



SOFTWARE TEST PLAN

GULLIVER website

Team Members

Saeed Esawi

TABLE OF CONTENTS

INTRODUCTION	3
1. TEST STRATEGY	3
1.1 Scope of Testing	3
1.2 Glossary	3
2. TESTS TREE	4
2.1 test tree of functional tests	4
2.2 test tree of non-functional tests	9
2.3 Feature to be tested	12
2.4 Features not be tested	14
3. TEST TYPES	14
4. RISK AND ISSUES	15
5. TEST LOGISTICS	16
5.1 who will test	16
5.2 when will the test occur	16
6. TEST OBJECTIVE	16
7. REST CRITERIA	16
7.1 suspension criteria	16
7.2 exit criteria	16
8. RESOURCE PLANNING	17
8.1 system resource	17
8.2 human resource	18
9. TEST ENVIRONMENT	19
10. SCHEDULE & ESTIMATION	20
10.1 all project task and estimation	20
10.2 schedule to complete these tasks	20
11. TEST DELIVERABLES	21
11.1 before testing phase	21
11.2 during the testing	22
11.3 after the testing cycle is over	22

INTRODUCTION

Booking through Gulliver's website involves the process of arranging various travel services, including flights, accommodations, car rentals, and more, in advance. This entails selecting specific dates, destinations, and preferences to secure desired travel arrangements. The primary objective of booking on Gulliver's website is to ensure availability and streamline the travel planning process for individuals, enabling them to efficiently organize their trips. Whether it's booking a flight to a favorite destination, finding a comfortable hotel room, or arranging transportation for exploration, Gulliver's website provides a user-friendly platform that makes booking travel services convenient and accessible to a diverse audience.

1 TEST STRATEGY

1.1 Scope of Testing

The Software Test Plan (STP) for the Gulliver website encompasses a comprehensive scope designed to validate the core objectives and functionalities. The primary goals involve confirming the accuracy of the Gulliver system, ensuring robust security measures for user data, and evaluating the website's performance under varying loads. Testing will cover critical features such as room reservations, ticket bookings, and authentication processes. The scope includes various testing types such as functional, performance, security, compatibility, and usability testing, conducted at different levels like unit, integration, system, and user acceptance testing. Environments for testing range from development to staging, with an emphasis on realistic data usage and privacy compliance. The plan acknowledges resource constraints and sets acceptance criteria for functionality, security, and performance. Identified dependencies on third-party services or APIs are highlighted, and potential risks and assumptions, including those related to third-party integrations and performance issues, are outlined for risk mitigation. This concise but thorough scope guides the testing effort to ensure the Gulliver website's reliability, security, and overall user satisfaction.

1.2 Glossary

- **reserve:** Book a hotel or a place to stay from the website by entering details and making the order, which means confirmation of the place of accommodation.
- **filter:** It is a search mechanism when it contains parameters from all kinds of points that can help and insist on the types of accommodation that a user is interested in.
- **sort:** Sorting is a booking tool that helps in the search to sort the accommodations according to price or distance or rating.

2. TESTS TREE

2.1 test tree of functional tests

A) Functional tests

1) Login page:

- Login with an existing username.
 - Login with an existing number order and the id number.
 - Login with an existing id number and an invalid num order.

- Login with a non-existing mail.
- New customer login.
 1. Logging in with a connected account -Consent to verify approval of terms of use.
 - View the full terms of use.
 - Navigation on the Terms of Use page.
 - Closing the terms of use page
 2. Logging in with an offline account.
 - Consent to verify approval of terms of use.
 - View the full terms of use.
 - Navigation on the Terms of Use page.
 - Closing the terms of use page.

2)Choose the flight

1. choose the time of the flight
 - time outbound time
 - choose return time
2. choose the company of the flight
3. choose the short flight
4. choose the airport
 - choose all airports in city
 - choose specific airport in the city
5. choose multyflight
6. choose dates of flight
 - choose specific day
 - choose flexible days

3) Categories Page:

- Accommodation categories.
 1. Search for accommodation by location.
 - a. Search by check-in and check-out date.
 - i. Search by the number of rooms.
 - Search by the number of people.
 2. Search by country name.
 - a. Search by check-in and check-out date.
 - i. Search by the number of rooms.
 - Search by the number of people.
 3. Search by a specific area.
 - a. Search by check-in and check-out date.
 - i. Search by the number of rooms.
 - Search by the number of people.
 4. Search within your vicinity.

