**General:**

**Can you tell me about yourself?**

I’ve been working in the IT industry for about 2 years now and prior to that in …..

I’ve started as a UAT coordinator for a pilot program in capital one were I provided feedbacks on Testing scenario and UI/UX Component. I helped in identifying issues with the system and gave suggestions and scenarios for Dev team to improve the functionalities.

I also helped testing the application in the preprod environment with a group of other end-users before releases.

Currently I’m working as a test engineer doing manual as well as automation testing using BDD through cucumber and Java. I’m still in the process of strengthen my skills on the automation testing.

**Can you tell me a little more about your current Project?**

It’s a e-commerce application, kind of similar to Airbnb but for students. It helps them find places to stay.

**Manual Testing:**

**What type of manual testing have you performed?**

I have performed mostly functional testing, specifically system test (also called, end to end testing) . Acceptance testing (The purpose of acceptance testing is to reveal how closely the application conforms to the user’s needs and expectations and is often referred to as User Acceptance Testing or UAT for short.) , positive testing (happy path) and negative testing.

I have also performed integration testing, to make sure that new feature integrated within the exiting working system didn’t break any existing feature or workflow.

**What tool are you using to write test cases?**

Currently we are using ALM (application lifecycle management) to write our test cases.

**What tool are you using for Issue tracker and stories management?**

We are using Jira to create and manage the sprint stories. We also use it to log the defects found during the testing

**What are acceptance criteria and who writes them?**

Acceptance criteria set of predefined requirements that must be met in order to mark a user story complete (they also make the definition of done). I have written them but for the most part the BA is writing them white we do the grooming sessions as they are the ones that know the functionality.

**What do you guys do in the sprint planning, sprint grooming and sprint retrospective?**

* In sprint planning we define the sprint goal of the upcoming sprint and select a list of user stories based on the priorities to form the Sprint Backlog which could fulfill the sprint goal.
* In the sprint grooming we go over the user stories in the backlog, we go over the feature/functionalities for each of these stories and we provide the LOE (level of effort) and we make sure that the acceptance criteria are present and clear. We also discuss if there is any missing scenarios that needs clarification from end user.
* In the sprint retrospective we go over what went well and what issue we encountered in the sprint and what we learned from it.

**How long is you sprint?**

We have one month sprint and quarterly deployment to production , so every 4 month we deploy new version to production

**How many people are in your team?**

There are 9 people in my Team. 2 testers, 5 developers a BA and a scrum master.

**What make a test case?**

There are many fields, some of them are:

* Scenario
* Description
* Steps
* Expected results
* Actual results

**What is traceability matrix?**

The relationship between test cases and requirements is shown with the help of a document. This document is known as a traceability matrix.

It’s a way to track if all the requirement have been covered with stories , so no missing requirement goes without forgetting to implement it.

**What is the difference between the STLC (Software Testing Life Cycle) and SDLC (Software Development Life Cycle)?**

SDLC deals with development/coding of the software while STLC deals with validation and verification of the software

**What Test Plans consists of?**

Test design, scope, test strategies, approach are various details that Test plan document consists of.

1. Test case identifier
2. Scope
3. Features to be tested
4. Features not to be tested
5. Test strategy & Test approach
6. Test deliverables
7. Responsibilities
8. Staffing and training
9. Risk and Contingencies

**What is the difference between UAT (User Acceptance Testing) and System testing?**

1. System Testing: System testing is finding defects when the system undergoes testing as a whole; it is also known as end-to-end testing. In such type of testing, the application suffers from beginning till the end.
2. UAT: User Acceptance Testing (UAT) involves running a product through a series of specific tests which determines whether the product will meet the needs of its users.

