**What are the Test Strategy, Test Plans, Test Cases and Traceability Matrix?**

* **Test Strategy:** A test strategy is an outline that describes the testing development cycle. It is created to inform project managers, testers, and developers about some key issues of the testing process. This includes the testing objective, methods of testing new functions, total time and resources required for the project, and the testing environment. It is written by the Test Manager or Lead.
* **Test Plans:** A Test Plan is a document describing the scope, approach, resources, and schedule of preplanned testing activities. It identifies test items, the features to be tested, the testing tasks and who will do each task (roles and responsibilities) and any risks and its solutions.
* **Test Cases:** A Test Case is a document that describes step by step process how to test the application. A Test Case includes Test Case ID, Steps Description, Expected Output, Actual Output, Pass/Fail, Remarks.
* **Requirement Traceability Matrix (RTM):** Tractability matrix is used to checks whether the each functionality is covered in the Test Cases as per as requirement document.

**What is Restful?**

* Rest is an architectural style of developing web service which is based on HTTP protocol and HTTP methods of define action, web service developed using REST is also known as restful web service.

**What framework have you used to develop RESTFUL web service?**

* I have used Jersey [Jersey is an open source framework that provides the capability of conversion between WSDL and Java classes] Framework to develop restful web service. Also there are many frameworks like Apache CXF, REST-Easy etc.

**What do you understand by payload in Restful?**

* Payload means data which passed inside request body, you can do payload in POST method not in GET or DELETE method

**What is the main difference between SOAP and RESTFUL?**

* **SOAP** is a protocol through which two computers communicates by sharing only XML document.
* **Rest** is an architectural style
* **SOAP** support only XML format
* **REST** multiple formats likes xml, html, text etc.
* **SOAP** is slower than REST
* **It** is faster than SOAP

**What is Ajax?**

* Ajax is asynchronous JavaScript and XML, the request is sent to the server by using XML Http Request objects. Without reloading the whole pages.

**What is selenium or selenium webDriber in testing?**

* Selenium is a free open source automated testing suite for web application across different browsers and platforms like firefox, chrome, IE and safari.
* WebDriber is a web automated testing tool that allows us to execute your tests against different browsers like firefox, chrome, IE and safari.

**What is TestNG ?**

* TestNG is a test automation framework for Java, inspired by JUnit and NUnit and developed to overcome their limitations of the older framework likeJUnit. It purpose is to cover all categories of test automation – unit testing, functional test, end-to-end, regression and integration testing
* Also testNG gives the tester of ability to write more flexibility and powerful tests, such as annotations and support for data driven testing.

**What are the advantages of TestNG?**

* The main advantage of using TestNG framework in selenium is ease to running multiple tests from multiple classes using just one configuration (we can also have many configurations, which depends upon how we design our test). TestNG.xml is an XML file that describes the runtime definition of a test suite
* TestNG allows us to run parallel tests
* TestNG has a wider rangs of setup annotations, including @Before/AfterSuite, @Before/AfterTest and @Before/AfterGroup
* testNG provide us run a test based on priority, can be used priority attribute, that will tell us what test method should be executed
* also testNG has an important attributes that can be passed dataProvider (using for parameterized)
* TestNG provided asserts, that helps us to verify the conditions of the test and decide whether it failed or passed
* Also testNG has a features to generates nice logs reports after test execution
* Also using testNG we would able to produce HTML extends Reports after test execution
* Using without main method we can executed test

**What are the benefits of using annotations?**

* Annotations are those things in TestNG which guide a tester what to do next or which method should be executed next
* help us to pass additional parameters to annotations
* Test classes no longer need to extend anything

**What is maven?**

* Maven is a build management tool
* Maven provides a way to help managing
* Builds
* Documentation
* Reporting
* Dependencies
* Release
* Distribution

**Why Maven is used?**

* Maven is simplifies and standardizes the project build process
* It handles compilation, distribution, documentation, team collaboration and other tasks seamlessly
* Maven increases reusability.
* Maven helps us to building reports, creating jar and use of repositories to manage jar files

**Explain what is maven repository?**

* A maven repository is location where all the project jars, library jars, libraries, plugins or any other particular project related artifacts are stored and can be easily used by maven

**What is maven local repository?**

* This is the place where maven stores all the project jars files or libraries or dependencies by default the folder name is .m2

**What is maven central repository?**

* Maven central repository is the default location ‘mavenrepository.com’ for maven to download all the project dependency libraries
* For any library required in the project

**What is dependency keyword?**

* Dependencies are libraries, which are required by the project, for example log4j jars, apache poi jars, selenium jars etc.

