

Test Approach

[HTTPS://BUGGY.JUSTTESTIT.ORG/](https://buggy.justtestit.org/)

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Objective

The purpose of this document is to outline the high-level test approach for testing Buggy Cars Rating website.

Testing Approach

- ❖ Analyzing the Requirement - Need to analyze the Requirement once the ticket is assigned for testing and need to add the Efforts (T Shirt Size).
- ❖ Analyzing the Tables & Views - Need to verify the Mapping, Fields, Data Types across all the Zones.
- ❖ Table, Raw to Refined Table and perform the testing as per the requirement.
- ❖ Update the Results - Failure/Clarification test cases in JIRA ticket and discuss with Developers and Data Analyst. Performing the Test again in case of discrepancies identified.
- ❖ Storing all the test results including SQL Query, Screenshots etc. in the Confluence Page and Updating the corresponding link in JIRA ticket.
- ❖ Need to change the JIRA ticket status to Peer Review for review the test results.

We need to test the below mentioned to ensure the quality across different zones.

- ❖ Mapping between the Source and Target Tables
- ❖ Views, Dimensions and Data Model
- ❖ Transformation Logics
- ❖ Data Type Conversion, Meta Data Check & Duplicate Check
- ❖ Initial and Incremental Load Testing
- ❖

Test Classification

- ❖ Functional Testing
- ❖ Non-Functional Testing
- ❖ User Acceptance Testing

- ❖ Automation Testing

Functional Testing

Testing is focussed on functionalities implemented by validating happy path, negative test scenarios and edge cases for the below functionalities.

- Registration
- Login
- Site Functionality

- Site Navigation

Manual Testing

Manual testing of the functionalities needs to be completed to ensure all the business requirements are satisfied and acceptance criteria defined is met. Test scenarios, Steps and expected results are to be defined and all the identified bugs are to be tracked through the life cycle of the project

Inputs:

- Business requirements
- Test Cases
- Acceptance criteria
- Test data

Outputs:

- Bugs

- Test reports Tools used:

- Jira Xray

The JIRA ticket status through the life cycle of Testing:

- ❖ Backlog - Tickets are created, developed and assigned to us for testing for particular sprint.
- ❖ Analyze - Tickets are picked for Testing and Analysis will be done in order to identify the scope of validation.
- ❖ In progress - Once the analysis is completed, Test execution will be performed.
- ❖ Peer Review - Post completion of testing, Ticket will be assigned to respective Developers/Data Analyst for peer review.
- ❖ Done - Once the sign off is received from the developer, Ticket status will be updated as Done.

Non-Functional Testing

Testing is focussed on validating if the non-functional requirements were met in below areas:

- Performance Testing
 - o Validate if the application is capable of handling expected amount of user loads by

simulating virtual users and checking for any bottlenecks • Load Test

- Stress Test

- Soak Test

- Spike test
- Security Testing
 - o Test the application to find out any security vulnerabilities
- Recovery Testing
 - o Check how the application is recovering from unexpected errors or outages in various dependant systems.

User Acceptance Testing

Test the application as a whole, to validate if the solution meets the business requirements and users can accept it as a solution. This includes executing the end-to-end scenarios and validating the state of the solution in various back-end systems. The following steps need to be carried during this phase:

- Test Planning
- Test Design
- Test Execution and Documentation
- Bug Fixing

Testing - Risks & Mitigation

Risk/Challenges	Mitigation Plan	Action
There is a possibility that QA team may get more number of tickets on a particular day.. Slippage may occur in order to meet sprint deadline with respect to completion of QA in scope tickets.	To mitigate this, we want to know how many tickets may require QA testing and ETA (From when the ticket is ready for testing) during sprint planning sessions.	QA Team will follow up with the project team and others, after sprint planning sessions.
QA Team may get 2-3 complex tickets on the last day of the sprint. So, slippage may occur in testing closure within the timeline	To mitigate this , we need to initiate a discussion with developers and get the priority tickets ASAP. In case QA team is not able to complete the tickets which are assigned to us during the last days of the sprint, then those tickets has to be spill over to the next sprints.	Need to follow up with developers and get the complex ticket on priority basis. So that sprint deadline can be achieved.
Confirming the testing scope in order to avoid Defect leakage.	QA Team is proposing a peer review from Developer/Data Analyst once the testing is completed. Also, QA will update the testing scope and results in JIRA ticket for reference purpose.	Ticket status will be changed to Peer review after the testing completed.