CSV 301 ASSIGNMENT 1

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Unit I: Introduction to Test Automation and DevOps

- 1. What is the main goal of test automation?
- A) The main goal of test automation is to automate the execution of test cases and software testing.
- 2. Name one benefit of test automation.
- A) One of the best benefit of test automation is to automate the tests repeatedly with consistency .
- 3. What is a challenge of implementing test automation?
- A) Setting up and maintaining the automation infrastructure can be the primary challenge.
- 4. Can you name a test automation approach that focuses on the UI?
- A) Selenium is one of the most approached test automation tool.
- 5. What is Selenium used for in test automation?
- A) Selenium is used for automating web browsers interactions.
- 6. Name another test automation framework besides Selenium.
- A) Appium is also another test automation framework besides Selenium.
- 7. What criteria would you consider when selecting a test automation framework?
- A) The compatibility with application, support for required programming languages and integration capabilities with tools.

- 8. What is Continuous Integration (CI)?
- A) Continuous Integration is a process where the code changes are merged into central repository which triggers automated builds and tests.
- 9. What is Continuous Delivery (CD)?
- A) Continuous Delivery is a practice of automating the delivery process to code changes deployed into production at any time.
- 10. How does test automation integrate with CI/CD pipelines?
- A) Test automation integrates with CI/CD pipelines by running automated tests of build and deployment processes.

Unit II: Web Application Testing with Selenium

- 11. What is Selenium primarily used for?
- A) Selenium is used for automating the web browsers.
- 12. Name a component of Selenium used for automating web browsers.
- A) Selenium WebDriver is one of the major component used for automating web browsers.
- 13. How do you set up the Selenium WebDriver?
- A) Selenium WebDriver is set up by downloading the WebDriver files for dedicated programming language and configuring the environment.
- 14. What is a locator in Selenium?
- A) Locator's in selenium is a way to identify and locate the web elements on web page.
- 15. Name one method to locate web elements in Selenium.
- A) CSS selectors are most used method to locate web elements in Selenium.
- 16. How can you perform a click action on a web element using Selenium?
- A) Click() method is used to perform click action on a web element using Selenium.

- 17. What is the purpose of assertions in Selenium tests?
- A) Assertions in Selenium tests are used to verify the test executions.
- 18. How do you validate if a web element is present using Selenium?
- A) We can validate web element in selenium by "isDisplayed()".
- 19. What tool can be used to generate test reports in Selenium?
- A) Junit can be used to generate test reports in selenium.
- 20. How do you handle dropdowns in Selenium?
- A) By "selectByValue()", we can handle dropdowns in Selenium.

Mixed Questions from Both Units

- 21. What is a common practice to ensure the quality of software releases in DevOps?
- A) A common practice to ensure the quality of software releases in DevOps is to implement automated testing throughout the pipeline.
- 22. Which framework is known for testing mobile applications?
- A) Appium framework is used for testing mobile applications.
- 23. What is the benefit of integrating test automation into CI/CD?
- A) Integration of test automation in CI/CD improves enabling fast and reliable testing of code changes.
- 24. How can Selenium tests be run across different browsers?
- A) Selenium tests can run across different browsers by using WebDriver capabilities.
- 25. What is the advantage of using Cypress over Selenium for certain projects?
- A) Using Cypress over Selenium for certain projects makes faster execution speed and simple syntaxes.
- 26. How do test automation frameworks contribute to agile development?
- A) Test automation frameworks contribute to agile development to enable reliable testing of code changes during development lifecycle.
- 27. What language is primarily used for scripting in Selenium?
- A) Python, Java languages are primarily used for scripting in selenium.

- 28. Can Selenium tests be executed in parallel?
- A) Selenium tests can be executed in parallel to make faster test executions.
- 29. What is the role of test automation in achieving continuous delivery?
- A) To provide fast and reliable feedback on code changes, ensuring deployments in production.
- 30. Name one tool that supports Behavior Driven Development (BDD) in test automation.
- A) Cucumber is one of the commonly used tool that supports Behavior Driven Development in test automation.