**What is Agile?**

* Agile is a 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 on frequent interval, the big difference is that in agile environment, testing is not a phase; it is an activity parallel to development in agile environment.
* Basically we are following sprint cycle, we are divided 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 created test scenarios and wrote test cases, first executed all the test cases in manually then if needed do it automation, again in second sprint or 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.

**What is waterfall model?**

* 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 illustrate the software development process in a linier sequential flow, this means that any phase in the development process begins only if the previous phase is complete.
* Sequential phases in waterfall model are: requirement gathering and analysis, system design, implementation, integration and testing, deployment of system and maintenance

**What is Jenkins?**

* Jenkins is a continuous integration server built with java, basically continuous integration is the practice of running your test in a machine automatically every time someone pushes new code into the source repository, Jenkins can be used to schedule jobs for regression testing, Can be used to associate Jenkins with a version control server, Jenkins can be used of trigger builds by polling in maven targets, In Jenkins we able to publish result, and send email notification.

**What is GIT & GITHUB why is popular?**

* GIT is a version control system
* GIT HUB is a website that allows you to store your code on the cloud, it is not just a cloud storage but a full version control system powered by GIT
* We can share code with team member.

**What problem you have faced to push a code in github?**

* [Push origin master error on new repository](https://stackoverflow.com/questions/827351/push-origin-master-error-on-new-repository)
* I tried to push a new code on repository, but the problem was I had no local branch named master in the config.
* Fatal authentication failed
* I have used HTTPS to connect with Github. I was tried to login in github but I wasn’t given access to account on Github.

**What Is Black Box testing?**

* Black box testing is a type of testing to check the functionality of an application is working based on the requirement specification, Black box testing also known as behavioral testing in which internal structure/design/implementation is being tested.

**When black box testing is applicable to?**

* Black box testing is applicable to
* Integration testing
* System testing
* Acceptance testing

**What Is White Box testing?**

* White box testing is a type of testing method in which internal structure known to tester who is going to test the software
* Internal security
* Expected output
* Functionality and each statement

**What is smoke, functional, integration, exploratory, regression**?

* **Smoke:** It is an initial set of test to check whether the major functionalities are working or not and also to check the major breakdowns in the application. It is the preliminary test carried out by the tester.

* **Functional:** It is a test to check whether each and every functionality of that application is working as per the requirement. It is major test where 80% of the tests are done. Basically In this test, the Test Cases are ‘executed’.
* **Integration:** It is a test to check whether all the modules are combined together or not and working successfully as specified in the requirement. Integration testing are done by developer
* **End to end testing:** **it** is a test to check whether the flow of an application right from start to finish is behaving as expected. The purpose of performing **end-to-end testing** is to identify system dependencies and to ensure that the data integrity is maintained between various system components and systems. Such as interacting with a database, using network communication, or interacting with other hardware, application, or system.
* **System testing:** System testing is consider specified way to complete when actual results and expected results are either in line, based on client input.  
  Before system testing, all unit and integration test results are reviewed by Software QA to ensure all problems have been resolved.
* **Cross Browser testing:** Cross **Browser Testing** is a process to **test** web applications across multiple **browsers**. Cross **browser testing** involves checking compatibility of your application across multiple web **browsers** and ensures that your web application works correctly across different web **browsers**
* **Regression:** When functionality is added to an application, we need to make sure that the newly added functionality does not break the application.  In order to make it sure, we perform a repeated testing which is called Regression Testing. We also do regression testing after the developers fix the bugs.
* **Parallel:** Parallel testing means multiple applications have one application concurrently to reduce the test time, parallel test consist of two or more parts, Basically we do parallel testing when company moving from old version to new version
* **User acceptance testing:** In this type of testing, the software is handed over to the user in order to find out if the software meets the user expectations and works as it is expected to.

**What is ALM/Quality Center and how to execute test and benefit?**

* ALM is a project management tools, ALM tools provide a consistent environment for team’s collaboration between development teams, testing teams, operations teams etc. ALM tools are also used to automate the process of software development and delivery.
* It can be integrated automation tools like QTP, Win-Runner and Load-Runner with ALM

**How to export test cases from QTP into QC?**

* To export test cases from QTP to QC, you first need to establish QTP-QC connection
* In QTP, Go to File > Quality Center Connection.
* Enter QC URL project name/domain/username/password and click on Login. QTP is now connected to QC.
* Next you can select the save the QTP Script in QC.
* In QTP, Select File Menu > Save As > Save in QC
* Select the Folder in QC where you want to save the QTP Script
* Click OK to Save.

