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# Testing interview questions and answers pdf pdf download full

Score: 0% Rank: Correct Answer: Let's begin this software testing interview questions with beginners level questions first. Basically, it starts with the Unit Testing phase and ends with Acceptance Testing. A defect life cycle is a process in which a defect goes through various phases during its entire lifetime. It starts when a defect is found and ends when a defect is closed, after ensuring it's not reproduced. Bug or defect life cycle includes the steps as illustrated in the below figure. If you wish to learn in depth about Bug Life Cycle then you can refer my article on Software Testing Tutorial. It can vary from organization to organization and also from project to project based on several factors like organization policy, software development model used (like Agile, Iterative), project timelines, team structure etc. A test case is nothing but a set of conditions or variables under which a tester will determine whether a system under test satisfies requirements or works correctly. Verification: It is a static analysis technique. Here, testing is done without executing the code. Examples include - Reviews, Inspection, and walkthrough. Validation: It is a dynamic analysis technique where testing is done by executing the code. Examples include functional and non-functional testing techniques. In the V model, the development and QA activities are done simultaneously. There is no discrete phase called Testing, rather testing starts right from the requirement phase. The verification and validation activities go hand in hand. It is a testing methodology where the end customer is asked to use the software to see if the product is easy to use, to see the customer's perception and task time. An accurate way to finalize the customer point of view for usability is by using prototype or mock-up software during the initial stages. Basically, the acceptance document is prepared using the following inputs. The parameter used in software testing to describe the extent to which the source code is tested is known as coverage. There are three basic types of coverage techniques and they are: Selenium is an open source tool which is used for automating the tests carried out on web browsers. Since Selenium is open-source, there is no licensing cost involved, which is a major advantage over other testing tools. Other reasons behind Selenium's ever-growing popularity are: The locator is nothing but an address that identifies a web element uniquely within the webpage. Thus, to identify web elements accurately and precisely we have different types of locators in Selenium as follows: XPath also called as XML Path is a language to query XML documents. It is an important strategy to locate elements in selenium. It consists of a path expression along with some conditions. Here, you can easily write XPath script/query to locate any element in the webpage. It is designed to allow the navigation of XML documents, with the purpose of selecting individual elements, attributes, or some other part of an XML document for specific processing. It also produces reliable locators. It is the direct way to find the element, but the disadvantage of the absolute XPath is that, if there are any changes made in the path of the element then that XPath gets failed. For example: /html/body/div[1]/section/div[1]/divFor Relative XPath, the path starts from the middle of the HTML DOM structure. It begins with the double forward slash (/), which means it can search the element anywhere at the webpage. For example: //input[id='ap\_email'] Exceptions in Selenium are similar to exceptions in other programming languages. The most common exceptions in Selenium are: Selenium Grid can be used to execute same or different test scripts on multiple platforms and browsers concurrently so as to achieve distributed test execution, testing under different environments and saving execution time remarkably. The following syntax can be used to launch the Browser: WebDriver driver = new FirefoxDriver(); WebDriver driver = new ChromeDriver(); WebDriver driver = new InternetExplorerDriver(); Want to upskill yourself to get ahead in your career? Check out this videoIntermediate Level Software Testing Interview Questions and Answers 21. Should testing be done only after the build and execution phases are complete? Testing is always done after the build and execution phases. Earlier we catch a defect, the more cost effective it is. For example, fixing a defect in maintenance is ten times more costly than fixing it during execution. 22. What's the relationship between environment reality and test phases? As test phases start moving ahead environment reality becomes more important. For example, while unit testing, you need the environment to be partly real, but at the acceptance phase you should have a 100% real environment, or we can say it should be the actual real environment. The above graph shows during acceptance testing it should be 100% real. 23. A defect which could have been removed during the initial stage is removed in a later stage. How does this affect the cost? If at the initial stage a defect is identified, then it should be removed during that stage/phase itself rather than at some later stage. It's a fact that if a defect is delayed for later phases it becomes more costly. The following figure shows how a defect is costly as the phases move forward. If a defect is identified and removed during the design phase, it is the most cost effective but when removed during maintenance it becomes twenty times costlier. 