

Software QA Tester - Questionnaire

General

1. Why are you interested in Software Testing?

I look for jobs about which I am passionate because this allows me to be extremely productive and creative. Testing is about more than just making sure that the program works. The ultimate purpose of Software Testing is not to find bugs but to make the product superior. As a tester, I am contributing to improvements in the product's quality, and therefore playing an important role in the company. Comprehending and testing products, while considering factors like functionality, performance, security, and many others, is a multi-faceted and complex task. One of my software tester's biggest challenges resides in understanding the vast range of devices available and checking the application's behavior in terms of response time and usability. For that reason, with my inquisitive nature and a keen eye for detail, I am very committed to excellence. I also want the opportunity to prove myself in the Software tester hierarchy of responsibilities in a leadership position. Leadership has the power to inspire individuals to achieve great things. A great leader creates a positive work culture that fosters collaboration and creativity.

2. Are you familiar with Phishing and Social Engineering techniques?

In my opinion, Social Engineering is a very important term used for a broad range of malicious activities accomplished through human interactions. It uses psychological manipulation to trick users into making security mistakes or giving away sensitive information. There are more steps for Social engineering attacks to happen than stimuli for subsequent actions that break security practices, such as revealing sensitive information or granting access to critical resources. That's why human errors are especially dangerous rather than vulnerabilities in software and operating systems. For that reason, we must really know the Social Engineering Attack Lifecycle and attack techniques for choosing the best way of protection. The five most common forms of digital social engineering assaults are: Baiting (malware-infected flash drives, malicious sites...), Scareware (legitimate-looking popup banners, rogue scanner software, spam email, fraudware...), Pretexting (impersonating other persons who have authority), Phishing and Spear phishing (more targeted version, the most popular social engineering attack types). With creating a sense of urgency, curiosity, or fear in victims, phishing is the right way to take current credentials and new passwords from users and their services. There are many testing programs that let organizations send realistic but fake phishing emails to employees in order to see how they respond. It is used to gauge the effectiveness of phishing training programs that are designed to help employees spot phishing emails and to handle them appropriately.

3. Are backups relevant in today's era of Cloud Computing?

Cloud computing is like the delivery of computing services which includes servers, storage, databases, networking, software, analytics, and intelligence over the internet ("the cloud") to offer faster innovation, flexible resources, and economies of scale. We can use the benefits of cloud computing like lower costs, scale elastically, high hardware performance, speed, and productivity. With the benefit of reliability, Cloud

computing makes data backup very easier and less expensive because data can be mirrored at multiple redundant sites on the cloud provider's network. For example, Azure offers an end-to-end backup and disaster recovery solution that's simple, secure, scalable, and cost-effective—and can be integrated with on-premises data protection solutions. But it's still important to back up data parallelly. Data backup and recovery is creating and storing backup copies of data to safeguard businesses from data loss due to breaches, external attacks, software crashes, and hardware failures. With many automated project management backup solutions we can use all advantages available for companies.

QA-related

1. Do you have experience in a similar role? If yes, please explain what type of testing methodologies (manual/automation/agile/scrum) and technologies (Web/desktop/API) you made use of (if any).

I have experience in non-functional testing with JMeter. It improves performance testing, load testing, and stress tests. With JMeter are testing Web apps and FTP apps, made functional tests, and database testing. Simulate multiple users with concurrent threads, creating a heavy load against web apps under test. It's important for distributed testing, recording, and playback and is useful for multiple protocols: HTTP, FTP, JDBC, and SOAP.

BlazeMeter – test platform for GUI testing, performances, API testing, functional testing, moca servers, API Monitoring, and reporting.

Robot Framework – test automation framework for acceptance testing(fourth phase of testing stages) and acceptance test-driven testing. It's a keyword-driven framework and very useful for creating test cases and test scenarios. I have tested social networks, databases in HeidiSQL, PostgreSQL, web apps, and pages.

SeleniumIDE – open source test automation tool for recording and playback the actions on the web.

Postman – low-code tool for building API applications. It's used in the second phase of the testing stages: Integration and automation. By writing functional tests, regression, and integration tests we can provide good code quality in the early stages of software development.

I have experience in XAMPP(cross-platform, virtual server), HeidiSQL(open-source administrative tool, regression testing with creating Stored procedures), StarUML(ER diagrams, Requirements, Block diagrams...) in relation to JUnit in Apache NetBeans(component testing - the first phase of the testing stages like Unit testing and repeatable tests.)

Experience in manual testing apps and web pages.

2. Which character traits, in your opinion, would make a person a good Software QA Tester? And why?

There are characteristics that form the base skills required by a software tester, there are others that are supremely important given the increasing level of competition, and the increasingly complex role a software tester plays in today's software development environment. Some of them are: Strong Analytical Skills and the ability to analyze is essential, a holistic approach with deep analysis to be able to raise all our test cases. Excellent Communicator with wide cultural aspects, able to actively anticipate and disclose potential risks, Quick and Continuous Learning to maintain adaptability to new projects and new challenges presented to them. Creativity, Technical Tools, and Technical Knowledge for achieving optimal execution, It is critical for a highly effective tester to have a plan, and have their plan ready before any test execution activity. I think the importance of all of these skills will come out of the needs of the market, clients, and the organization.