- a. Activate geolocation on the device.
 - i. Search by the number of rooms.
 - Search by the number of people.
- 5. Activate geolocation on the device is not enabled.

- Flights category:

- 1. Search for a flight.
 - a. Search for a flight with origin and destination.
 - Choose a specific date.
 - Choose a flexible date.
 - Select specific hours.
 - Choose an airport.
 - Choose an airline.
 - b. Search for a flight with origin.
 - Choose a specific date.
 - Choose a flexible date.
 - Select specific hours.
 - Choose an airport.
 - Choose an airline.

- Car Rental category.

- 1. Search by pickup points.
 - a. Choose car size.
 - Limited travel range.
 - Unlimited travel range.
 - b. Sort by car types.
 - Limited travel range.
 - Unlimited travel range.
 - c. Check return of the car to the same location.
 - Limited travel range.
 - Unlimited travel range.
- 2. Search by driver age.
 - a. Choose car size.
 - b. Sort by car types.
 - c. Check return of the car to the same location.

- Attractions category:

- 1. Search by location
 - Attractions with a discount.
 - Attractions without a discount.
 - Sea attractions.
 - Mountain attractions.
 - .
- 2. Search by date.
 - Attractions with a discount.

- Attractions without a discount.
- Sea attractions.
- Mountain attractions.

4) Product page

- Hosting Categories
 1. Selection of Room Quantity
 - Quantity greater than the number of guests -Number of available rooms in the guesthouse.
 2. Selection of Room Types.
 - Room with a balcony.
 - Room without a balcony.
 - Room with a view.
 - i.Sea view.
 - ii.Mountain view.
 - Room without a view.
 - Smoking allowed room.
 - Non-smoking room.
 3. Service Selection.
 - Breakfast included.
 - All-inclusive.
 - Transfers from and to the airport.
- Flight Category:
 1. Package Selection.
 - Flight with a meal.
 - Flight without a meal.
 - Economy class.
 - Business class.
 - First class.
 1. Driver's Age.
 - Age over 21.
 - Is the location close to the airport.
 - Rental place working hours.
 2. Returning the Car to a Different Location.
 - Is the location close to the airport.
 - Rental place working hours.
- Attractions Category.
 1. Attraction Selection.
 - Type of attraction.
 - Attraction payment.

-The number of participants is limited.

5) Order Update:

- Cancel with a full refund.
 1. Refund to credit card.
 - Checking that the transaction was successful.
 - Executing cancellation before canceling the payment.
 - Receiving confirmation email after the credit.
 - After the money has been credited, transfer of booking cancellation to the accommodation.
 2. Refund as a coupon
 - Executing cancellation before cancelling the payment.
 - Receiving confirmation email after the credit.
 - After the money has been credited, transfer of booking cancellation to the accommodation.
- Cancel without a refund.
 - Receiving confirmation email after the cancellation.
 - After the credit, transferring the cancellation of the reservation to the accommodation place.
- Order Modification.
 1. Changing the reservation date.
 2. Adding parts to the order - number of people.
 3. Changing the names of the guests.

6) Rating Page.

- Sending a message after the vacation ends to rate the accommodation location.
 - Rating of the location.
 - Rating of cleanliness.
 - Rating of service.
 - Rating of breakfast.
 - Rating of restaurants.
 - Rating of staff.
 - Rating of the shower.
- Sending a reminder if the accommodation place has not been rated.
 - Receiving an email about rating the place.
 - Receiving an offer from the place to rate it.
 - A thank you note if the place has been rated.
- Adding comments / a textual rating of up to 500 words.
 - Checking the size of the characters entered .
 - Checking the content written.

-Request to share the review with your name.

- Attaching photos up to 1MP in size.
 - Checking that the photos are appropriate and not something else.
 - Limit of up to 5 photos.

7) Benefits.

- The benefit is valid.
 - The benefit is updated in the shopping cart and can be used if needed.
 - Using the benefit is valid after the entire shopping process.
- Benefits that are not valid.
 - The option to use the benefit in the shopping cart is removed.

8)

Filter.

