**Test Strategy**

**Project : ABC Redesign**

**Revision History**

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| --- | --- | --- | --- |
| Date | Version | Author | Description |
| 18/5/2022 | 1.0 | Chakshu | QA Test Strategy for ABC Redesign |
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# Scope

Test manager will be reviewing this document. Redesign’s main test scope is to check all the integrations of all webpages with all backend systems and APIs available.

Testing in scope : a. Integration testing  
 b. System testing  
 c. Regression testing  
 d. Performance testing  
 e. Acceptance testing  
 e. Security testing

# Test Approach

It defines

* Testing will be carried out in iteration level for all 5 iterations.
* Roles and responsibilities of each team member

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| --- | --- | --- | --- |
| Tester\_Name | Module | Time | Responsibility |
| Siddhartha | Retail Banking, leasing | 8hrs | Complete testing for all functionalities related to Retail banking |
| Manoj | Insurance, loan | 8hrs | Complete testing of Loan and Insurance functionalities |
| Maneesh | Card services | 6 hrs | Testing of Card and Leasing functionalities |
| Chakshu | UAT | 3 hrs | Checking all functionalities in UAT environment |

* Testing Types : Regression, Integration, System, User acceptance, Load testing, Security testing
* Automation framework need to be ready web application “ABC” will use tools like **TestNg, Selenium, Cucum**ber and follow Behavioural driven development technique.
* UAT testing will be performed by UAT team in which testing of all the modules in different ways.
* is done and **GO No Go** meeting will be held in order to give a green signal if the changes are ready to be deployed in production.
* Unit testing is performed first of the functionalities by the Dev team in sprints
* Security testing will be performed to maintain the confidentiality of the data in all test and production environments.
* Integration testing will be performed to check multiple modules and the performance between them.
* System testing will be performed by all QA engineers to make sure all functionalities and webpages are checked and working fine as per stakeholder expectation
* Jira is used for defect management. All the possible defects will be raised and resolved in Version One tool.
* For all the defects to be resolved, retesting and regression testing will be performed.

**SCRUM Model :**

* We follow Scrum model of Agile in order to deliver complex modules and functionalities in time without fail
* All Sprint ceremonies are followed so that Scrum master, Product owner and development team are in line with the delivering of the application
* **Sprint Planning** : In this ceremony, everyone in the scrum team connects and plans what need to be worked on for the next 14 days of the sprint.
* **Daily Scrum** : In this ceremony, Scrum master takes care of all on going activities by the team to find the status of the tasks and solve in case of any impediments.
* **Sprint Review** : In this ceremony, everyone in the scrum team lists out the delivered items of that sprint and let the team know if any user stories or tasks will be split to the upcoming sprints so that planning can be accordingly.
* **Product Backlog Refinement** : In this ceremony, Product owner prioritizes all the items which are planned for a PI and plan accordingly sprint wise.
* **Sprint Retrospective**: In this ceremony, team will be discussing on things what went well as planned and things to take care and overcome difficulties if any.

# Test Environment

* Dev , QA and UAT environments are the test environments available to perform testing at different levels so that the quality of the application is not compromised.
* **Dev Environment** : All the ongoing change requests of the functionalities of different modules will be tested and available.
* **QA Environment** : Integration and System testing will be performed by QA engineers to check all modules and their functionalities in the application.
* **UAT Environment** : UAT team will be performing testing of all the functionalities before the release and confirm whether the changes can be deployed into the production level if there are 0 bugs.
* **Pre Prod Environment** : Quick Smoke, sanity and reg

# Testing Tools

* **POSTMAN** – Testing APIs will be easy
* **HP ALM** – used for maintaining test scripts
* **Test Rail** – test management tool used for test design and test execution
* **Selenium** – Front end automation is taken care
* **Sonar Qube** – To maintain quality Security testing of the application
* **JMeter** – Performance testing

Above are the listed Automation and Test management tools needed for test execution.

# Release Control

* Release management plan with appropriate version history that will make sure test execution for all modification in that release
* Release planned for **every 2 sprints** i.e, 30 days with all planned features and enhancements
* Continuously working on user satisfaction and making UI more friendly as functionalities are complex
* Patch releases are planned when minor fixes are to be done in Production

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| --- | --- | --- |
| Release Date | Modules | Remarks |
| 20-04-2022 | Banking – New features planned | Successfully deployed and tested in Prod. |
| 20-05-2022 | Enhancements of existing functionality–Retail Banking | NA |
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# Risk Analysis

* We maintain outage of the application for sometime depending on the list of changes getting deployed so that when there is a bugger impact on the application after deployment. We will be able to roll back the release to keep application working.
* Proper Sanity and smoke testing will be done to overcome any major impacts on the deployments.

# Review and Approvals

* After defining all the activities, project management, Business team, Development team and system admin team will be reviewing the documents and then Test plan will be planned once the approval is provided.