1. **Tel me about your last project**

Currently I am working at The New York Times Company as selenium test automation engineer inpaywall system [**pay-wall is a system that prevents internet users from accessing webpage content without a paid subscription, while pay-walls are used to bring in extra revenue for companies by charging for online content, Credit card will be the only payment option for digital subscriptions (Visa, MasterCard, Amex)],** Here to testing I was given the BRD, and USE CASES, I reviewed and analyzed those document and reached out to product team that any clarification which I needed, as a QA tester I developed test plan according to requirements and use case then I created test scenarios and wrote test cases, then I reviewed those document with Project Manager or QA manager and other team members, I have used ALM to executed manual test cases, then I have developed selenium project using testNG framework based on page object model and page factory pattern to execute automation test cases. I performed various types of testing like smoke testing , functional testing, back end testing, black box testing, and regression testing, in smoke testing where I tested for core load browsers like FF, IE, CHROME. The testing was set up to two major areas back end data validation and UI data validation, for back end testing I have used not only SQL database I was also given CSV file, first I run CSV file from terminal and validated data was inserted correctly into database I also manipulated data in CVS file and make sure that changed reflected in database is correctly, I have found many bugs during browser testing, most of the bugs I found in IE and Firefox, for an example in some places buttons weren’t aliened, Content issue arrows weren’t visible selecting different language logged me out, pays layout etc, during the testing I have found defect then I have created new defect by JIRA tracking management tool that forwarded to Project Manager and developer, after that received final decision from Project manager then closed the defect, I locked the bugs in JIRA tracking tool and tracked bugs till they were resolved or closed Also I have submitted bugs report to the PM/QA/CM/Scrum Master, I also participated in daily scrum backlog grooming meeting, planning meeting, retro meeting and provided valuable feedback to Business Analyst, I worked with other QA team members and successfully communicated with a scrum master for further clarification on certain requirements. By using Jenkins Continuous Integration Tool, I execute test cases on daily basis schedule for regression testing and also for nightly execution based on the schedule. We are using Git is a version control server for tracking changes in project file and coordinating work on those files among team member. In my current job they are following agile approach to developed software application. This is pretty much that I have done as a QA tester in my current project.

**Can you explain me about your last two projects and university time duration?**

I started bachelor degree in 2009 and going into my third year, I applied for a job as a software tester in August 2011. Under the process, I took an exam based on my software knowledge, and fortunately, I was selected as a software tester. As I worked I continued my study as a university student. I had to create a schedule that corresponded to my work and university hour. Even though I was unable to complete my Bachelor degree within four years, I completed all the entire requirements to acquire a bachelor’s degree under a time scope of five and a half year. I worked as a software tester under employer contract for two years. I began my second job in January 2014 under the same employer, and that contract also ended in May 2016. My current Job which began in June 2016, which I continued even after I moved to America in the year of 2017.

1. **Tel me about yourself**

My name is sharif uddin. I have completed Bachelor degree in computer science and software engineering from American International University-Bangladesh. I joined united healthcare group as a software tester in 2011. Currently, I am working in New York Times Company as Selenium Test Automation Engineer in the pay-wall project (**pay-wall is a system that prevents internet users from accessing webpage content without a paid subscription, while pay-walls are used to bring in extra revenue for companies by charging for online content, Credit card will be the only payment option for digital subscriptions (Visa, MasterCard, Amex)**). As a QA tester, I have been working on several of system platform and operating system like Windows, Linux/Unix. As a detail-oriented tester, I have developed test plan based on requirement. Creating test scenario, writing test cases, developing methods for repeating steps.Writing scripts, executing test cases and debugging. Prepare automation scripts in Selenium WebDriver.Designing Automation Framework and Implementing Automation Framework. as far as different type testing I have performed regression testing, smoke testing, functional testing and sometimes based on project time estimation I have to do end to end testing. **Support and reviewing Test scripts.Data driving Test script. Defect reporting by using Jira tracking management tools. Executing Framework, and Analyzing Result.Preparing script execution report**. By using Jenkins Continuous Integration Tool, I execute test cases on daily basis schedule for regression testing and also for nightly execution based on the schedule. We are using an agile approach to a developed software application. We are using Git is a version control server for tracking changes in project file and coordinating work on those files among team member. I have participate daily scrum backlog grooming meeting, planning meeting, and retro meeting and provided valuable feedback to Business Analyst. I always enhance and achieve technical and non-technical skill by working closely with my peers and I always find effective way to deploy those new skills in my work. This is pretty much that I have been doing as a QA tester in the past years.