**What is the step you would follow once you find the defect?**

Once a defect is found you would follow the step

* 1. Recreate the defect
  2. Attach the screenshot
  3. Log the defect

**Automation Testing:**

**Java:**

**What are the component of OOP and can you explain each one of them?**

*Inheritance*: Inheritance allows us to use variables and methods that might needs to be used in different classes from one shared class (Parent class). We accomplish this by using the extend keyword. This is a good way for reusability and maintainability of the code.

We can ONLY extend one class. Java does not allow multiple inheritance of classes

*Encapsulation*: Encapsulation is used to encapsulate the fields(variables) by making them private , so they are not accessed outside of its class. To access them we will need to create the getter and setters method. This is done for security reason.

*Abstraction*: Abstraction is meant for abstraction of your code by impelenting abstract classes and interfaces.

That why we cannot create an Object from abstract classes or interfaces

*Polymorphism*: Polymorphism is used to override method from parent classes and change their definition by using the @Override annotation.

**What a class?**

**A class is the blue print from where the object is going to be created**

For example, Animal can be a class and we can create an object called Dog from Animal class

**What an object?**

An object is an instance of the class (or a copy of the class)

We create an Object as follow: Animal dog = new Animal()

**Whats a constructor?**

A constructor is used to instantiate/create and Object for the specified class.

If you don’t mention a constructor in your class , an empty default constructor will be called once you try to create an object.

**What the difference between local variable and member variable:**

A local variable is a variable that is declared within the class or method parameter. Its only visible within that method.

A member variable (also called an instance variable) is a global variable and is declared at the class level, so its visible to all methods of the class.

**What’s a static variable or static method:**

Static variable are variable that are defined with the keyword static for example :

public static int a = 5 , and they belong to the class , so all object will share the same value of it. That’s why we can just call it by using the class name for example Animal.a

Static method are the same way and they can be called using the class name too Animal.run()

**What the difference between method overriding and method overloading?**

Method overriding (also called Static binding )is creating the same method that is inherited from super class into the subclass by giving the annotation @override

Method overloading (also called dynamic binding ), is used to create multiple method with the same name but different type and number of parameters

**What the difference between private an public keyword?**

If we declare a field final and give it a value , can we change the value for it? For example the field is : public final int num =44;

No, we cant if the field is declared final then it’s a constant and it cannot be changed

**What the difference between static array and dynamic array?**

In static array the size of the array can not be changed once its set. In dynamic array we can change the size.

**What type of exceptions we have in java:**

Unchecked exception:

They are expcetion that occur during runtime (after you run the program) such as ArrayOutOfBound Exception or Aithemethic Exception

Checked exception:

They are exception that are generated during compilation error. So before running the program, a compilation error will be displayed to handle that expcetion, Example : FileNotFoundException

**How To find the size of static array ?** We can use length() method

**How to find the size of dynamic array ?** We can use size() method

**How to reverse a string ?** we can use reverse() method

**How to take the first 3 character of a string?** we can use substring() method

**Selenium:**

**Can you tell me about the current framework you using?** The current framework that im using is a BDD framework and we are using maven for dependency management and java as a programming language and cucumber framework for writing the feature files and running our tests. We have separate folder for feature file and separate packages for the step definition, runner class, utils classes and some other classes

**What we need selenium for ?**  Selenium helps us automation the Webbased application , its an open source tool , so there is no cost for it to use it , and the community for it is big so debugging issues is usually easy as you most likely to find the answers for your question or issues you encounter

**What are the limitation of selenium?**  Selenium is mainly build for automating the web application, so it doesn’t have the ability to automate desktop application. Ive heard about some toold like sikuli and autoIT that can integrate with it to perform these desktop automation tasks but I haven’t actually worked on it.

**Whats a BDD framework?**  BDD or what we call it behavioral driver development is a way for developing our application around the behavior of it. We usually go by creating the feature files that will define the different scenarios of the functionality to be build. Its also easier for BA and end-user to read and the feature file as they are written in gherkin language. So given feedbacks on them is very easy.

