

Test Approach By: Team Striker

* **Problem: National train booking platform(Chatbot as a service - CaaS)**
* **Date**: 17th April 2023
* **Document Status**: Done
* **Author**: Prashant, Lata, Rahul and Rohit
* **Document Number**: Striker v1.0

[CONFIDENTIAL]

Table of Contents

[1. Introduction 2](#_Toc132645019)

[2. Testing Targets 2](#_Toc132645023)

[2.1. In Scope 2](#_Toc132645024)

[3. Testing Approach 3](#_Toc132645025)

[4. Test environments: 3](#_Toc132645036)

[5. Defect Management 4](#_Toc132645037)

[6. Testing KPI’s and Testing deliverables 4](#_Toc132645040)

[7. Metrics 4](#_Toc132645046)

[7.1. App Metrices 4](#_Toc132645047)

[8. Testing assumptions and risks 5](#_Toc132645048)

# Introduction

Test Approach for National train booking platform which has migrated to Azure with new UI, functionality and features with retention of all user data. NRB has a web application and corresponding native mobile applications supported on both Android and iOS.

NRB also has a chatbot as a service (CaaS) implementation which enables to solve all user queries.

It’s expected to handle a load of 1 lakh concurrent users.

# Testing Targets

Provide a high-level overview of the main functionalities and business requirements that will have to be covered during testing.

## In Scope

Functional and Non-Functional Testing

|  |  |
| --- | --- |
| Entry Criteria | • Requirements are approved |
| • Integration builds passes unit tests and static analysis |
| • The environment is set up  Tools used: Browser stack, Android studio, Devices, JMeter |
| Exit Criteria | • Tests that cover all new/changed requirements pass |
| • No critical, major defects in open state |
| • Test reports are available and reviewed |
| Test Approach | At the Design, Development and Continuous Integration stage, a set of regression tests is executed |
| At the Acceptance Testing stage: |
| • A broader set of functional test cases are executed. |
| • Performance testing |
| Test Methods | Black-box test methods |
| Accountable | Quality Assurance Lead |
| Responsible | Testers |

# Testing Approach

* Story analysis before Test creation tasks.
* Test execution will start once story is moved to QA.
* Test cases should be regularly updated.
* For every Test cycle such as Regression, Sanity and Smoke status report will be shared across the entire NRB team.
* Team availability for Daily stand-up and all scrum ceremonies.
* Proper test estimation

## Testing Types

### Functional Testing

### Interruption Testing

### Smoke / Sanity Testing

### Memory Leak Testing

### Performance Testing

### Usability Testing

### Security Testing

# Test environments:

* Development environment
* Test environment
* Staging environment
* Production environment

# Defect Management

All relevant information about the defects during its life cycle is tracked and stored using the defect management tool.

Defect reporting

Defects Monitoring and Controlling

# Testing KPI’s and Testing deliverables

## Test Strategy

## Test Plan

## Test Cases

## Traceability Matrix

## Test Report

# Metrics

Software testing metrics are a way to measure and monitor test activities.

Test execution reporting should contain below information:

* Overall number of test cases (by status)
* Test execution trend
* Number of defects and defect severity distribution
* Defect resolution time
* Defect open vs defect closed

## App Metrices

* Number of downloads
* Active users
* Session intervals
* Average usage time
* Churn Rates
* Your ranking in the Apple App Store and Google Play Store etc

# Testing assumptions and risks

* Lack of skills, resources
* Services failed from third party
* Shift in project major milestones etc