

Test Plan: PlacementPal : Graduation and Placement Predictor**1. Introduction**

Establishing the testing strategy and practices for the XYZ Software project is the aim of this test plan. Prior to deployment, it is important to ensure that the application satisfies all functional, performance, security, and usability requirements.

2. Scope

This test plan includes the following types of testing:

- Unit Testing
- Integration Testing
- Functional Testing
- Performance Testing
- Security Testing
- User Acceptance Testing (UAT)

3. Test Objectives

- Check each individual unit of code for accuracy (unit testing).
- Control how smoothly software components interact (integration testing).
- Verify each and every functional need for the software.
- Assess the scalability and performance of the software.
- Recognize and fix security issues.
- Validate usability and user satisfaction (UAT).

4. Test Environment

- Operating Systems: Windows, macOS, iOS, Android
- Browsers: Chrome, Firefox, Safari, Edge
- Database Management System: MySQL
- Testing Tools

5. Test Strategy

- Unit testing will be done by developers when they are in the development process.
- To make sure that the interactions between modules are accurate, integration testing will be carried out.
- Functional testing will be used to check certain features and use cases.
- Performance testing will measure the system's response time, scalability, and resource usage.
- Security testing will reveal vulnerabilities, and a fix will be put in place.
- End users will participate in UAT to assess the usability and satisfaction of the program.

6. Test Cases

- Each testing method will have a unique set of test cases.
- Each test case will have a description, test steps, expected outcomes, and pass/fail criteria.
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- In the test cases, both favorable and unfavorable scenarios will be explored.

7. Test Schedule

- The testing phase will start following the development phase and continue while problems are being fixed.
- A thorough testing schedule that specifies the beginning and ending times of each sort of testing will be created.

8. Defect Management

- The reporting of faults will follow a standardized procedure.
- There will be a severity and priority rating assigned to each fault.
- Defects shall be monitored, examined, and corrected as soon as practical.
- After a defect has been fixed, regression testing will be done.

9. Test Deliverables

- Test strategy
- Test scripts and cases
- Data and environments for testing
- Test results
- Reports of flaws

10. Risks and Contingencies

- Risks will be identified, assessed, and documented.
- Contingency plans will be created for dangers with significant potential for harm.
- The testing schedule will be adjusted as necessary to take into account unforeseen difficulties.

11. Approvals

- Before testing begins, project stakeholders will review and approve this test plan.

12. Conclusion

This test plan outlines the testing strategy and procedures for the XYZ program project, ensuring that the program meets user expectations and quality standards. The testing phase will be conducted with regular communication and coordination between the testing team, the development team, and the stakeholders to ensure a successful outcome.