- Filter results on the homepage for valid values entered in the filter.
 - How many stars the guest house has.
 - Rating above 7.
 - Rating above 8.
 - Distance of 1 km from the center.
 - Pool.
 - Private pool.
 - Large rooms.
 - Bathroom with a bathtub. -
- Flexible outbound flight.
- Flexible outbound flight.
 - Spa center at the accommodation.
 - dish food included.
 - Free Wi-Fi.
 - Coffee and tea free.

-Preferred area.

- Ensure that filter results do not conflict.
 - Room with smoking and non-smoking room.
 - Room with breakfast and room with all-inclusive.
 - Room in two different quarters in the same place.
 - Room with a bathtub and room with a shower.
 - Room with a kitchen/room with a coffee machine.
 - Room with a sea view/room with a mountain view.
 - Suite/standard room.
 - Family room/king room.

2.2 test tree of functional tests

B) non-functional

- Upgrade & Installation Tests:
 1. Compatibility Testing:
 - Verify that the new version or upgrade is compatible with different browsers, devices, and operating systems.
 - Ensure compatibility with third-party plugins or integrations that the Gulliver website relies on.
 2. Functionality Testing:
 - Test all existing features to ensure they continue to work as expected after the upgrade.
 - Conduct regression testing to identify and address any unintended side effects.
 3. User Interface (UI) Testing:
 - Confirm that the user interface elements, styles, and layouts remain consistent with the design after the upgrade.
 - Test for any UI issues, such as alignment problems or broken elements
 4. Installation Process:
 - Test the installation process of the new version, ensuring it is well documented and easy to follow.
 - Verify that the installation process does not lead to unexpected errors or system conflicts.
 5. Compatibility with Existing Systems:
 -

- Confirm that the new version can be installed on the existing infrastructure without compatibility issues.
6. Post-Installation Checks:
- Conduct post-installation checks to verify that the system is running smoothly after the upgrade.

- **Recovery Tests:**

1. Network Failures:

- Connection Interruption: Simulate network failures and interruptions to ensure that the Gulliver website can handle temporary loss of connectivity and recover when the connection is restored.

2. Software and Application Failures:

- Application Crash and Recovery: Simulate a crash of the Gulliver application and ensure that it can restart without affecting ongoing transactions or data integrity.

- **Localization & Globalization testing:**

1. Language Support:

- Translation Accuracy: Verify that all text and content, including menus, buttons, error messages, and help documentation, are accurately translated into the target languages.
- Multilingual Content: Ensure that the Gulliver website can support multiple languages simultaneously.
- Language support: Check that the layout and content of the site are displayed correctly for languages that are read from right to left or left to right.

2. Date and Time Formats:

- Localized Date and Time Display: Confirm that date and time formats adhere to regional preferences.
- Time Zone Handling: Verify that date and time values are displayed and stored correctly based on the user's selected time zone.

3. Currency and Number Formats:

- Localized Currency Display: Ensure that currency symbols, formats, and decimal separators match the conventions of the user's region.
- Number Formatting: Verify that numbers are formatted appropriately based on regional preferences.

4. Address and Contact Information:

- Localized Address Formats: Confirm that address formats align with the expectations of users in different regions.
- Phone Number Formats: Validate that phone numbers are formatted according to regional conventions, including country codes.

5. Compliance with Regional Laws:

- Ensure that the Gulliver website adheres to local regulations, especially concerning data privacy, consent, and other legal requirements.
-

6. Testing in Different Locales:
 - Geographical Testing: Test the application with users from different geographical locations to identify and address issues specific to those regions.
7. Error Messages and Help Documentation:
 - Localized Error Messages: Confirm that error messages are presented in the user's selected language.
 - Localized Help and Documentation: Ensure that user guides and help documentation are available in multiple languages.
- **Usability Testing:**
 1. Navigation and Layout:
 - Test the intuitiveness of the website's navigation structure.
 - Ensure that important features, such as searching for accommodations, selecting dates, and making reservations, are easily accessible.
 - Evaluate the layout to ensure a clean and user-friendly design.
 2. Gulliver Process:
 - Test the entire Gulliver process, from selecting dates to confirming reservations.
 - Verify that the steps are clear and users can easily understand how to proceed.
 - Check for any unnecessary or confusing steps that may hinder the Gulliver process.
 3. Search:
 - Test filters and sorting options to ensure users can refine their search results based on preferences.
 4. Calendar and Date Selection:
 - Check the usability of the date selection feature, ensuring it's user-friendly and supports different date formats.
 - Confirm that users can easily switch between months and years in the calendar.
 5. User Registration and Login:
 - Assess the ease of user registration and login processes.
 - Verify that password recovery options are available and straightforward.
 6. Mobile Responsiveness:
 - Test the website's responsiveness on various devices, including smartphones and tablets.
 - Ensure that the mobile version maintains a seamless and user-friendly experience.
 7. Error Handling:
 - Evaluate how the website handles errors during the booking process.
 - Check if error messages are clear, concise, and guide users on how to resolve issues.
 8. Feedback and Confirmation:
 -

