1. **About yourself:**

I work as Lead SDET and QE automation engineer since last 10+ yrs. At present I am associated with Deloitte. So far, I have worked on several automation API and tools like Selenium web-driver, Appium, protractor, GitHub, Jenkins. Java is my major programming language along with JavaScript.

As SDET and QE, I have strong experience to develop several automation framework and tools from scratch. Innovation has always been my favorite part of work.

1. [**W**](https://en.wikipedia.org/wiki/Artificial_intelligence)**hy Amazon:**

1) Impressed about the “Invent and Simplify” principle of Amazon, which tells that Amazon always encourage of innovation and invention. Amazon looks for employees who can think outside the box and create innovative solutions to problems. Here my main interest to get hired is LEARNING and explore exciting things. (**Innovation or Success stories**)

2) Stay foolish, stay hungry has always been main mantra of my career, which is quite relevant with “Learn and Be Curious” principle of Amazon.

3) Amazon works as start-up.

4) What I heard from my friends who are in Amazon that Amazon always encourage their employee to take challenges and calculated risk and do not afraid of failure.

5) As a software engineer, it has always been a dream for me to work for Amazon. To be very honest I just want to work such an organization where people are not afraid of failure and failure is celebrated as a step to get the success.

**2a) Innovation or Success stories (Invent and Simplify):**

I joined Deloitte and current project on 2018 Dec as a QAE. When I joined there were only 12 members into the project, including 1 manual tester. But there was no such dedicated testing team exist. I was 1st one to be joined as SDET and the expectation was to innovate customized reusable generic test automation framework and tools from scratch single handedly.

I started learning the application(web), functional flow and the architectural design. Initially set-up few meeting with the product owner and regular touch base with developer.

Before jumping into development, I prepared deck about test automation having the below points.

a) Benefit of test automation- like effort saving, catching up hard bug as white/black box level, reusability, product quality increase.

b) Selected API to automate the application: Selenium webdriver and the reason of selection

c) Duration to build the framework- 3 weeks, dedicated

e) Version controlling

f) Planning of automated release- CICD

Framework development phase: Started to build the framework. Below point taken into consideration.

a) Programming language: Java

b) Reusability- modular approach

c) Scalable coding

d) Performance

e) Validation and Error handling properly

f) Page-object

g) TestNG used for unit testing.

Features introduced into the framework.

a) Customized HTML report generation after test run, showing pass/fail status in test suite and test step level.

b) Taking screenshot in run time.

c) Taking test data from external file to feed into the application.

d) Browser compatibility testing

e) Run same test in different test environment, like SIT, UAT

f) Automated release and deployment- CICD

At present, the team size increase to 65. Dedicated QE team of 6 members. 4 SDETs and 2 QE automation. I am working as Lead SDET. The team automated around 2000 test scenario. We have stable CICD pipelines, I build single handedly.

a) Smoke pipeline- use to deploy every-day in the morning

b) Regression pipeline- use to deploy whenever new release comes.

**2a-1) Learn and Be Curious**

In the year of 2017, January, I joined HCL as a test automation engineer. During interview, I was asked whether I have experience to work with HP leanFT tool. I was not, but I conveyed I am eager to explore it, if I get a chance. Luckily, I got offer from HCL.

I was employed for one of their insurance customers at onsite. When I joined the team, at that we were around 12 members into the team including offshore, and HCL was a new vendor who was about to replace another vendor. The tech-lead I use to report from customer side, he requested me to explore about HP leanFT. The reason they wanted to go with LeanFT, they were having a hybrid application, having web and window component mixed.

I started to explore LeanFT and jot down point presented a short powerpoint having the below points.

a) Learning about its API libraries

b) Programming language it supports, i.e. Java, ruby, c++

c) It can automate both windows and web

d) Support existing version control, i.e. GitHub

e) Support CICD

f) About its installation and configuration.

g) Time required to build up to build core framework- 3 weeks dedicatedly.

h) Support page-object.

g) Support unit testing framework, like Junit and TestNG

h) Performance wise, it’s better UFT

Then I started working on building up LeanFT framework from scratch. They were having a pre-existing Selenium framework. Their expectation was to implement a customized LeanFT framework having the same feature as pre-existing selenium framework.

I was able to implement a leanFT framework within 3 weeks.

