Automation Engineer

**How do you identify the test cases which are suitable for automation?**

* If the test cases belong to the Critical features for business
* If Test cases that needs to tested quiet frequently i.e with every build
* If test cases need to be tested in various platform/browsers
* If test cases use multiple data to run the same flow of functionality
* If Test cases are for performance/stress/load testing
* If test cases take long duration of time i.e. that needs to run overnight using Jenkins

**What are the attributes of a good framework?**

* Reliability
* Usability
* Robustness
* Flexibility
* Portability
* Maintainability
* Efficiency

**Do you think that testing can be done only at the UI level?**

* Testing can done in every level – Code level, API level, Functionality level, Non-functionality level, User level, Database level, Front-End to Back-End level, Regression/Integration

**What is Selenium?**

* Selenium is an open source automation testing tool for web application across multiple platform/OS

**What is TestComplete?**

* TestComplete is the automation testing framework which has ability to do automation testing for web, mobile, desktop application. Though never got chance to use it.

**What is Cucumber?**- Cucumber is the automation testing tool for Behavioral Driven Development (BDD) utilizing Gherkin language to bring technical and non-technical personnel to be in the same page.

**What are the phases in Automation testing Life Cycle?**

* Determining test cases for automation
* Selecting right tools
* Plan-Design-Strategize
* Environment setup
* Automation test development then Execution
* Report generation and analysis

**Why do we use Jenkins with selenium?**

* Jenkins is a CI tool that gives power to run scripts with no or very minimal human intervention so the scripts can be scheduled to run overnight and repeatedly, so QA’s can focus more in thinking about test cases and analyzing reports.

**What is a CI CD pipeline?**

* CI/CD pipeline is the concept of DevOps so that developing, testing and deployment of an application can be done with minimal human intervention. This provides extra time to professional to think more about application.

**What is build pipeline in Jenkins?**

* Building pipeline in Jenkins means defining sequential steps in the development of application by providing ease in continuous integration and defines the whole application lifecycle.

**What is a Jenkins pipeline?**

* Jenkins is one of the open source CI/CD tool that helps to build the pipeline defining the whole application lifecycle and every steps in the development so that human intervention can be minimized.

**What criteria do you consider for automating a test?**

* Test cases that needs to run repetitively
* Test cases in which chance of human error is high
* Test cases that requires multiple sets of Data for execution
* High risk functionality
* Test cases impossible to be tested manually
* Test cases that needs to test over various configuration
* Test cases that will take much effort and time if tested manually

**How to perform API Testing? What to check for?**

* API testing is done using various tools manually or via automation to check if we are getting proper/desired response with the request. It is done to check functionality, reliability, performance, and security of programming interfaces.

**What tools are typically used for API Testing?**

* SOAP UI
* Postman
* RestAssured API

**What are the different types of frameworks?**

* Behavioral Driven Development (BDD)
* Test Driven Development (TDD)
* Hybrid Framework
* Keyword Driven Framework

**Can you provide an example of something that should be only be tested using unit, integration or api tests that should not be tested using e2e?**

* Unit testing is only done for features that does not require to retract or store data.
* Integration Testing is better to identify system issues, Data schema, cache integration.
* API testing is only done for features in which request needs to be sent to the programming interface and response is expected.
* E2e test can also test above mentioned situation but these kind of test will take more time and more effort and will increase in time wastage.

**What are the points that are covered while planning phase of automation?**

* Selecting right automation tool
* Right framework
* Setting up environment
* Scope for automation
* Flow chart for test script development and execution
* Identifying test deliverables

**What are the common API Testing Types?**

* Functional Testing
* UI Testing
* Load Testing
* Security Testing
* Penetration Testing

**What is an API documentation?**

* API documentation is also called contract document which contains all the information required for various http call like Base URI, Authentication keys, Resources, Parameters, Request Body, Response body/code.