- **Compatibility Testing:**

1. Browser Compatibility Testing:

- Test the website on popular web browsers such as Chrome, Firefox, Safari, Edge, and Internet Explorer.
- Verify that the website functions correctly, and the layout remains consistent across different browsers.

2. Device Compatibility Testing:

- Test the website on various devices, including desktops, laptops, tablets, and smartphones.
- Ensure that the website is responsive and adapts to different screen sizes, resolutions, and orientations

3. Operating System Compatibility Testing:

- Verify that the Gulliver website is compatible with different operating systems such as Windows, macOS, Linux, Android, and iOS.
- Check for any OS-specific issues that may affect the functionality or appearance of the website.

4. Mobile Compatibility Testing:

- Test the website on a variety of mobile devices with different screen sizes and resolutions.
- Ensure that mobile-specific features, such as touch gestures, work as intended.

5. Offline Mode Compatibility:

- If the website supports offline functionality, test its compatibility with different browsers and devices when operating in offline mode.

2.3. Feature to be tested

All the feature of the Book website which were defined in software requirement specs :

Module Name	Applicable Roles	Description
Login	User	<ul style="list-style-type: none">● Confirm that the log in success when login with correct user name and correct password● Confirm that the log in not success when login with user name is correct and password incorrect● Confirm that the log in not success when login with incorrect user name● Login using a connected account
Search	User	<ul style="list-style-type: none">● Users can search for services or products.

Booking Process	User	<ul style="list-style-type: none"> ● Verify that users can select their desired services or products. ● Test the ability to add or remove items from the booking cart.
Notification	User	<ul style="list-style-type: none"> ● Confirm that users receive booking confirmation emails or messages. ● Test notifications for any changes or cancellations in bookings.
Payment	User	<ul style="list-style-type: none"> ● Confirm that the payment is processed successfully ● The user receives a payment confirmation by email. ● Verify that the booking is a success.
Cancellation Process	User	<ul style="list-style-type: none"> ● Confirm that users can cancel bookings if needed ,and any applicable refunds are processed
Booking Change	User	<ul style="list-style-type: none"> ● Confirm that users can change a booking date or any part of the booking.
Filter	User	<ul style="list-style-type: none"> ● Ensure the system handles invalid or unsupported filter combinations gracefully. ● Checking that the selected date has not passed. ● Checking the limited number of days for ordering.
Rating	User	<ul style="list-style-type: none"> ● Confirm that users can submit ratings for completed bookings and send a reminder message.
Coupon	User	<ul style="list-style-type: none"> ● Confirm that users can apply for a valid coupon during the booking process.
Social Media Integration	User	<ul style="list-style-type: none"> ● Test features related to sharing bookings or promotions on social media. ● Verify that social media login options work correctly.
Geolocation Services	User	<ul style="list-style-type: none"> ● Test features that involve geolocation. Verify ● accuracy in displaying location-based information.

2.4 Feature not to be tested

These feature are not be tested because they are not included in the software requirement specs

- Software Interfaces
- Database logical
- Communications Interfaces
- Website Security

3 Test Type

To ensure the strength and reliability of Gulliver websites, a comprehensive testing strategy has been devised, through various types of testing to address both functional and non-functional aspects.

Functional Testing:

1. **Integration Testing:**
 - Verify the interaction between different modules.
 - Ensure seamless data flow and functionality.
2. **API Testing:**
 - Validate APIs handling data requests and responses.
 - Confirm accurate data exchange between the website and external services.
3. **Regression Testing:**
 - Ensure that new updates or changes do not adversely affect existing functionalities.
 - Conduct regression testing after each update to validate the overall system stability.

