

FUNCTIONAL REQUIREMENTS

Product Name: RYANAIR
Portfolio Project

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Overview

Ryanair website allows customers to book flights, manage bookings, check-in online, and access other services related to their travel on Ryanair flights. The website should provide an efficient, user-friendly booking experience while also promoting Ryanair's products and services.

The application will include features such as user registration and login, flight search and flight booking, payments gateway integration, and booking management.

The website will aim to provide a seamless user experience and ensure the security of sensitive customer information. The target audience for this flight booking platform will be customers looking to purchase a flying ticket online.

REQUIREMENT	DESCRIPTION	PRIORITY	ACCEPTANCE CRITERIA
LOGIN	Users should be able to create an account and log in to the system.	High	<ul style="list-style-type: none">- User can access the login page from the homepage.- User can enter their credentials and click the "login" button.- User is redirected to the home page upon successful login.
REGISTRATION	Users should be able to register for a new account.	High	<ul style="list-style-type: none">- User can access the registration page from the homepage.- User can enter their details (name, email, password, etc.) and click the "Create an account" button.- User is redirected to the home page upon successful registration.
FLIGHT SEARCH	Users should be able to search flights.	High	<ul style="list-style-type: none">- User can click enter the name of existing airports into the "From" and "To" fields and click the "Search" from the home page- The search results will be displayed- User can view the different days/times/prices corresponding to his search.
FLIGHT BOOKING	Users should be able to book flights.	High	<ul style="list-style-type: none">- User can click the "Select" button from the search page to start booking- User can choose the different options: baggage, seat number, insurance, billing information.- User can choose a payment method and complete the transaction.
PAYMENT GATEWAY	The system should integrate with a payment gateway.	High	<ul style="list-style-type: none">- User can choose from a list of supported payment methods during checkout.- User's payment information is securely transmitted to the payment gateway for processing.- User receives a confirmation of their payment upon successful processing.
BOOKING MANAGEMENT	Users should be able to view their booking history.	High	<ul style="list-style-type: none">- User can access their order history from their account dashboard.- User can view details about their past bookings (date, destination, total cost, etc.).

Login

User Stories

- As a user, I want to be able to log in to the system so that I can access my account.
- As a user, I want to be able to log in using my email address and password so that I can securely access my account.
- As a user, I want the login page to have fields for entering my email/username and password so I can input my credentials.
- As a user, I want the ability to click on a "Log In" button to submit my credentials and log in.
- As a user, I want to see an error message if I enter an incorrect email/password combination so I can try again with the right credentials.
- As a user, I want the option to reset my password if I forget it so that I can regain access to my account.
- As a user, I want the ability to stay logged in so that I don't have to re-enter credentials every time I use the site.
- As a user, I want my credentials and account access to remain secure.

Test Cases


- Validate logging into the Application using valid credentials
- Validate logging into the Application using invalid credentials (i.e. Invalid email address and Invalid Password)
- Validate logging into the Application using invalid email address and valid Password
- Validate logging into the Application using valid email address and invalid Password
- Validate logging into the Application without providing any credentials
- Validate 'Forgot Password' link is available in the Login page and is working
- Validate logging into the Application using Keyboard keys (Tab and Enter)
- Validate Logging into the Application and browsing back using Browser back button
- Validate Logging out from the Application and browsing back using Browser back button
- Validate logging into the Application using inactive credentials
- Validate the number of unsuccessful login attempts
- Validate the text into the Password field is toggled to hide its visibility
- Validate the copying of the text entered into the Password field
- Validate the Password is not visible in the Page Source
- Validate Logging into the Application after changing the password
- Validate Logging into the Application, closing the Browser without logging out and opening the application in the Browser again
- Validate timeout of the Login Session
- Validate the different ways of navigating to the Login page
- Validate the UI of the Login page
- Validate the Login page functionality in all the supported environments


Design Mockups


Login page design mockup


Log in to continue

Make it simple with myRyanair



 Continue with Google

 Continue with Facebook


 Continue with PayPal

Or


Email address

Email address is required

Password



Password is required

[Forgot password?](#) 

Log in

Don't have an account? [Sign up](#)

Registration

User Stories

- As a new user, I want to be able to register for an account so I can start using the application.
- As a user, I want to be able to sign up by providing my name, email address, and password so I can create a secure account.
- As a user, I want the registration page to have fields for entering my name, email, password, and confirmation password so I can input my information.
- As a user, I want the ability to click on a "Register" or "Sign Up" button to create my account after entering my details.
- As a user, I want to receive a confirmation email after registering so I can verify my account.