1. **Explain framework**

* I have developed selenium project using test-NG framework based on page object model design pattern and page factory. So one thing, when we design a test-NG framework/any framework using selenium testing tool, we can divide our framework in term of different component.
* **Language:**In my Selenium Project I am using Java language. Even though Selenium supports multiple languages, we are using Java language is just because most of the automation developers have knowledge on Selenium with Java.
* **Type of Framework:** when we choose a framework it totally depend on requirement. But in my project, I am using TestNG Framework by using [Page Object Model design pattern](https://www.softwaretestingmaterial.com/page-object-model/) with Page Factory.
* **POM:**As per the Page Object Model, we have maintained a class for every web page in an application. Each web page has a separate class and that class holds the functionality and members of that web page. A page test class to maintain test for every individual test.
* **Packages:** we have to maintained separate packages for *Pages* class and Tests class. All the *web page* related classes come under **Pages** package and all the *tests* related classes come under **Tests** package.
* **Base class: A**lso we have to maintain a base class for common functions use by all pages. Base class deals with all the common functions. This class is responsible for Initializing the WebDriver, Implicit Waits, Extent Reports, Browser close, Take a screen shot and wait for specific element etc.
* **Driver package:** When we execute test cases from different browser. We have to maintain a driver package where we can store all the drivers.
* **Properties file**: In Selenium .properties files are mainly used to store GUI locators / elements, and also Global fields like database configuration, project configuration data and application URL. Each parameter in properties file is stored as a pair of strings, in key and value format.
* **Screenshots:** Screenshots will be captured and stored in a separate folder and also the screenshots of a failed test case will be added in the extent reports.
* **Test Data:** All the test data will be kept in excel sheet (controller.xlsx). By using ‘controller.xlsx’, we pass test data and handle data driven testing. We use [Apache POI](https://www.softwaretestingmaterial.com/handling-excel-files-using-apache-poi/) to handle excel sheets.
* **Listener class:** This class is provided by testNG, it is very important whenever we are running more than hundred of test cases or more we don’t know whenever failure will occur, sometimes it is very unpredictable, when failure will happen listener class will catch the failure and it will attach to the html report and test-NG report.
* **TestNG.xml:** selenium doesn’t have any execution engine to execute test cases. In that case we can execute test cases using testng.xml suite file to execute test case also testng provided us grouping and parallel execution.
* **Log4j**: We are using log4j library to maintain logging of our project. We are using all kinds of logging statements like INFO, DEBUG, and ERROR etc. for an example we are performing 100 steps of a test case. But we need to know which step getting an error or in that case log4j is very helpful to figure an error.
* **Extent Reports:** For the reporting purpose, we are using Extent Reports. It generates beautiful HTML reports. We use the extent reports for maintaining logs and also to include the screenshots of failed test cases in the Extent Report.
* **Maven:** We are using standardized maven project for build, execution & dependency management.
* **Version Control Tool:** We use Git as a repository to store our test scripts.
* **Jenkins:** By using Jenkins CI (Continuous Integration) Tool, to execute test cases on daily basis schedule for regression testing and also for nightly execution based on the schedule

1. **What did you learn from your previous companies?**

* I learned a lot from the previous companies wherever I have worked, I have found out there is always something to learn. Different companies have different ways of working.  The environment and technology always differ from one company to another company.  I have never found one company’s environment matching with another company.  For example, if one company is using documents called requirement documents, then the other company might be using Use Cases and some companies might be using Design Document and so on.  Therefore, in my experience, there are always new things to learn in every company and we can always contribute these things in the next company if they help to be more productive

1. **Daily basic work**
   1. Beginning of the day I usually check the email, if there is any update to be needed send that update to peers. Then I will participate in daily scrum backlog grooming meeting provide valuable feedback to the business analyst, and then reviewed results of regular test runs, if any failure analyzed find out reason of test runs failure, also developing new test scripts , read requirements, creating test scenario and covering test cases, also perform code review with colleagues, sometime learning new programming language, infrastructure tools like web service, CI, CVS and so on, learning test tools, learning test approaches, finally end of the day sending daily status email to Project Manager.
2. **Agile Methodology**
   1. Agile is testing approach that follows the principles of agile software development, agile testing involves all member of an agile team with special skills and expertise to ensure business value is delivered at frequent interval, I think the big difference is that in agile environment, testing is not a phase; it is an activity parallel to development.
   2. Basically we are following sprint cycle, in generally we are divide sprint cycle into 2 weeks, let say first week we got some BRD or Use Case, then we developed test plan according to requirements and use case then we are created test scenarios and wrote test cases, first executed all the test cases in manually then if needed do it automation, again in second week usually we do same things, basically in every sprint we do repeat same process, first we have to do functional testing, if functional testing is working according to requirements and second sprint is finished then remaining task will goes to sprint cycle 3, in sprint cycle 3 we don’t need to functional testing we do only automation testing, that’s how we could release the product to the market
3. **Waterfall model**
   1. In general waterfall model, each phase must be completed before the next phase can begin and there in no overlapping in the phase, waterfall model demonstrate the software development process in a linier sequential flow, that means any phase in the development process begins only if the previous phase is complete.
   2. Sequential phases in waterfall model are: requirement gathering and analysis, system design, implementation, integration and testing, deployment of system and maintenance
4. **What is your approach when requirements are change continuously?**