Non-Functional Testing:

1. **Performance Testing:**
 - Assess responsiveness and load handling capabilities.
 - Conduct stress testing to evaluate performance under high user loads.
2. **Security Testing:**
 - Identify and address potential vulnerabilities.
 - Test for secure data transmission and storage practices
3. **Compatibility Testing:**
 - Ensure compatibility across different browsers and devices. ● Validate functionality on various operating systems.
4. **Usability Testing:**
 - Evaluate the overall user experience during the booking process. ● Check for intuitive navigation and user-friendly design.
5. **Load Testing:**
 - Assess the website's ability to handle specific loads.
6. **Volume Testing:**
 - Evaluate system performance with a large volume of data.
7. **Stress Testing:**
 - Test system robustness under extreme conditions.
8. **Recovery Testing:**
 - Verify the system's ability to recover from failures.
9. **Localization Testing:**
 - Test the website for different languages and regions if applicable.
 - Ensure that the content and features of the website adjust well to different languages and cultures.

4 Risk and Issues

Risk	Mitigation
Delays in project timelines.	Implement agile project management practices to allow for flexible planning and adjustments. Holding regular stand-ups to address and mitigate delays promptly.
Poor communication among team members and stakeholders.	Establish clear communication channels and regular update meetings. Using project management tools to keep everyone informed and engaged.
Changes in project requirements.	Implement a change management process to evaluate the impact of changes on budget, timeline, and quality. Ensuring stakeholder alignment on changes before implementation.
Inadequate testing coverage leading to quality issues.	Using risk-based testing to prioritize testing areas. Implement automated testing for repetitive tasks to increase coverage. Regularly reviewing and adjust test plans as the project evolves.
The project schedule is too tight; it's hard to complete the whole project on time.	Setting Test Priority for each of the test activity.

5 Test Logistics

5.1 Who will test?

The project will be tested by Beyondev QA Software Engineering Team.

5.2 When will the test occur?

Having the tests is a crucial part of the planning process.

The timing of tests can be broadly categorized into several phases of the software development lifecycle and based on specific criteria.

- During requirements analysis.
- After Design Phase.
- During Development.
- Before and After Deployment.

6 TEST OBJECTIVE

The objectives of the test are to verify the functionality of a site for selling and managing holiday accommodations, the project should focus on testing operations of booking a vacation or changing it or canceling an order through an existing user who is trusted to be able to manage the order through him, such as receiving confirmation of an order, an invoice for payment at checkout, etc. '. To ensure that all these operations can work normally and effectively in a real user environment that is interested in booking a vacation or accommodation anywhere in the world.

7 TEST CRITERIA

7.1 Suspension Criteria

If the team members report that there are **40%** of test cases **failed**, suspend testing until the development team fixes all the failed cases.

The tests are tests that constitute a better and higher quality user experience.

7.2 Exit Criteria

Specifies the criteria that denote a **successful** completion of a test phase

- Run** rate is mandatory to be **100%** unless a clear reason is given.

- Pass** rate is **80%**, achieving the pass rate is **mandatory**.

8 RESOURCE PLANNING

8.1 System Resource

No.	Resources	Descriptions
1.	Server	Using a robust Database server with MySQL installation to manage reservation data. Employ a Web server with Apache installation to host the Gulliver website.
2.	Test tool	Set up a high-speed LAN Gigabit and a reliable internet line with a minimum speed of 5 Mb/s to support real-time Gulliver interactions.
3.	Network	Setup a LAN Gigabit and 1 internet line with the speed at least 5 Mb/s.
4.	Computer	Deploy at least 4 computers running Windows 10 with 8GB RAM and a CPU clocked at 3.5GHz for testing various functionalities concurrently.
5.	browser	Ensure compatibility with popular web browsers such as Google Chrome, Mozilla Firefox, and Microsoft Edge, to verify that users can access the Gulliver website seamlessly.