3. How would you test a very simple login page? Please write down as many test cases (UX/security/functionality) as you can think of – be creative! The first four tests are written down below already.

(Requirements for this page: This page has only 2 input fields which are used to enter a username and a password, and two buttons to login or cancel, which are located underneath the input fields on the same page.)

Examples:

Test logging in with incorrect username and correct password (Logging in should fail).

Test logging in with a correct username and an incorrect password (Logging in should fail).

Test logging in with an incorrect username and an incorrect password (Logging in should fail).

Test logging in with the correct username and a correct password (Logging in should succeed).

Test logging in empty username and empty password (Logging should fail, username and password are required).

UX Scenario: Verify is the interface easy to use, clear, and intuitive design, and is there the two labels for username and password; Check the messages for incorrect username and password, and message for empty fields, Check and test the "Login" and "Cancel" button and their functionality for help users to log in or cancel the request, Validate the fields for incorrect, highlight text or letters.

Security Scenario: Verify is failed login if the credentials are incorrect, Verify the fields enforce strong password requirements, min, and max characters, Verify if exist SQL injection and cross-site scripting (XSS), Check if the account lockout after multiple failed attempts and check proper session timeouts and secure session handling.

Functionality Scenario: (JMeter) Create Treads(multiple users) from accessing the same account simultaneously, Check if logging can endure endless requests-users at the same time(stress testing), Check all roles for admin and other users and appropriate access based on their privileges, Verify if a user can change the username or password properly and securely, Verify the correct roll that appears in the appropriate click on dashboard and menu.

Technology and Networking

1. Did you ever set up a network? If yes, please describe the network, including the process (and hardware) that you have used in technical details. (This can be any network, even a home network.)

I have networked a basic home network with a fiber connection. I have an ISP modem that I got from our ISP (Internet Service Provider). Modems (modulators-demodulators) are used to transmit digital signals over analog telephone lines. The model is Arris VIP 1002ESL. I have an internet connection with multiple devices and need a router. These kinds of routers typically allow you to connect up to four devices using a network (UTP) cable. From a security perspective, I used my own router instead of the router from the ISP. Routers are the first line of defense, and they must be configured to pass only traffic that is authorized by network administrators, I used Huawei Echo Life HG814VS. Also changed the password, and network security key, from the wireless network, and disable WPS if it's enabled in the router. I have more than four wired network devices (computers, printer, game console, 2 smart tvs), then I added a network switch to the network layout. Hubs connected two computers networking devices together. Using switches improves network efficiency over hubs or routers because of the virtual circuit capability. I used an 8-ports network switch below the router. A good 8 ports switch with PoE ports is an Unifi US-8-60W. For laptops and some mobile devices, we are using a wireless network. I chose an optimal location to give the best wireless network performance possible. But I think an access point (AP) can technically involve either a wired or wireless connection, it commonly means a wireless device. For higher speeds to be reached between the device and the access point must support MU-MIMO (Multi-User, Multi-Input, Multi-Output).

2. What is the difference between http and https? What is the advantage for a user, to browse a website which can only be accessed via https?

The main difference is in encrypting and verification. The S in HTTPS stands for "secure." HTTPS uses TLS (SSL) to encrypt normal HTTP requests and responses and to digitally sign those requests and responses. When an organization enables HTTPS, any information we transmit, like passwords or credit card numbers, will be difficult for anyone to intercept and we like users are secured.

3. What do you understand by data encryption? Why it is important?

Data encryption, known as ciphertext, is a security method where information is encoded and can only be accessed or decrypted by a user with the correct encryption key. We need encryption for protects sensitive personal data such as passwords, social security numbers, and SSNs and share confidential information. I have created pipelines

with Asymmetric encrypted/decrypted content in the JSON file generator by creating key pars. The decrypting tool I used was Snaplogic.ss

4. Which programming languages do you have experience with? And to what extent?

I have experience with Java in Eclipse for small project development. Apache NetBeans – tools for Java application development I used for creating Unit tests, repeatable tests with annotations, and Python in Robot Framework for creating scenarios and writing test cases. I use JavaScript for writing tests in Postman API Platform.

5. How would you rate your practical experience for each of the following on a scale of 1-5, 5 being the highest? (Does not necessarily have to be “on the job”-experience.)

Windows PowerShell	1	2	3	4	5
Windows Server OSs	1	2	3	4	5
Active Directory/LDAP	1	2	3	4	5
MS Exchange Servers	1	2	3	4	5
Microsoft Hyper-V	1	2	3	4	5
VMWare ESXi Servers	1	2	3	4	5
SQL	1	2	3	4	5
Network routers	1	2	3	4	5
REST API	1	2	3	4	5
Office 365 Management	1	2	3	4	5
Linux	1	2	3	4	5
Cybersecurity	1	2	3	4	5
E-mail Transport and Flow	1	2	3	4	5
Cypress	1	2	3	4	5
Test Automation	1	2	3	4	5

Thank you for answering our email interview questions! Please forward your answers to us via email. We will review them as soon as possible.