* Usually its happen in most of requirement in that case I will try to write generic test plans and test cases which focus on the intent of the requirement rather than its exact details
* Also work very closely with the product owners or business analysts to understand the scope of change so testing can be updated

1. **What are the three main roles in scrum?**

* Product owner: manage the product backlog , PO is the voice of business and create new features to be developed for the application
* Scrum master: responsible for managing the sprint, get feedback from the team members
* Scrum team itself: usually this team which is responsible for developing high quality software

1. **Manual Tools- ALM/QC/TestDirector – Word/Excel and why use HP ALM?**

* HP ALM🡪v11to v12(application life cycle management) is web based tool that helps organizations to manage the application lifecycle right from project planning, requirements gathering, unit testing and deployment, it was earlier as quality center🡪v8,
* The various stakeholders involved in a typical project are
* Developer
* Tester
* Business analyst
* Project manager
* Product owners
* These stakeholders perform diverse set of activities that need to be communicated to all concerned team members, if we do not maintain centralized repository to record, maintain and track all the artifacts related to the product, the project will unquestionably fail, we also need a mechanism to document and collaborate on all testing and development activities,
* It enable all the stakeholder to interact and coordinate, to achieve the project goals
* It provide robust tracking and reporting system
* ALM can connect to our email system and send emails about any change like requirement change, defect raising

1. **How is agile testing different to other traditional software development models?**

* In agile methodology, testing is not a phase like other traditional models, it is an activity parallel to development in the agile, and the time slot for the testing is less in the agile compare to the traditional models.

1. According to requirements –create test case/Test scripts -100%
2. **When do we use agile scrum methodology?**

* When the client is not so clear on requirements
* When the client expect quick release

1. Mapping for automation
2. What is VB Scripting?

* VB scripting is a client side scripting language like JavaScript
* VB script stands for visual basic script and it is a light version of Microsoft visual basic

1. Disadvantage of VB scripts?

* VB scripts only run internet explorer and only support by operating system in windows not other operating system like linux and unix

1. How to create a VB scripts sample?

* We need only two simples tools to create VB script like internet explorer any version but it is good to use IE6 or above and text editor for text editor we can use nodepad++ or other text editor.

1. **What is sprint?**

* In scrum, the project is divided into scrum, each sprint has a specified timeline its depend (may be 2 weeks to 1 month), this timeline will be agreed by a scrum team during sprint planning meeting, here user stories are spit into different modules, the end result of every sprint should be a potentially shippable product

1. **What is the different between burn-up and burn-down chart?**

* Burn-up charts represent how much work has been completed in a project whereas burn down chart represents the remaining work left is a project

1. **What is mean by Walk-thru meeting daily stand up meeting?**

* Walk thru meeting or daily stand up meeting is daily routine meeting, it brings everyone up to date on the information and helps the team to stay with organized, each team member reports to the peers, in general it’s not a recorded meeting, reporting will be between peers not to the scrum master or PO
* Before start working in a module or after accomplishing the testing of a module, share queries to other tester or leads of the company working on the same application that is called the Walk-thru meeting or daily stand up meeting.

1. **What is daily stand up meeting?**

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1. **Explain data-driven framework?**

* In data driven framework all of our test data is generated from some external files like excel, csv, XML or some database table. That means we need not to hard code the required data in code.
* In data driven framework script will be separated from Data part, it means so if any changes happen we do not have to modify all the test cases. Any changes in application then we have to modify only one script not the entire scripts.
* Suppose we need to test the login/Register/ Any form with multiple input fields with 100 different data sets, in this type of scenario we can use data driven framework.
* Re-usability of code, Improves test coverage, Faster Execution, Less maintenance, Permits better error handling
* In selenium doesn’t support to read and write data from any external source, that’s why using third party apache poi open source library we can read and write data from external source in data driven framework.