- As a user, I want to see relevant error messages if I enter invalid data during registration so I can correct it appropriately.
- As a user, I want my personal information and credentials to remain private and secure.
- As a user, I want the option to register using my social media accounts for faster signup.
- As a user, I want to easily understand the registration process so I can quickly create my account.

Test Cases

- Validate logging into the Application using valid credentials
- Validate Registering an Account by providing only the Mandatory fields
- Validate proper notification messages are displayed for the mandatory fields, when you don't provide any fields in the 'Register Account' page and submit
- Validate different ways of navigating to 'Register Account' page
- Validate Registering an Account by providing the existing account details (i.e. existing email address)
- Validate Registering an Account by providing an invalid email address into the E-Mail field
- Validate Registering an Account by using the Keyboard keys
- Validate all the fields in the Register Account page have the proper placeholders
- Validate all the mandatory fields in the Register Account page are marked with red color font and '!' symbol
- Validate whether the Mandatory fields in the Register Account page are accepting only spaces
- Validate whether the Password fields in the Register Account page are following Password Complexity Standards
- Validate the Password text entered into the 'Password' and 'Password Confirm' field of 'Register Account' functionality is toggled to hide its visibility
- Validate the UI of the 'Register Account' page
- Validate 'Register Account' functionality in all the supported environments
- Validate Registering an Account using a Google email account
- Validate Registering an Account using a Facebook profile account
- Validate Registering an Account using a PayPal account

Design Mockups

Registration page design mockup

Sign up to continue

Make it simple with myRyanair



Continue with Google



Continue with Facebook



Continue with PayPal

Or

Email address

email@email.com

Password

Password



By signing up, you agree to Ryanair's [Privacy Policy](#) and [Terms of Use](#)



Create account

Already have an account? [Log in](#)

Flight Search

User Stories

- As a user, I want to be able to search for available flights so that I can book travel plans.
- As a user, I want to be able to enter my departure and arrival airports so that I can see flights for that route.
- As a user, I want to be able to select my departure and return dates so I can see flights for my travel period.
- As a user, I want to be able to choose between one-way or round trip flights so I have flexibility in searching.
- As a user, I want to be able to enter the number of passengers traveling so the flight results accurately reflect my needs.
- As a user, I want to be able to filter or sort the search results by criteria like price, duration, number of stops so I can find the optimal flights.

- As a user, I want to see relevant flights with details like airline, departure/arrival times, duration, stops so I can evaluate the options.
- As a user, I want the search filters and criteria to be clear so I can effectively narrow down flight results.
- As a user, I want the flight search to be fast and intuitive so I can easily find options for my travel plans.

Test Cases

- Validate searching with an existing Airport Name
- Validate searching with a non existing Airport Name
- Validate searching without providing any Airport Name
- Validate searching for a airport name after login to the Application
- Validate searching with an existing Airport Name and with an existing Country name as destination (or flight origin)
- Validate the Website Terms of Use automatically if the box is not ticked
- Validate searching with chronological return flight dates
- Validate searching with non chronological return flight dates
- Validate Booking for 1 adult passenger only
- Validate Booking for 1 teen passenger only
- Validate Booking for 1 child passenger only
- Validate Booking for 1 infant passenger only
- Validate Booking for more than 25 adult passengers
- Validate Booking for more than 25 adult passengers and 18 infants
- Validate booking a return flight the same day
- Validate we can use all the options of Search functionality using the Keyboard keys
- Validate Page Heading, Page URL and Page Title of the 'Search' page
- Validate the UI of Search functionality and Search page options
- Validate the Search functionality in all the supported environments

Design Mockups

Flight Booking

User Stories

- As a user, I want to be able to book a flight I've selected so I can complete my ticket

purchase.