6.	Mobile Devices	Include various mobile devices (iOS and Android) for testing the responsiveness and functionality of the Gulliver website on different platforms.
7.	Load Testing Tools	Using tools like Apache JMeter to assess the Gulliver website's performance under various loads and identify potential bottlenecks.
8.	Security Testing Tools	Employ security testing tools like OWASP ZAP to identify and address potential vulnerabilities in the Gulliver system.
9.	Database Management System	Using a robust Database Management System such as MySQL to manage and organize reservation data efficiently.
10.	Version Control System	Implement a version control system (e.g., Git) to track changes in the source code, ensuring collaboration and versioning control among team members.

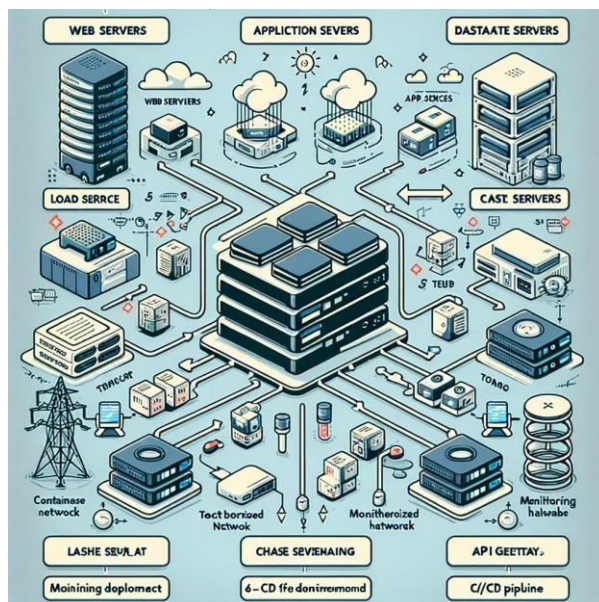
8.2 Human Resource

No.	Member	Tasks
1.	Project Manager	Oversee the entire project, define project directions, and acquire necessary resources for the successful testing of the Gulliver website.
2.	Test Team Lead	Lead the test team in identifying and describing appropriate test techniques, tools, and automation architecture. Verify and assess the Test Approach. Execute tests, log results, and report defects. Coordinate with outsourced team members if applicable.
3.	Test Engineers	Implement test cases, test programs, test suites, etc. Execute tests, log results, and report defects. Collaborate closely with developers to ensure comprehensive test coverage.
4.	Test Administrator	Build and ensure the test environment is effectively managed and maintained. Support testers in using the test environment for test execution, ensuring smooth testing processes.
5.	SQA Analysts	Take charge of quality assurance, confirming whether the testing process aligns with specified requirements. Provide ongoing feedback for continuous improvement in the testing process.

9 TEST ENVIRONMENT

The Test Environment should be setup as figure below.

test environment for Gulliver.com that include user, database and web server.



The test environment include:

Web Servers: To serve the web pages of the Gulliver.com site.

Application Servers: To handle the business logic and processing of the application.

Database Servers: To store all the data related to users, bookings, accommodations, etc.

API Gateway: To manage and route API requests to the appropriate services.

CI/CD Pipeline: For continuous integration and continuous deployment, integrating with version control.

10 SCHEDULE & ESTIMATION

10.1 All project task and estimation

Task	Members	Estimate effort
Create the test specification	Test Administrator	35 man-hour
Perform Test Execution	Tester, Test Administrator	25 man-hour
Test Report	Tester	15 man-hour
Test Delivery	Tester	20 man-hour
Total		95 man-hour

10.2 Schedule to complete these tasks

Stp and Std 18.2-22.2

Testing and objects model 23.2-28.2

Complete testing and presentation 29.2-3.3

11 TEST DELIVERABLES

refer to the tangible items or documents produced as a result of the testing process.

Test deliverables are provided as below

1. Test cases: scenarios that we are going to test is a case of a person who is using the product and he will make an order and receive an order confirmation by email
2. Test scripts: manual scripts with unit test cases and run the tests to see the performance against the expected scenarios.
3. Test data: We need user login details and internet connection and the website address.

11.1 Before testing phase

- Test plans document.
- Test cases documents.

11.2 During the testing

- during the test
- test tool • simulators.
- test data
- Email is open to receive notifications
- User details for connection and testing

11.3 After the testing cycles is over

- Test Results/reports
- Defect Report
- Installation/ Test procedures guidelines
- Release notes