**What’s maven?**  Maven is a dependency management tool, it helps us manage our dependency and libraries by grapping them from the maven repository. Its also used as a build tool to build our project where we can run our test from command line using the maven command like mvn test and mvn verify

**What a feature file?**  A feature file is where we write our feature to be tested and the various scenarios that belong to it. The file must have the extension .feature in order to be a feature file and it need to start with the keyword “Feature”

**Whats a scenario outline?**  A scenario outline is a keyword used in the feature file when the scenario have data that needs to be parameterized. For example if we need to run the login feature with different sets of data , we can use the parameter in the feature file and use Scenario outline keywork to work with the data set.

**Whats a background:** The background keyword is used in the feature file when there are steps that will be repeated between scenarios . In that case we can add them into the background steps. This is better for cleaner and reusable code.

**Whats a runner class?**  When we need to run the feature all together , or we need to run more than one , then we need to create a class that we usually call it runner class and specify a couple of parameter to tell what and how to run the feature file

**Why do we need tags for?**  Tags are used to tag feature file or scenario with some keywords and than those keywords can be mentioned in the runner class to run these specific tagged ones. It’s a very neat way for running specific feature , for example tags with @smoketest you can run them everyday but tags with @regression you can run them at the end of every sprint

**What a hook in cucumber?** A hook in cucumber framework are nothing but a sets of method that are annotated with a cucumber annotation @before or @after , and these will run before each scenario and after each scenario . Usually we have the instantiation of the driver in the setupMethod and closing the browser in the teardown method

**Whats a Page Object model?**  This is a testing pattern/model that helps for the reusability and maintainability of the Webelements. The way it works is that we create classes for each webpage and we identify these elements that belong to these pages. Now if an element is used across multiple test cases and it gets changed, we can easily go and modify that element in the specific page and that change will be reflected across all these test cases as they share the same element.

**What method we can use to write into a textbox in selenium?**  We can use sendkeys() method

**How can we get a text from the UI without using getText() method?**  We can use getAttribute(“value name here”) method

**How to handle an alert in the page ?**  we can use the Alert class from selenium to switch to alert box and then accept the alert

**How to switch to a different Frame ?** we can use SwitchTo().frame method.

**How to select a value from the dropdown in selenium?**  We need to use the Select class

Select obj = new Select(driver) , and then obj.selectByIndex() method or any other method

**Whats Assertion?**  Assertion is a way to verify your expected output with the actual output

**Whats the difference between hard assert and soft assert?**  In hard assert, of the assertion fails then the test will stop execution . In SoftAssert (also called verify) if the assertion fails , we still can continue to the end of the test . We can use SoftAssert class to do the softassert

**What the difference between implicit wait and explicit wait?**  In implicit wait the driver will wait for the specified time on every step for the element to perform the action on. This way can slow the duration of your tests. For the explicit wait, you explicitly tell the driver to wait a certain amount of time for a specific element until a condition is met.

**Whats the different element locators in selenium that we can use?**  We can use name, id, class, xpath etc… there are I belive 8 of them.

**What the diference between absolute xpath and relative xpath?**  In absolute xpath we look for the exact path to that element starting from the main node /html/div/body/../../../span . This is usually not a good way because if an element gets added in between then this xpath will brake.

For relative xpath , you specify the relative path by using //span[@class=’blablabla’] which means literally “find me anywhere a tag name span with the class value of balblabla” . In this way there is a lesser risk that this will break.

**API:**

**Whats an API?**  API or application programming interface is a way for development to get and send data between system without the need to know their implementation.

**What tool did you use for API?**  I have used postman for manually testing a couple of API request. My next focus is that I want to automate this using RestAssured library

**Miscellaneous:**

**What do you use for repository management or where do you save your code?**  Currently we are using gitlab to store our code.

**Have you used Jenkins before?** Honestly I haven’t personally used it as there is a developer who takes care of the build process and the Jenkins pipeline , but I would love to learn it.