Features introduced into the framework.

a) Customized HTML report generation after test run, showing pass/fail status in test suite and test step level.

b) Taking screenshot in run time.

c) Taking test data from external file to feed into the application.

d) Browser compatibility testing

e) Run same test in different test environment, like SIT, UAT

f) Automated release and deployment- CICD

Present a demo of utilization of the framework. I started from the phase, where I was aware about the tool. The time HP introduced it into the market, it was pretty new phase and not much user material was available into internet. Starting from there, I developed an E2E test automation framework using LeanFT, which the whole team from HCL and customer side utilizing. I was highly appreciated from customer side for my effort of learning something new and then implement it successfully into the project.

Because of this, QE presence of HCL started to grow day by day. The time I leave HCL, the employee count of the project increased by 100+ including offshore, where the count was 12, when I joined.

**2b-1) Component of test plan:**

1. Test Plan id
2. Introduction
3. BRD link
4. Screenshot of Mind-mapping
5. Link of test scenarios repository
6. Features to be tested
7. Features not to be tested
8. Suspension criteria
9. Entry and exit criteria
10. Test environment (Entry criteria, Exit criteria)
11. Testing measurements and metrics
12. Risks and mitigation
13. Responsibilities
14. Schedule
15. Defect reporting and tracking
16. Version control link (github link)

**2b-2) Difference between Test plan and Test Strategy .**

Test strategy is a high level document which defines the approach for software testing. It is basically derived from the Business Requirement document. Test strategy is developed by project manager or business analyst. It is kind of static document which sets the standards for testing so not updated often.

Test plan is derived from SRS (*Software Requirement Specification*) which is prepared by test lead or manager. The main goal of test plan is to include all the details related to testing such as what to test, when to test, how to test and who will be the tester. Test plan is often not updated but if there is some new feature or change is introduced then it has to be updated accordingly.

**Components of the Test Strategy document**

1. Scope and Objectives
2. Business issues
3. Roles and responsibilities
4. Communication and status reporting
5. Test deliverables
6. Industry standards to follow
7. Test automation and tools
8. Testing measurements and metrices
9. Risks and mitigation
10. Defect reporting and tracking
11. Change and configuration management
12. Training plan
13. (Bug found in Production), (Hardest bug you found), (scenario I missed to test and defect leakage in production):

a) This has happened very recently, month of June this year. I am working on a healthcare application. There are several scenarios I use to test regarding insurance amount to be displayed as expected based on certain data conditions and no of participant applied for it while filling up the application.

Now due to covid-19, the insurance amount gets changed for some certain scenarios (20% of total regression). Out of those, there was 1 scenario (combination of test data), I missed out to test.

Test data combination:

a) 3 HH- Father (US citizen, age<50), Mother is (Non-US citizen, age<45) and their child(age<12).

b) Applied for Medical assistance and Colorado works.

c) Mother lost her job.

d) Program: Food assistance and Cash assistance

I see for this scenario, the insurance amount was showing same as Mother as US citizen, which should not be the case.

Customer found this bug.

b) I found this one April 2019. Clicking on ‘Exit’ button, instead of coming back to home page, I found that exit button working same as ‘Next’ button.

This is the defect I found in production.

**4) Failure story:**

1) 2 yrs back around March 2018, I was working on a project as SDET for one of our customer in my previous company. There I was working on an insurance application. I was mainly responsible for ‘Product and services’ part of the insurance application. I designed 30 regression scenarios of ‘Protection for income’ module in one module. In next sprint I was assigned to complete 30 scenarios to test and automate. Customer wanted to complete the testing within 2 weeks.

I was so eager to please them that I told them I could finish it within 2 weeks, without much analyzing. I thought this was doable, but it ended up taking 4 weeks and they were not happy at all. They escalated my manager for this. I totally accept it was absolutely my fault of setting wrong expectation, no doubt.

Looking back, I realized I should have been more conservative in my estimate to the customer. I realized that a client isn’t going to be upset if I was clear about the timeline in advance, but they are going to be disappointed if I promise something and then don’t deliver. So I took this experience and used it to become much better at managing expectations of delivering something during projects I oversee.

In future after that, whenever I have been asked to deliver something, before saying Yes, I take time, do a formal estimation, talk to other people, do the requirement analysis. Then commit.