**What is scheduler?**

* The Scheduler is a QC feature that allows timed execution of automated tests. You can specify the date and time when a test will be run. This is useful for running large no. of tests unattended, such as overnight.

**How to import test cases from Excel / Word to Quality Center?**

* We need to Install and Configure the Microsoft Excel / Word Add in Quality Center.

**Can we export the file from Quality Centre to Excel / Word? If yes then how?**

* Yes.
* Requirement tab– Right click on main Requirement🡪click on export🡪save as word, excel or other template. This would save all the child requirements

**Page Object model VS page factory**

* Page object model is a design pattern it is widely used in selenium for enhancing test maintenance and reducing code duplication and readability. Page object model can be used any kinds of framework like data driven, keyword driven etc.
* Page factory is a way to initialize the web elements when we want to interact with within the page object when we created an instance of it.

### Can you explain what framework have you developed?

### In my current job, I have developed a testNG framework using maven build management tools based on page object model and page factory. Structure of framework POM project is the main root and it has two sub-packages src/main/java and src/test/java, src/main/java is configured as a folder, containing java classes. That helps to executed tests, and src/test/java is configured as a folder to containing only test scripts which will be executed through testing. In src/main/java I created some common packages likes testbase, config, excelReader, pageactions, customeListener, report, screenshot etc, In Testbase class deals with all the common functions used by all the pages for an example initializing webdriver, implicit wait, loading configuration, extent reports and some common methods those methods will be extended by other classes. Config  class consumed some common parameters like database configuration, application url, browsers, username, and password. ExcelReaderclass will help us to read the data from excelsheet and supply to the test scripts. PageActionsclass is a collection of modules for an example the New York time company domain has the lot of modules like financials, events and presentations, investor news and stock and debts etc. Customlistenerclass it 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 testng report. Datais nothing but excel sheet, properties files. Extent reportsclass are used for reporting purpose, we are using extent report, it generates beautiful html report, we used extent report to store logs report and also screenshot failed test cases. Testscriptsis a set of modules it was designed based on pages actions, every module has n numbers of test scripts. Now we need to execute those test scripts for that testng is provided us testng.suite in POM project level. testng.suiteA suite in testng is commonly represented by one xml file. This is also useful if you are running several suite files. For an example let say you have 100 test cases, in java you can’t run all test cases in one sort. But in a suite we can run all the test cases in one sort. POM.xmlit will help us to downloads all the required jar files or dependency to support the project.log4.propertiesit will help us to required logs let say we are performing 100 of steps when the scripts are passed or failed you would like to know and you can achieve through logs. Than test-outputit is provided by testing to get a default testng reports. That’s all the features I used in my framework

### What is Data-Driven framework?

* Normally when we need to read data from external source we use data driven framework, where the test scripts read test data from data sources such as ODBC sources, CSV files, Text files, Ms Excel file etc. rather than using hard-coded values.

**What is Keyword driven framework?**

* In keyword driven test framework, all the operations and instructions are written in some external file like Excel worksheet.

**What is JIRA for Bug Tracking?**

* JIRA is a issue or bug tracking management tool, JIRA allows us to track any kind of unit works like bug, story, project task etc, JIRA really good to tracking custom reports, In JIRA collaboration also a big point like mentoring and sharing issues via email all help to make your work more visible to your teams, project release or set of tasks and one of the most common use agile project management and JIRA also pluggable integration test with GitHub

**From your resume, I see that you have been working in one place for a very short period of time. This raises me questions why. Can you explain why?**

* As a QA, I am hired for a certain period of time, normally for 12 months to 14 months. Once the project is over, I needed to move to another project. That’s why you see me in the resume jumping frequently here and there.

**When you log a defect using TestDirector (or ClearQuest) what fields do you see?**

* When we log a defect in **TestDirector**, we can see Defect ID🡪 where we write short description of the defect

Description🡪 description of the defect, Detected by🡪 Person who found the defect, Severity🡪 meaning-is the defect critical, High or Medium or Low. Date, Detected in Version, Priority, Project, Status, Assigned to and so on.