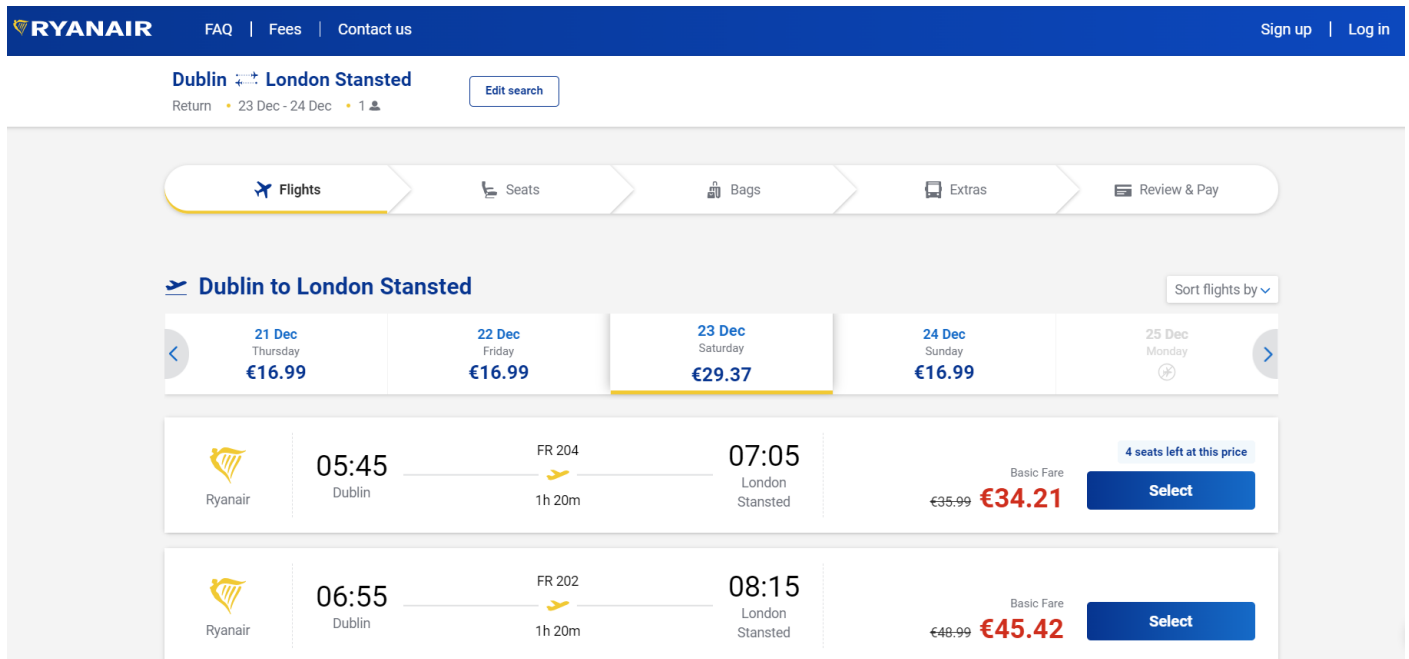
- As a user, I want to be able to choose my travel options ('Regular', 'Plus', 'Flexi Plus').
- As a user, I want to be able to select seats for the flight if available so I can choose my preferred seating arrangement.
- As a user, I want to be able to add checked bags and other ancillaries to my booking so I can purchase those needed services.
- As a user, I want to be able to enter passenger and contact information for my booking so it is associated with my ticket.
- As a user, I want to be able to choose from multiple payment options so I can pay in the way most convenient for me.
- As a user, I want to receive a confirmation email with my ticket information after booking so I have a record of my purchase.
- As a user, I want the booking process to be quick, clear and intuitive so I can easily complete my ticket purchase.
- As a user, I want my payment information to be protected and secure throughout the booking process.

Test Cases

- Validate choosing chronological return flight dates
- Validate choosing non chronological return flight dates
- Validate edit search button
- Validate 'choose fare' option:
- Validate Back button on the 'Flight Booking' page
- Validate Back then Next button on the 'Flight Booking' page
- Validate automatic ending session after a period of inactivity
- Validate Booking for 1 adult passenger only
- Validate Booking for 1 teen passenger only
- Validate Booking for 1 child passenger only
- Validate Booking for 1 infant passenger only
- Validate Booking for more than 25 adult passengers
- Validate Booking for more than 25 adult passengers and 18 infants
- Validate booking a return flight the same day
- Verify promo code error with invalid code
- Validate we can use all the options of Search functionality using the Keyboard keys
- Validate Page Heading, Page URL and Page Title of the 'Search' page
- Validate the UI of Search functionality and Search page options
- Validate the Search functionality in all the supported environments
- Validate number of seats left at this price information
- Validate 'Save to my Ryanair' account Passenger information form to save time in future bookings
- Validate Registering a Passenger by providing only the Mandatory fields
- Validate proper notification messages are displayed for the mandatory fields, when you don't provide any fields in the 'Passenger' section
- Validate proper notification messages are displayed for the mandatory fields, when you provide alphanumerical or special characters in the Passenger's fields section
- Validate proper notification messages are displayed for the mandatory fields, when you provide less than 2 characters in the Passenger's fields section
- Validate proper notification messages are displayed for the mandatory fields, when you provide more than 32 characters in the Passenger's fields section
- Validate proper notification message after a period of inactivity (3 min)
- Verify wheelchair assistance can be requested
- Validate Registering a seat
- Validate Registering a check-in bag