2) 3 yrs back, In my last job, my manager gave me a chance to interview and hire entry-level engineers for our team. I chose to hire someone who seemed to have a lot of potential but also had some “red flags” or things that worried me. It ended up being a big mistake. He had a poor attitude and dragged the team down until my manager released him from project.

My manager questioned me the reason of hiring him into the team. I told him I was more inclined and impressed about his technical depth. I thought let’s give him a chance. By experience he will learn things and be matured.

I learned to be more careful and not rush my decisions and to speak with others on my team who have more experience if I’m unsure of something. I also realized how important each hiring decision is, which made me a better decision maker in my career. Since then, I’ve interviewed and hire 8 other people in same project, and never had a bad experience like this again. But it was a great lesson to learn early in my career.

**4a) Weakness:**

1. I have not got a chance yet to work containerization, like docker, kubernate. These are hot skill in new technology era, an SDET or automation engineer good to have.

4b) Why did you switch your last company

1) Work profile and technology wise I got a good opportunity in my current organization.

2) Due to personal reason, I had to leave Bay area.

4c) What’s one thing you don’t like about the last job?

4D Question to ask post interview?

a) About job description and role.

b) How about the framework to build, like is it already build or the new joinee need to build things from scratch

c) Would like to know more about culture of the project, especially from testing perspective, what you guys expect from a QE from amazon work style point of view, like what make a QE successful in amazon.

d) What is dev and QE ratio into the team.

e) I have been trying to get into amazon from 2016. This is my 3rd attempt so far reached to onsite interview level. Every time I fail, I don’t give and prepare for the next opportunity. I can tell you that if I get the opportunity to get into the amazon I won’t let you down and you won’t regret while working with me.

# 4) Test Scenarios Login Page

1. Verify that the login screen is having option to enter username and password with submit button and option of forgot password
2. Verify that user is able to login with valid username and password
3. Verify that user is not able to login with invalid username and password
4. Verify that validation message gets displayed in case user leaves username or password field as blank
5. Verify that validation message is displayed in case user exceeds the character limit of the username and password fields
6. Verify that there is reset button to clear the field's text
7. Verify if there is checkbox with label "remember password" in the login page
8. Verify that the password is in encrypted form when entered
9. Verify that there is limit on the total number of unsuccessful attempts
10. For security point of view, in case of in correct credentials user is displayed the message like "incorrect username or password" instead of exact message pointing at the field that is incorrect. As message like "incorrect username" will aid hacker in brute-forcing the fields one by one
11. Verify the timeout of the login session
12. Verify if the password can be copy-pasted or not
13. Verify that once logged in, clicking back button doesn't logout user
14. Verify if SQL Injection attacks works on login page
15. Verify if XSS vulnerability work on login page
16. Verify after successful login, clicking back button, you are able to come back to login page and clicking on forward button user should not able to able navigate to homepage
17. Make sure while re-login, pw should not be stored in cookies
18. Any misunderstanding/disagreement scenario with you manager and teammates?

**Manager**

a) 3 yrs back, In my last job, my manager gave me a chance to interview and hire entry-level engineers for our team. I chose to hire someone who seemed to have a lot of potential but also had some “red flags” or things that worried me and my manager. My manager warned me. It ended up being a big mistake. He had a poor attitude and dragged the team down until my manager released him from project.

I feel sorry that somehow, I too let my manager down as he warned me before hiring him. But I was more inclined and impressed about his technical depth. I thought let’s give him a chance. By experience he will learn things and be matured.

I learned to be more careful and not rush my decisions and to speak with others on my team who have more experience if I’m unsure of something. I also realized how important each hiring decision is, which made me a better decision maker in my career. Since then, I’ve interviewed and hire 8 other people in same project, and never had a bad experience like this again. But it was a great lesson to learn early in my career.

b) 2 years back, in June 2018 in my previous company, I was 1st one about to start automating mobile app. I was one who had some experience on mobile app automation.

The 1st and foremost important aspect was to select best possible automation tool to select. I had a meeting with my manager including my tech-lead as well. We nurtured about couple of automation tools, like

Detox

Expresso

Calabash

Appium

My manager was quite inclined on Detox because

* JavaScript mobile testing framework.
* Fast and robust.
* He worked on it.

The reason I oppose, that

a) Detox support only javascript

b) It does not support iOS real device

c) Most of team members who-ever going to work on mobile part, they were mainly

Java developer background.

d) Support both iOS and android.

