**SDLC & Agile**

**1. What is a Test Plan?**

Test plan is a document that contains the testing scope, design, test strategies, and approaches that defines entrance and exit criterias. Entry Criteria gives the prerequisite items that must be completed before testing can begin. Exit Criteria defines the items that must be completed before testing can be concluded. Usually the QA lead writes the test plan.

**2. What is an epic? Can you give me an example?**

* **Epic** is a big user story that can be completed in a couple of sprints.

For example, as a user I want to buy products online. This story is too big, and it cannot be completed in one sprint. So, we can call it Epic instead of a user story. It should be divided to multiple user stories like:

* As a customer I want to be able to login so I can view my account.
* As a customer I want to be able to search for a product so I can buy them.
* As a customer I want to be able to proceed to checkout so I can pay for the item that I am going to buy.

**3. Tell me about User Story and Acceptance Criterias along with an example.**

* **User Story** is a requirement from a **user** perspective.
* Format: As <end-user> I want to do < action> So that I can <benefit>.
* Example: As an amazon user I should be able to login, so I can buy products online.
* **Acceptance criteria** is the way that we know the user story is successfully developed or not.

Statements of requirements that are described from the users’ perspective to determine when a story is ”done” and working as expected. Example:

AC#1: Login page contains a form with the following: Email address field, password field, and login button.

AC#2: The email field must contain a valid email address.

AC#3: The password field must contain at least one capital letter, lower case letter and number.

AC#4: Login button will take the user to the homepage.

**4. Please talk about Test Case.**

* **Test Case** describes the functionality and test steps, prerequisites, test environment, and outputs.
* **Test case components are** Test Case ID, Step number, Description of the functionality, Expected result, and Actual Result.

**Java**

**1. Tell me about differences between Abstract Class and Interface.**

* A class that is declared with an abstract keyword, is known as abstract class can have instance methods that implement a default behavior. It can have abstract and non-abstract methods.
* An Interface is a blueprint of a class. It is a template and it is declared with an interface keyword. Java interface methods are implicitly abstract and cannot have implementations. It can have abstract methods, default methods, static methods and public final static variables
* When we want to use the Abstract class, we use the “extend” keyword. When we want to use Interface, we use the “implement” keyword.
* Abstract class and interface both are used to achieve abstraction. Both cannot be instantiated; we cannot create an object.

**2. Can you explain about differences between method Overloading and method Overriding?**

* In case of overloading, method name must be the same, but the parameters must be different;
* In case of overriding, method name and parameters must be the same.
* We can overload methods in the same class but method overriding occurs in two classes that have an inheritance relationship.
* We cannot override static, final and private methods in Java, but we can overload static, final and private methods in Java.
* In method overloading, the return type can be the same or different. In method overriding, the return type must be the same or covariant type.

**3. What is the difference between pass-by-value and pass-by-reference? pass by value & pass by reference?**

* **Passing by value** means that the value of the function parameter is copied into another location of your memory, and when accessing or modifying the variable within your function, only the copy is accessed/modified, and the original value is left untouched.
* **Passing by reference** means that the memory address of the variable is passed to the function. This is unlike passing by value, where the value of a variable is passed on. In the examples, the memory address of myAge is 44. When passing myAge to the function increaseAgeByRef, the variable used within the function (age in this example) still points to the same memory address as the original variable myAge (Hint: the & symbol in front of the function parameter is used in many programming languages to get the reference/pointer of a variable).

**Link for an example:** [**https://blog.penjee.com/passing-by-value-vs-by-reference-java-graphical/**](https://blog.penjee.com/passing-by-value-vs-by-reference-java-graphical/)

# Behavioral Questions

1. **Why are you looking for a job? (Why are you in the market?)**

I am looking for a job because my current project is ending soon. My manager told me I should start looking for new opportunities.

1. **Why did you apply for this position?**

After looking at the job description, I think it matches my day-to-day activity and my experience.

I was confident with the job description that’s why I applied.

1. **Where do you see yourself 5 years from now?**

Well I’m really excited by this position at (COMPANY NAME) because in five years, I’d like to be seen as someone with deep expertise in testing, and I know that’s something that I’ll have an opportunity to do here. I’m also really excited to take on more managerial responsibilities in the next few years and potentially even take the lead on some projects. I’ve been lucky enough to work with some amazing managers, and so developing into a great manager myself is something

I’m really excited about.

**Real Interview Questions**

