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Task: STLC

SOFTWARE TESTING LIFE CYCLE

SOFTWARE TESTING:

- ❖ Software testing is a process to evaluate the working functionality of a software application, with the intention to find whether the developed software met the specified requirements or not.
- ❖ To identify the defects for producing defect free products.

SOFTWARE TESTING LIFE CYCLE:

- ❖ Identifies what are the test activities to carry out and when to accomplish those tests.
- ❖ The testing process is executed in a well-planned and systematic manner.
- ❖ All testing activities are done to improve the quality of the product.

PHASES:

- ❖ Requirement analysis
- ❖ Test plan creation
- ❖ Environment setup
- ❖ Test case execution
- ❖ Defect Logging
- ❖ Test Cycle Closure

REQUIREMENT ANALYSIS:

- ❖ Review Software Requirements Documents (SRD) and other documents to understand what needs to be tested.
- ❖ If anything is missing, then gather that additional information.
- ❖ Identify any inconsistencies in the requirements.
- ❖ Identify the risk that may impact the testing process.
- ❖ **Deliver**: List of all necessary tests.

TEST PLAN CREATION:

- ❖ All the test strategies are defined in this phase.

- ❖ To calculate the estimated effort and cost of entire project.
- ❖ List the methods of the test schedule and control procedures.
- ❖ **Deliverable**: Strategy Document, Estimation Document.

ENVIRONMENT SETUP:

- ❖ It involves setting up the necessary hardware, software and network configurations.
- ❖ With the help of those things, to create a test environment.
- ❖ Senior developers are going to create a testing environment.
- ❖ Deliverable: Execution report, Defect report.

TEST CASE EXECUTION:

- ❖ Prepare the test data.
- ❖ The test cases and the scripts created in the test plan stage are run against the software to detect any defects or issues.
- ❖ Test cases and scripts are run as per the test plan.
- ❖ The outcomes of each test case (pass, fail, or blocked) are recorded.
- ❖ **Deliverable**: Test execution report.

DEFECTS LOGGING:

- ❖ Ensure all defects are tracked and managed effectively.
- ❖ This process involves recording detailed information about the defect to help developers understand, reproduce, and fix the issue efficiently.
- ❖ Defects like Quality, time consumption, cost, critical business objectives.
- ❖ **Deliverables**: Defect report (Bug Report).

TEST CYCLE CLOSURE:

- ❖ It includes all in the documents related to the software design, development, testing results and defects reports.
- ❖ Test summary report: A report is created, it includes overall testing process, no of test cases executed, no of defects found, overall pass/fail rate.
- ❖ Test report knowledge transfer, feedback and improvement details are shared.
- ❖ Deliverables: Test closure report.