**Teammate:**

Sometimes with dev guys.

* Mobile myco benefit app, next button has @text value as blank, which was prohibiting us to unequally identify the element.
* After login, clicking back button and forward button, successfully able to re-login, it’s a defect

1. **What is the most challenging/complex job that you did?**

**You can give HCL experience also.**

This happened 2 years ago, October 2018, I was with Yahoo Small Business. The dev and test engineers are involved in web application staff.

The team I joined over there was involved in developing mobile app (YSB analytics). There was a release coming January 3rd week, 2019.

Before release, my manager, tech-lead want to start testing the mobile app.

For small business, so far, there was no existence of a mobile automation framework to start with, neither the pre-existing test engineers have the hands-on experience to work on mobile automation.

Considering the release date, it was a hard job to create a mobile automation framework from scratch and then automate TCs.

My manager, tech-lead, dev and I called for a meeting to decide what next and how.

My manager knew that I had some mobile automation experience, for around 6 months. So, they wanted me to take the challenge. I too found it interesting because

This would be a big opportunity from a learning perspective and skill wise too.

As I was 1st one inside small business to start mobile automation, that also needs to be done single handedly, this sounds quite challenging, exciting to me. I was also confident.

 I plan and I did the below steps.

·What automation tool, we should go with

- 1st preference was Appium and why.

Detox:

•JavaScript mobile testing framework.

•Fast and robust.

•Does not run on real iOS device

Expresso

•Latest Android test automation framework that got open-sourced by Google

•Supported on API level 8 (Froyo), 10 (Gingerbread), and 15 (Ice Cream Sandwich) and onwards

•But it does not support iOS.

Calabash

•Cross-platform test automation framework for Android and iOS native and hybrid applications.

•Only support Ruby

•Native, Hybrid and Mobile Web(limited)

Appium

•Mobile test automation framework (and tool) for native, hybrid and web apps.

•Support both iOS and Android.

•Supported by versatile programming languages such as, Java, Python,C#, Ruby, JavaScript, PHP, Objective-C.

•Support higher and latest versions of android API level.

Developing Appium framework from scratch.

It took 3 weeks to implement.

·Demo of the framework to the manager, tech-lead, and dev

·Had a meeting with product manager to understand the BRD and then

* Design mind-mapping.
* Prepared test plan
* Writing test scenario
* Manually test them
* Start automating them

·The module I covered

* Creating account
* Login
* Main menu bar
* Payment

So far, I left the project as well as the organization in Dec 2018. When I left, the project was quite in a stable condition. Almost 200 TC on mobile was automated.

1. Why are you interested in QAE?

I feel QAE is enigmatic for me. I feel interesting to play with application and catch bugs. I strongly feel, a person can not be an efficient QE, until he understands coding. I think coding is something which turns me on, that might be reason, I feel interesting to test a developer’s code by QE code.

1. Stage of testing:

* Understating and walk-though of BRD of the new testable requirement with product manager, developer, QE.
* Doing mind mapping by QE and design test plan.
* Meeting regarding reviewal of mind-mapping among QE and developers and get sign-off.
* Prepare test scenario. (80% positive and 20% negative)
* Categorizing test scenario between sanity and regression (20:80)
* Manually test all the scenario 1st
* Automating them
* Code review(peer)
* Align sanity and regression in devops(CICD) jenkins pipeline
* Defect logging if any.
* Fixing the defects
* QA sign-off

8) Test cases for Amazon Shopping Cart:

Shopping Cart:-

* Add one item to the cart and verify.
* Increase the quantity of the item from the cart and verify.
* Add the same item multiple times and verify.
* Add multiple items of different types and verify.
* Remove some items from the cart and verify.
* Remove all items from the cart and then verify.
* Click on an item in the cart and verify that the user is redirected to the product detail page.
* Check that the price of the cart is discounted when we apply a valid coupon.
* Check that the price of the cart is not discounted when we apply an invalid coupon.
* Add item(s) to the cart, close the browser and reopen the same site.
* Add item(s) to the cart, close the browser and reopen the same site.
* Verify the product QTY field when the product is out of stock.
* Verify that the user is able to add a text note for all products.
* Verify that the user is able to add any or all products to his wishlist by clicking on the wishlist link.
* Verify that the user is able to mark his order as a gift.
* Verify that the user is able to add any a gift message.
* Verify that the user is redirected to the checkout page after clicking on the checkout button.
* Verify the cart total when the exclusive tax is enabled from the admin end.
* Verify the cart total when the inclusive tax is enabled from the admin end.