- Validate Registering a cabin bag
- Validate Registering more than 3 cabin bags
- Validate Security Fast Track (if available)
- Validate Extras (Insurance, Pre-paid credit)
- Validate Ending session after a period of inactivity during booking
- Validate VAT number / business name when booking a flight
- Verify displayed flight prices match expected pricing
- Verify booking confirmation email received after purchase
- Confirm flight selections are saved after creating user account

Design Mockups



Payment Gateway

User Stories

- As a user, I want to be able to securely pay for my purchases using my credit/debit card/PayPal account so that I can complete transactions.
- As a user, I want the payment gateway to offer multiple card options like Visa, Mastercard, American Express so I can pay with my preferred card.
- As a user, I want to be able to enter my card details into a payment form to process transactions.
- As a user, I want the card details to be encrypted and securely sent to the payment processor so my information is protected.
- As an admin, I want the payment gateway to be PCI compliant so customer card data is handled securely.
- As an admin, I want the payment gateway to have high uptime and availability so users can always complete purchases.
- As an admin, I want real-time reporting of successful/failed transactions from the payment gateway.
- As an admin, I want the payment gateway to support features like subscriptions, invoices, refunds to meet our business requirements.
- As a user, I want to receive confirmation and receipts after my payment goes through so

I have records of my transactions.






- As a user, I want clear error messaging if my transaction fails so I can resolve issues and complete my purchase.

Test Cases

- Validate Review and Pay (must be logged-in)
- Validate Review and Pay (payment methods - credit card) with valid credentials
- Validate Review and Pay (payment methods - credit card - 3d secure)
- Validate Review and Pay (payment methods - paypal)

Design Mockups

Credit Card

Accepted Cards     

Card details

Card number *

Expiry date *

Security code *

Cardholder name *

Billing address

Address line 1 *

Address line 2

City *

Country *

PayPal

Price Breakdown

Flights

Dublin to London Stansted

Sat 23 Dec • 05:45 - 07:05 • FR 204

1 x Adult Regular Fare €55.06

1 x Priority & 2 Cabin Bags Included

1 x Reserved standard seat Included

You saved -€1.78

You do not pay government taxes

London Stansted to Dublin

Sun 24 Dec • 06:10 - 07:30 • FR 203

1 x Adult Regular Fare €49.59

1 x Priority & 2 Cabin Bags Included

1 x Reserved standard seat Included

1 x Additional seat cost €0.00

You do not pay government taxes

Passengers ▼

Total to pay €104.65

VAT

Fields marked with * are mandatory

Booking Management

User Stories

- As a user, I want to be able to view a list of all my previous bookings so I can see my booking history.
- As a user, I want to be able to see key details for each booking like date, booking reference, origin, destination etc. so I can identify the booking.
- As a user, I want to be able to search for bookings by date range so I can find past bookings easily.
- As a user, I want to be able to filter bookings by criteria like origin city or destination so I can quickly locate a specific booking.
- As a user, I want to be able to click on an individual booking to see all the details and information for that booking.
- As a user, I want to be able to view booking details like flight timings, seat number, passenger information etc so I can review the booking.
- As a user, I want to be able to access e-tickets, invoices and receipts related to the booking so I have all the records.

- As a user, I want to be able to cancel or change upcoming bookings if permitted, directly from my booking history.
- As a user, I want the booking history to be clearly organized and easy to navigate so I can efficiently manage my bookings.


Test Cases

- Validate logging into My Booking using user's account or 'reservation number'
- Validate logging into My Booking using 'reservation number' using no credentials
- Validate logging into My Booking using 'reservation number' using invalid format credentials
- Validate finding a booked trip if it does not appear in my Account using the reservation number and email
- Validate 'Make a baggage claim' from 'Manage this past trip' section
- Validate 'Apply for a refund' from 'Manage this past trip' section
- Validate 'Make EU261 claim' from 'Manage this past trip' section
- Validate 'Request an insurance letter' from 'Manage this past trip' section
- Validate 'Make a complaint' from 'Manage this past trip' section
- Validate 'Download booking and inflight receipts' from 'Manage this past trip' section
- Validate Page URL, Page Heading and Page Title of the 'My Account' page
- Validate the UI of 'My Account' page functionality
- Validate the 'My Account' page functionality in all the supported environments

Design Mockups

Hey jean-yves, your upcoming trips

Manage any issue regarding your next trips





There are no trips to show
Use the booking reservation number to find your booking or begin a new adventure!

[Book a new trip](#)[Find my booking](#)


Your past trips


Manage any issue regarding your past trips



Perpignan to London Stansted • 04 Aug - 09 Aug • Reservation number: EI23PJ • 1 

[Manage this past trip](#)



London Stansted to Beziers Cap d'Agde • 19 Oct • Reservation number: HGRNKA • 1 

[Manage this past trip](#)