24. What do you mean by regression and confirmation testing? Regression Testing: It is defined as a type of software testing to confirm that a recent code change has not adversely affected existing features. Confirmation Testing: When a test fails because of the defect, the defect is reported. Then a new version of the software is submitted whose defect is fixed. This is called as confirmation testing or re-testing. 25. What do you mean by boundary value analysis? Boundary Value Analysis (BVA) is a black box test design technique which is applied to see if there are any bugs at the boundary of the input domain. 26. What is Random testing? Usually, in Random testing, data is generated randomly often using a tool. For example, the following figure shows how randomly-generated data is sent to the system. This data is generated either using a tool or some automated mechanism. With this randomly generated input, the system is then tested and results are observed accordingly. 27. On what basis you can arrive at an estimation for your project? To estimate your project, you have to consider the following points: Divide the whole project into the smallest tasks. Allocate each task to team members. Estimate the effort required to complete each task. Validate the estimation. 28. Which test cases are written first, white boxes or black boxes? Usually, black box test cases are written first and white box test cases later. To write black box test cases we need the requirement document and design or project plan. These documents are easily available at the initial start of the project. White box test cases cannot be started in the initial phase of the project because they need more architecture clarity which is not available at the start of the project. So normally white box test cases are written after black box test cases are written. 29. Mention the basic components of defect report format. The basic components of defect report format include: Project Name, Module Name, Defect detected on, Defect detected by, Defect ID and Name, Snapshot of the defect, Priority and Severity status, Defect resolved by, Defect resolved on. 30. Is Automation testing in agile methodology useful? Automation testing is very useful in agile methodology and helps in achieving maximum test coverage in a lesser time of the sprint. 31. Which test cases can be automated? Smoke test cases, Regression test cases, Complex calculation test cases, Data-driven test cases, Non-functional test cases. 32. On what basis you can map the success of Automation testing? By following criteria, the success of Automation testing can be mapped: Defect Detection Ratio, Automation execution time and time savings to release the product, Reduction in Labour & other costs. 33. Explain Load Testing on websites? To access a website, a user sends a "request" to that website's server, and the server sends back a response in the form of the website you want to access. To load test a website, quality assurance engineers and automation engineers just need to multiply the number of responses sent to simulate different traffic loads. The web server's response to the influx of virtual users can then be measured. This is used to determine performance issues and server capacity. 34. What is the difference between Selenium and Sikuli? Selenium/Sikuli cannot automate flash objects like video player, audio player etc. It provides extensive support to automate flash objects. It has got complicated API. It has a simple API. It can automate only web applications. It can automate the web as well as a windows application. 35. How to click on a hyperlink using linkText()? driver.findElement(By.linkText("Google search")).click(); This command finds the element using link text and then click on that element. Thus, the user would be re-directed to the corresponding page. 36. What is TestNG? It is an advanced framework which is designed in a way to leverage the benefits by both the developers and testers. It also has an inbuilt exception handling mechanism which lets the program to run without terminating unexpectedly. 37. How to set test case priority in TestNG? Below code helps you to understand how to set test case priority in TestNG. package TestNG; import org.testng.annotations.\*; public class SettingPriority { @Test(priority=0) public void method1() { } @Test(priority=1) public void method2() { } @Test(priority=2) public void method3() { } } Test Execution Sequence: Method1 Method2 Method3 38. What is the difference between Selenium and QTP? Selenium/Quick Test Professional Selenium supports almost all the popular browsers like Firefox, Chrome, Safari, Internet Explorer, Opera etc. QTP supports Internet Explorer, Firefox and Chrome. QTP only supports Windows Operating System. Selenium is distributed as an open source tool and is freely available. QTP is distributed as a licensed tool and is commercialized. Selenium supports testing of only web-based applications. QTP supports testing of both the web-based application and windows based application. 39. What is Object Repository? How can we create Object Repository in Selenium? Object Repository refers to the collection of web elements belonging to Application Under Test (AUT) along with their locator values. With respect to Selenium, objects can be stored in an excel sheet which can be populated inside the script whenever required. 