**Assignment 1**

1. A written document outlining your quality assurance strategy and objectives.
2. I will work with the required QA document to effective track bugs, report to the developers, take follow-ups, and deliver error free product to the client. In which following steps will included :

* **Checklist:** In this document the list of feature that’s need to be test that cover all the functionality of the software.
* **Test Plan:** It includes the all the test activities, goal of testing, test schedule, all conditions, and deadlines etc.
* **Test Case:** It is the description of the all steps of testing to test a particular functionality of the software.
* **Use Case:** It includes the different use cases of a product feature in different scenarios.
* **Defect Report:** It includes to explain a bug in the software in which all the steps and conditions are defined for the bug was encountered tester.

**Now create the Case:**

* **ID:** It is an identifier field to help distinguish between test cases and a bug for track them easily.
* **Priority:** It includes the severity of the bug, how much it affects the module of the software. Different grading values can be used to show the test case priority like high, medium and low.
* **Test Requirement Document:** It contains the requirements for testing software.
* **Test Content:** Contain all the test steps for doing testing of the particular module of the software.
* **Expected Test Output:** It includes the expected output of module of the software.
* **Actual Test Output:** It includes the actual outcome of the testing which includes the bug/error in the module of the software.
* **Comment:** It contain the extra information regarding the bug.

1. A comprehensive test plan for the assigned feature, including test cases and test scenarios.
2. To write the effective test plan following steps should be included in it :

* Productive analysis: Learning about the product for testing.
* Designing the test strategy: It includes the project objectives, the amount of effort, scope of testing, type of testing, risk and issue (if any).
* Testing criteria: it includes the positive and negative test cases.
* Test environment: It includes the testing server or platforms like stage server, QA server and production server.

1. A defect report summarizing the defects found during testing and their prioritization.
2. During creating a bug report, the tester cover the following points as follows:

* Bug Id: It is unique id for the particular defect.
* Bug description: It includes the detail of the bug in detail which includes the actual result and expected result.
* Steps for reproduce the bug: it includes all the steps to reproduce the bug for developer understanding.
* Environment: It cover’s the testing environment where test was performed.
* Priority: it should be normal, critical, and blocker.
* Severity: it should be low, medium, high and critical.

1. A description of the automated test scripts developed and their integration into the testing process.
2. The script is set of instruction to test a module of an application automatically. It is done according to the scripting format. In this we use the different commands of any programming language like: Java, Python and JavaScript etc. The automation include following benefits:

* Execute lengthy test scenario in less time
* Fast feedback process
* Effective smoke and sanity testing
* Test multiple module in parallel
* Reusability of test script
* Easy data driven testing
* Better regression testing
* Maximum test coverage
* Reduce the time of testing
* Low business cost
* Better utilization of resource
* Enhance the better quality of testing

1. A report highlighting your proposed improvements to the quality assurance process.
2. This reports the following points:
   * Quality standards: This report contains the client expectation, proper functionality of the product, level of quality. Quality of testing maintains the consistency of the production.
   * Frequent Reviews: It includes the regular or frequent reviews the product and its functionality.
   * Update of production process: It includes the new area where we can improve our product, gives the solution to reduce the problems, to develop more consistency in our product.
   * Client feedback: Regular read and understand the client review which can help us to improve our product.
   * Automate specific feature: by automating the specific feature which uses frequently can improve our time management and helps to catch the defect very fast.