Case Study Analysis

ONLINE JOB PORTAL MANAGEMENT SYSTEM

By Kamal Acharya

Mhark Anthony Pentinio   BA-3101

1. Briefly describe the main stages of software testing: unit testing, integration testing, system testing, and acceptance testing. Include the goals of each stage and how they contribute to the overall reliability and quality of a software product

Software Testing Stages:

- Unit Testing: Tests individual components, like login and registration modules, to ensure they function as intended. This helps catch issues early in isolated code sections, improving overall software stability.

- Integration Testing: Verifies that combined components, such as candidate profile management and job posting, work together smoothly. In a job portal, this ensures that user actions flow seamlessly between modules.

- System Testing: Evaluates the complete system in an environment similar to production to confirm that it meets functional and performance requirements. For a job portal, this includes testing search features, application tracking, and data security.

- Acceptance Testing: Confirms the portal meets business requirements and user expectations. This final testing step validates that the software is ready for deployment.

2. Describe acceptance testing and its importance in software development. Explain how acceptance testing differs from system testing and why it is often considered the final stage before release.

Acceptance testing is a vital phase in software development that evaluates whether a system meets the required specifications and fulfills user needs, marking the final stage before a software product is released. It verifies that the

product aligns with the initial business goals, addressing user expectations and ensuring that the software can operate as intended in a live environment.

In a job portal application, for example, acceptance testing checks if functionalities like job search, profile management, and application submission work effectively and meet the user requirements. The focus is on the satisfaction and usability aspects important to end-users, in contrast to system testing, which emphasizes the technical functioning of the entire system.

Acceptance testing differs from system testing primarily in purpose and scope. While system testing confirms that components work well together across different functions, acceptance testing focuses on the overall user experience and business objectives. It assures that the system will perform well for actual users, minimizing the risk of dissatisfaction and ensuring a smooth transition to real-world use

3. Identify and describe different types of acceptance testing, such as user acceptance testing (UAT), operational acceptance testing (OAT), contract acceptance testing, and regulatory acceptance testing. Explain when each type might be used and what it aims to achieve.

Types of Acceptance Testing:

- User Acceptance Testing (UAT): Conducted by real users to validate that features, such as job applications and notifications, function as expected.

- Operational Acceptance Testing (OAT): Ensures that operational elements, like system availability and data backup, are in place, which is critical for continuous platform accessibility.

- Contract Acceptance Testing: Checks compliance with contractual requirements, especially important if the portal is developed for a specific organization.

- Regulatory Acceptance Testing: Confirms compliance with industry regulations, like data protection laws, ensuring the job portal protects user privacy and handles data securely.