40. How to input text in the text box using Selenium WebDriver? By using sendKeys() method we can input the text in the text box using Selenium WebDriver. Advance Level Software Testing Interview Questions for Experienced Professionals This section help you practice with the advanced level and scenario based interview questions. 41. What kind of input do we need from the end user to begin proper testing? An end user is the most important person because he is the one who has to use the product and has a keen interest that anyone else in the project. Above figure illustrates the input that is essential from the user end. 42. What is meant by workbench concept? A workbench at its core is a way of documenting how a specific activity has to be performed. It is often referred to as phases, steps, and tasks as shown in the following figure. There are five tasks for every workbench and they are as follows: Input, Execute, Check, Production output, Rework. 43. What is meant by Defect Cascading? Defect cascading is a defect which is caused by another defect. One defect triggers the other defect. When a defect is present in any stage but is not identified, hide to other phases without getting noticed. This will result in an increase in the number of defects. Let us understand this by an example. You are designing the Login Module of a WebPage. In phase 1 - You are designing Register User Module for Login and mobile number is mandatory but you can leave it blank due to a bug that gets unnoticed. In Phase 2 - You will design the login form having username and password. The password is OTP which will be sent to User's registered mobile number. Now as Register module has a bug that mobile number can be left blank so this may lead to Login failure or maybe some system error or crash if a null mobile number is not handled. This is known as defect cascading. 44. What are the different strategies for rollout to end users? The strategies to be followed for rollout are as follows: Pilot, Gradual Implementation, Phased Implementation, Parallel Implementation. 45. Explain how can you find broken links in a page using Selenium WebDriver? This is a tricky question which the interviewer might present to you. He can provide a situation wherein there are 20 links in a web page, and we have to verify which of those 20 links are working and how many are not working (broken). As you have to verify the working of every link, the workaround is that you need to send HTTP requests to all of the links on the web page and analyze the response. Whenever you use driver.get() method to navigate to a URL, it will respond with a status of 200 - OK. This indicates that the link is working and has been obtained. Whereas any other status indicates that the link is broken. Let's now understand how to do that. First, we have to use the anchor tags to determine the different hyperlinks on the web page. For every tag, we can use the attribute 'href' value to obtain the hyperlinks and then analyze the response received when used in driver.get() method. 46. Which technique should be considered in the script "if there is neither frame id nor frame name"? If frame name and frame id is not available, then we can use frame by index. For example, there are 3 frames in a web page and if none of them have a frame name and frame id, then we can still select those frames by using frame (zero-based) index attribute. All the frame will have an index number like the first frame would be at index "0", the second at index "1" and the third at index "2". driver.switchTo().frame(int arg0); 47. How to take screenshots in Selenium WebDriver? By using the TakeScreenshot function you can take a screenshot. With the help of getScreenshotAs() method, you can simply save that screenshot. Example: File scrFile = (TakeScreenshot(driver).getScreenshotAs(outputType.FILE)); 48. Explain how you will log in into any site if it is showing any authentication popup for username and password? If there is a pop up for logging in, we need to use the explicit command and verify if the alert is actually present. The below code helps you understand the use of explicit wait command. WebDriverWait wait = new WebDriverWait(driver, 10); Alert alert = wait.until(ExpectedConditions.alertIsPresent()); alert.authenticateUsing(new UserAndPassword("\*\*username\*\*", "\*\*password\*\*")); 49. How to skip a method or a code block in TestNG? To skip a particular test method or a code, then you can set the 'enabled' parameter in test annotation to false. @Test(enabled = false) 50. Briefly explain what does below code snippet indicate? WebElement sample = driver.findElement(By.xpath("//\*[contains(text(), 'data')]")); It defines a variable sample of type WebElement, and uses an XPath search to initialize it with a reference to an element that contains the text value "data". This brings us to the end of this article on Top 50 Software Testing Interview Questions. Hope it helped in adding up to your knowledge. Wishing you all the best for your interview. Happy learning. If you found this "Software Testing Interview Questions" article relevant, check out the Software Testing Training by Eduureka, a trusted online learning company with a network of more than 250,000 satisfied learners spread across the globe. Got a question for us? Please mention it in the comments section on this Software Testing Interview Questions and we will get back to you.



