CSV 301 ASSIGNMENT

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# Unit I: Introduction to Test Automation and DevOps

1. What is the main goal of test automation?
2. The main goal of test automation is to automate the execution of test cases and software testing.
3. Name one benefit of test automation.
4. One of the best benefit of test automation is to automate the tests repeatedly with consistency .
5. What is a challenge of implementing test automation?
6. Setting up and maintaining the automation infrastructure can be the primary challenge.
7. Can you name a test automation approach that focuses on the UI?
8. Selenium is one of the most approached test automation tool.
9. What is Selenium used for in test automation?
10. Selenium is used for automating web browsers interactions.
11. Name another test automation framework besides Selenium.
12. Appium is also another test automation framework besides Selenium.
13. What criteria would you consider when selecting a test automation framework?
14. The compatibility with application , support for required programming languages and integration capabilities with tools.
15. What is Continuous Integration (CI)?
16. Continuous Integration is a process where the code changes are merged into central repository which triggers automated builds and tests.
17. What is Continuous Delivery (CD)?
18. Continuous Delivery is a practice of automating the delivery process to code changes deployed into production at any time.
19. How does test automation integrate with CI/CD pipelines?
20. Test automation integrates with CI/CD pipelines by running automated tests of build and deployment processes.

# Unit II: Web Application Testing with Selenium

1. What is Selenium primarily used for?
2. Selenium is used for automating the web browsers.
3. Name a component of Selenium used for automating web browsers.
4. Selenium WebDriver is one of the major component used for automating web browsers.
5. How do you set up the Selenium WebDriver?
6. Selenium WebDriver is set up by downloading the WebDriver files for dedicated programming language and configuring the environment.
7. What is a locator in Selenium?
8. Locator’s in selenium is a way to identify and locate the web elements on web page.
9. Name one method to locate web elements in Selenium.
10. CSS selectors are most used method to locate web elements in Selenium.
11. How can you perform a click action on a web element using Selenium?
12. Click() method is used to perform click action on a web element using Selenium.
13. What is the purpose of assertions in Selenium tests?
14. Assertions in Selenium tests are used to verify the test executions.
15. How do you validate if a web element is present using Selenium?
16. We can validate web element in selenium by “isDisplayed()”.
17. What tool can be used to generate test reports in Selenium?
18. Junit can be used to generate test reports in selenium.
19. How do you handle dropdowns in Selenium?
20. By “selectByValue()” , we can handle dropdowns in Selenium.

# Mixed Questions from Both Units

1. What is a common practice to ensure the quality of software releases in DevOps?
2. A common practice to ensure the quality of software releases in DevOps is to implement automated testing throughout the pipeline.
3. Which framework is known for testing mobile applications?
4. Appium framework is used for testing mobile applications.
5. What is the benefit of integrating test automation into CI/CD?
6. Integration of test automation in CI/CD improves enabling fast and reliable testing of code changes.
7. How can Selenium tests be run across different browsers?
8. Selenium tests can run across different browsers by using WebDriver capabilities.
9. What is the advantage of using Cypress over Selenium for certain projects?
10. Using Cypress over Selenium for certain projects makes faster execution speed and simple syntaxes.
11. How do test automation frameworks contribute to agile development?
12. Test automation frameworks contribute to agile development to enable reliable testing of code changes during development lifecycle.
13. What language is primarily used for scripting in Selenium?
14. Python , Java languages are primarily used for scripting in selenium.
15. Can Selenium tests be executed in parallel?
16. Selenium tests can be executed in parallel to make faster test executions.
17. What is the role of test automation in achieving continuous delivery?
18. To provide fast and reliable feedback on code changes, ensuring deployments in production.
19. Name one tool that supports Behavior Driven Development (BDD) in test automation.
20. Cucumber is one of the commonly used tool that supports Behavior Driven Development in test automation.