.

1. **Integration testing**: In Integration Testing, the individual software modules are combined and tested as a whole unit. The integration testing generally follows unit testing where each module is tested as a separate unit. The main purpose of the integration testing is to test the functional and performance requirements on the major items of the project. All the modules of the project developed individually would be combined together and tested as a whole system in the integration testing.
2. **System testing:** The system testing is mainly done on the whole integrated system to make sure that the project that has been developed meets all the requirements. The test cases for the system testing will be the combination of unit and integration tests.
3. **Regression testing:** The Regression Testing is generally done whenever modifications are made to the source code of a project. The Regression Testing can also be defined as the process of testing changes made to the computer program and also makes sure that the older programming still works with the new changes. So, before any new version of a software product is released, the old test cases for the project will be run against the software with the changes made, to make sure that the old functionalities of the project still work.
4. **Acceptance testing:** This testing is generally performed when the project is nearing its end. This test mainly qualifies the project and decides if it will be accepted by the users of the system. The users or the customers of the project are responsible for the test.

**Milestones:**

* Master data for employee will be loaded from the employee database before test design. This will not be refreshed during the various cycles of testing.
* Transaction data on leave details of employees will be ported from the existing leave management system. This data will be refreshed for every cycle of testing.
* For load testing, data of 100000 ticket book transaction (assuming 2 per employee) should be provide to the testing team on the test environment.

**SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS**

**SUSPENSION CRITERIA**

Testing for all the dependent features will be suspended if a test case fails. The failed test case will be logged onto the test log which contains the description for the error.

**RESUMPTION REQUIREMENT**

The test cases which are not dependent on the case where the bug is reported will be executed in parallel with the bug fixing. Once the failed test case has been taken note of and has been identified and fixed then the testing for the failed test case will resume.

**TEST DELIVERABLES**

The following documents will be produced after the testing phase for the Airline Reservation System has been completed.

• Test Plan

• Test Cases

**Test Criteria:**

* Each phase of testing (test design, test execution etc.), level of testing (system, system integration etc.) and type of testing (performance, compatibility etc.) requires certain criteria as prerequisite and to determine completion by the various stake holders. The test criteria remove the ambiguity in terms of when a testing activity can start and when it is considered complete.

Few examples for online booking tickets are as follows:

* Entry criteria for system testing: All unit test cases, and component integration test cases should be executed, and logs made available.
* Suspension criteria: Encountering defects which prevents further testing
* Resumption criteria: When new version is released after defect fixes and assurance provided.

**Roles and Responsibilities:**

* For instance, for booking the online ticket, following roles would be identified:
* Testing related roles – test analyst, test lead, test manager for the various types and levels of testing.
* Developing lead – involved in clarification of design, participation in defect meetings, root cause analysis for defects etc.
* Business users – creating UAT (User Acceptance Testing) test cases and carrying out UAT.
* System support engineer – Involved in helping the testing team with test environment setup.
* Database administrator –involved in providing test data from the existing production system, providing adequate data for users etc.
* Program Manager – involved in resolving issues in timely manner for testing team to proceed with their testing activities, co-ordinate with other development and business stakeholder in testing related activities.