EETeamJ1

QA Test Plan

Version: 1.0

Revision History

1. Introduction

The document is a high-level overview outlining the test planning for the case study project assignment to be taken up by ***EE Team J1*** group. The objective is to set the test strategy for the particular product releases. This broadly describes the objective, testing scope, testing type, Entry & Exit criteria details in order to deliver adequate quality product.

Document Objectives

Define the general strategy and approach that will be incorporated to test the software and evaluate the test results.
Define the top-level plan that will be used to govern and direct detailed testing for the following test types: Functional, Environmental, Regression and User Acceptance.
Unit testing be covered as the development activity.
Provide visibility to stakeholders that adequate consideration has been given to the various aspects of testing, and where appropriate have the stakeholders approve the plan.
Identify the test environment required for each phase.
Identify the deliverables that should be targeted by the test phases.
Identify the modification for and the ideas behind the test areas to be covered.
Outline the test approach that will be used.

2. Test Strategy

Below identification table helps to identify what are different types of testing should be performed for the release.

Apart from the above rounds in case of immediate or urgent UAT release only the major bugs like blockers and critical be tested.

4. Test Scope

A Hadoop data lake will be created with 4 node cluster setup. The team will develop a

reference use case using multiple technologies.
The section describes the features which would be covered during the exercise along with features which would not be covered.

Things needs to be covered
Following technologies will be used to create the environment
Apache Hadoop/Yarn
Ambari
Pig
Hive
Kerberos (Security)
Ranger
ELK
Oozie
Spark
A sample movie lens application will be created to use the movie lens data for performing various operations. Few high level features that will be implemented as part of this activity-
List all the movies and the number of ratings
List all the users and the number of ratings they have done for a movie
List all the Movie IDs which have been rated (Movie Id with at least one user rating it)
List all the Users who have rated the movies (Users who have rated at least one movie)
List of all the User with the max,min,average ratings they have given against any movie
List all the Movies with the max,min,average ratings given by any user
Monitoring the multi-node cluster environment (Nagios/Ganglia)

5. Test assumptions

Test environment is available.
User stories, Acceptance Criteria is clearly mentioned to avoid disparity between Test Cases and actually developed functionality.
Exploratory Testing would be carried out once the build is ready for testing.
Performance testing will not be considered for this estimation.

All the defects would come along with snapshot.
Test case design activities will be performed by QA.
Test environment and preparation activities will be owned by Dev Team.
Dev team will provide Defect fix plans based on the Defect meetings during each cycle to plan. The same will be informed to Test team prior to start of Defect fix cycles.
There is no environment downtime during test due to outages or defect fixes.
The system will be treated as a black box; if the information shows correctly online and in the reports, it will be assumed that the database is working properly.
Benchmark testing will start only when QA environment is in stable state. (No Blocker, Critical, Major bugs is in open state).
6. Risk & Mitigation

7. Entry & Exit Criteria
Entry and exit criteria are flexible benchmarks. If they are not met, the test team will assess the risk, identify mitigation actions and provide a recommendation. All this is input to the project manager for a final go-no go decision.
Entry criteria of release

Exit criteria of release