**Explain step by step how an issue is created in JIRA or what fields do you see?**

* when we log a defect or issue created we need to follow some steps like Project Field🡪 project which we are creating an issue for selected, Issue Type🡪 nature of the issue which is selected from dropdown menu like bug etc, Summary🡪 brief about issue, The Reporter🡪 who reports the issue, Description Filed🡪 details about issue, After version Filed🡪 about version, Fix Version🡪 also about the version, Priority🡪 will be selected priority from dropdown menu, Attachment🡪 any video or screenshot related to the issue, Environment🡪 operating system or browser details, Affects Version🡪, Linked🡪, after completed all the fields click on create button then new issue will be displayed on the window

**Why do you like this job?**

* I like this job, because it is process oriented. Meaning that I get an opportunity to work from analyzing the requirement documents to writing test plans, test cases, testing the application, logging defects, retesting, preparing reports and finally testing in production as well. Therefore, I am involved from the very beginning to the end of the software development life cycle (SDLC) process. I could get a lot of opportunities to interact with people where I can share knowledge.

Also I like this. Another reason is I like to find defects. I enjoy logging defects. The more defects I find, the happier I am.

**How do you determine what to test in an application?**

* First of all we have the test cases (or test scripts) that are written based on the requirement document. This pretty much covers what functionalities to test. Therefore, looking at the test cases tells us what to test in the application.

**If you have no documentation about the product, how do you test an application? Describe the process.**

* Well, this is a situation where I have come across several times. One of the companies in my previous projects did not have any documents. In that case, I went to the Business Analyst and sometimes to developers to find out how exactly the functionalities work. I had made a document during consultation with Business Analysts and Developers and after getting a clear vision then I started writing Test Cases.

**As a QA Tester, can you tell me the situation when you felt the most proud of it?**

* When I find the defect that normally others don’t find, then I feel very proud. For example, it was my second job there were situations where I found bugs that crashed the whole system at the end of testing phase. I tried the scenarios where the scenarios were NOT mentioned in the test cases. For example, we can close the windows by clicking X on the page, with “Close” button and so on. But there is another way that you can close the window, by pressing Alt+F4 on the keyboard. Not many testers test this scenario. I have done this in my last two projects. Both the time, the application crashed which became a big issue. I felt proud.

**Give me five common problems that occur during software development?**

* Poorly written requirements, unrealistic schedules, inadequate testing, and adding new features after development is underway and poor communication.

**How do you execute in ALM?**

* Execution of tests is completed by following the test documents in a methodical manner. If we run test cases from manual for that
* In the Test lab tab, choose the test set that you would like to run and click on “Run Test” or “Run Test Set”. Run Test- will execute the test set selected and the “Run test set” will run the entire set one test after the other until the end.
* As a manual test, we will have to execute the steps manually on our **Application under Test** and set the results. Go to the test status field and click on it to set it to a certain value. You can also enter the actual result in the space provided.
* For an example I am going to choose “Passed”. And am going to do the same for all the steps.
* When done, click on the cross button to the dialog. The following confirmation message is displayed. Click Yes
* Now we can see, the status of the test is marked as passed.
* Also we can change this status any time you wish by clicking on the status column and setting the desired value

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

* I learned a lot from the previous companies wherever I have worked, I 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

**What are your strengths?**

Answer: I am a very detailed oriented person. I have the sense of urgency. I can prioritize my job according to the deadline. I am very much dedicated towards my job. I am honest. I have the skills and expertise in QA process. These are some of my strengths.  
  
**What is your weakness?**  
Answer: I think my weakness is that whenever I am given some responsibilities and there is a deadline for it, I work day and night, 7 days a week. This is probably bad for my family life, but I can’t sleep unless I am done with my assignments.

**What is the difference between Client Server Application and Web Application?**  
client server: An application that runs on the client side and accesses the remote [server](http://www.differencebetween.net/technology/software-technology/difference-between-application-server-and-web-server/) for [information](http://www.differencebetween.net/language/difference-between-knowledge-and-information/) is called a client/server application  
The client server always makes requests to the remote server to get some information. The user interaction with the server is always through a user interface or application on the client side. A client server application can be platform specific as well as cross platform depending on the programming language used  
Web application: An application that runs entirely on a web browser is known as a web application   
the user interaction in a web application is through a web browser A web application is platform independent because they require only a web browser

**What is a Primary Key?**

A primary key of a relational table uniquely identifies each record in the table, primary key must contain unique values, and can’t null values and a table can have only one primary key.