1. **Introduction**

The purpose of this document is to provide a comprehensive overview of the project's objectives, scope, and timeline. It is intended for all stakeholders involved in the project, including team members, sponsors, and clients.

2. **Project Objectives**

The primary objectives of this project are to:

- Develop a robust and scalable software solution.
- Ensure high-quality performance and reliability.
- Deliver the project on time and within budget.
- Provide excellent customer support and training.

3. **Project Scope**

The project scope includes the development, testing, deployment, and maintenance of the software solution. It also encompasses the necessary hardware, infrastructure, and documentation. The project will be completed by the end of the fiscal year.

4. **Project Timeline**

The project timeline is as follows:

- Phase 1: Requirements Gathering (1 month)
- Phase 2: Design and Development (3 months)
- Phase 3: Testing and Deployment (2 months)
- Phase 4: Post-Deployment Support (Ongoing)

5. **Project Risks**

Key risks identified for this project include:

- Scope creep and changes in requirements.
- Resource availability and allocation.
- Technical challenges and integration issues.
- Communication and collaboration gaps.

6. **Project Budget**

The project budget is estimated to be \$1,000,000. This includes all costs for development, testing, deployment, and ongoing support. A detailed budget breakdown is provided in the attached spreadsheet.

7. **Project Governance**

The project will be governed by a Project Management Office (PMO) and a steering committee. The PMO will be responsible for day-to-day project management, while the steering committee will provide strategic oversight and approval.

8. **Project Communication**

Regular communication is essential for the success of this project. Key communication channels include:

- Weekly project status meetings.
- Monthly steering committee meetings.
- Project status reports and dashboards.
- Open communication channels for team members.

9. **Project Conclusion**

This document serves as a foundational guide for the project. It outlines the key elements that will ensure the project's success. All team members are encouraged to read this document carefully and adhere to the guidelines provided.

10. **Appendix**

The following documents are included in the appendix:

- Project Charter
- Requirements Document
- Design Document
- Budget Breakdown
- Risk Register
- Communication Plan

11. **References**

Key references for this project include:

- Project Management Institute (PMI) - Project Management Body of Knowledge (PMBOK® Guide)
- Software Engineering Institute (SEI) - Capability Maturity Model (CMM)
- Industry best practices and standards.

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13. **Approval**

The project manager, [Name], has reviewed and approved this document. The steering committee has also reviewed and approved the project plan.

14. **Next Steps**

The next steps for the project are to begin the requirements gathering phase and to start the design and development work. The project manager will provide regular updates on the project's progress.

15. **Contact Information**

For more information, please contact the project manager at [Email Address] or [Phone Number].

16. **Revision History**

The following table shows the revision history of this document:

Version	Author	Changes	Date
1.0	[Name]	Initial draft	[Date]
1.1	[Name]	Added project objectives	[Date]
1.2	[Name]	Added project scope	[Date]
1.3	[Name]	Added project timeline	[Date]
1.4	[Name]	Added project risks	[Date]
1.5	[Name]	Added project budget	[Date]
1.6	[Name]	Added project governance	[Date]
1.7	[Name]	Added project communication	[Date]
1.8	[Name]	Added project conclusion	[Date]
1.9	[Name]	Added project appendix	[Date]
1.10	[Name]	Added project references	[Date]
1.11	[Name]	Added project disclaimer	[Date]
1.12	[Name]	Added project approval	[Date]
1.13	[Name]	Added project next steps	[Date]
1.14	[Name]	Added project contact information	[Date]
1.15	[Name]	Added project revision history	[Date]

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