**What is a Unique Key?**

A unique key ensure all the values in a column are different..

**What is Data?**

Data is number, character or image which has some information.

**What is Database?**

A database is of collection of information that is organized so that it can be easily accessed, managed and update.

**What is Negative Testing?**

Ans: Testing the system or application using negative data is called negative testing, for example, testing password entering 6 characters where it should be 8 characters should display a message.

**What do you do on your first day of the work?**

Ans: On the first day, normally, I will be given a computer and support people will set up the User Name and Password for the computer.  If that is done already, then the QA Lead or QA Manager will give me a brief walk through of the documents (which documents are where), introduce to different team. Then may be boss will ask to step into work what needs to be done.  However, the first thing normally is, they will ask you to read the documents available for that project

.

**What is the biggest bug you have ever found?**

Ans: Well, there are many big defects I have found in various projects. For example, in the last project, on a page, there was a button called “More Information”. Once the user clicked that button, the system would open a new window (pop up). We could close the new window in 3 ways: -By clicking X at the top right corner of the page -By clicking “Close” button on the page -By pressing combination keys (Alt+F4) on the key board Although the combination key (Alt+F4) was not mentioned in the test case. Since it was the last day of testing for us, it brought chaos in our Managers, Leads and the whole teams. Finally, the developers disabled Alt+F4 as a temporary solution and the application went into production

**What problems did you face in the past? How did you solve it?**

I had many problems while testing applications in the past.

**(i)** I was working on a module called “Transaction Summary”. There was “Submit” button on that page. After entering data in the all the fields, for example, First Name, Last Name, Social Security Number, Date of Birth and so on, I clicked the Submit button. Once I clicked Submit button, an error page displayed, “Page cannot be found…”. Since it was a critical defect, I immediately informed the Test Lead. There was a chaos in the room. All the developers, Database Administrators and Testers gathered in my cube. Nobody could tell exactly what was wrong with it. Finally, one smart guy checked into the database and found out that one of the files in the database was closed. The status of all the files should be in the open status. Once the status of the closed file was put in the “open” status, the application worked fine.

**(ii)** One of the problems was in the Login window (page). When the user enters and Login Name and Password, then Password should be encrypted.One of the Test Cases was that I needed to open database and see whether the password is encrypted or not. I found out it was not encrypted. I reported it as a bug (defect) and it was fixed in the next release (build).

**(iii)** Defects I have found in a project was a defect to close a window (pop up). For example, in the last project, on a page, there was a button called “More Information”. Once the user clicked that button, the system would open a new window (pop up). We could close the new window in 3 ways: -By clicking X at the top right corner of the page -By clicking “Close” button on the page -By pressing combination keys (Alt+F4) on the key board Although the combination key (Alt+F4) was not mentioned in the test case. Since it was the last day of testing for us, it brought chaos in our Managers, Leads and the whole teams. Finally, the developers disabled Alt+F4 as a temporary solution and the application went into production.

(iv)In my previous project, when the customer wants to upload a document, for example, a copy of a monthly statement (in Word format), on the website, the system should automatically change the Word document into .pdf format. Once the document was uploaded, I saw that the fields in the .pdf document were interchanged (misplaced). For example, the First Name displayed in the Last Name section. Date of Birth displayed in the Social Security Number field and so on. We found out that the problem was a mapping problem (remember this word). Once the mapping was correct, I tested in the new build. It was fixed.

(v)  The most common problem that I have faced in my previous projects are the Java script errors, data connectivity, error, HTTP 500 error (This error occurs when server is down), HTTP 400 error (when file is not found) and so on.

(vii)  “Father” pop up displayed when Print/Print Preview button clicked. (This was coded by the developer to mark this coding portion  (for his/her own purpose as a mark to indicate where he/she made changes, however, forgot to remove it).  Once the developer fixed it, it still displayed the same thing (because it was in the servers memory and could not go).  Now, I had to reset memory of the server from my machine.  Therefore, what I did is, I went to the website I was testing (for example, <http://mysite.app.org/My_profile>) and added reset.aspx at the end of the URL (Now the URL becomes <http://mysite.app.org/My_profile/reset.aspx> and hit enter. It took me to the server memory and I selected section and submitted the query and it was cleared.  Retested again and it is now OK.