Checkout flow:-

* Ensure that user can access the Checkout Page only after adding the product to the cart.
* Ensure that Checkout Address Page consists of all the details of the product such as Name, Quantity, Amount, etc.
* Ensure that only registered users are allowed to access the Checkout Address Page.
* Ensure that Name, Street Address, City, State, Country, Postal code is the mandatory field in the Checkout Address page (Shipping Address).
* Ensure that Name, Street Address, City, State, Country, Postal code is the mandatory field in the Checkout Address page (Billing Address).
* Ensure that error message is displayed when the user enters invalid input in all the mandatory field in the checkout address page.
* Ensure that Back to cart link is available so that user can modify the cart content if needed.
* Ensure that user is redirected to Checkout payment page only after entering valid mandatory details in the checkout Address page.
* Ensure that error message is displayed when the user leaves any one of the mandatory fields in the checkout Address page.
* Ensure that Next Button and Cancel Button are available in the Checkout Address Page.
* Check that a user is able to apply a valid coupon.
* Check order price when the coupon is applied.
* Verify the error message for the invalid coupon.
* Check that user is able to make his order as a gift.
* Ensure that the user is able to add any gift message.
* Check order price when gift and wrapping charges are applicable.
* Check the shipping price.
* Check the shipping price tax.
* Check the payment options.
* Ensure that Name on Card, Card Number, Expiration date, CWW2 are mandatory fields in the Payment Page.
* Ensure that error message is displayed when the user enters invalid input in all the mandatory field on the Payment Page.
* Ensure that error message is displayed when the user leaves any one of the mandatory fields in the Payment Page.
* Ensure that the user is redirected to the third party (Vender) page.
* Ensure that the user is redirected to the third party (PayPal) page if he is going to pay through a third party payment gateway (PayPal).
* Place an order where order total price is Zero (0).
* Place an order where the total discount is more than the entire order.
* Place an order by double clicking on the Submit Button.

9) You are hosting a web app in your server which is accessible only to a particular set of people. But on an unusual day, all the people are able to access your web app. How would you troubleshoot this issue

* Auth API might be down.
* Auth API returning incorrect response for unauthorized users.
* Web app not maintaining session based on auth API response.
* Security rule changes

10) Test cases for analog alarm clock:

**Wall Clock:**  
UI:  
Numbers read from 1 - 12 and in order and in clockwise  
Seconds pointers  
Clock minute hours and seconds hands  
Size of those hands  
material used for those  
Font of those numbers  
Option to set/reset the clock  
  
  
**System testing**

Validate the movement of minute second and hours  
Caluclate the accuracy of the seconds,minutes,Hours over period  
movement of minutes seconds and hours from each ones perspective  
Date(leapyear,months with different dates)  
Set/rest the clock  
Change the battery  
Night vision  
Grip ofthe watch  
  
  
**Recovery scenarios**  
Working of clock with battery and without battery  
  
**Performance testing**  
Clock performance with low battery and full battery (check in regular intervals)  
High pressure, Low pressure  
Battery life.  
water resistive(How much pressure it can take)  
Performance in the presence magnetic field

11) Test cases for Lift:

Capacity

Assume lift takes max. 300KG weight. So, by applying the boundary value analysis we can decide on more test cases.

* How much weight lift can take to go up?
* How much weight lift can take down w.r.t to specified weight?

Usability

Lift has a number pad and few controls to operate itself.

* Are the controls self-explanatory?
* Are the controls usable by blind person?
* Are the controls guided by voice message?

Functionality

* Is the functionality of the lift as per specification?
* Is the control functioning as it is supposed?
* What happens when the lift is overweight, does it still work?
* What happens if the auto-close functionality is not working?

Comfort

* Is the control pad comfortable to use?
* Is the experience inside lift makes the person uncomfortable due to gravity pull?
* Is the lift making noise while going up or down?

Height, Weight & Volume

The test cases on the height, weight and volume can be made based on the specifications. Few more test cases that can be added into this are as follows:

* How much time it takes to reach every floor?
* How much time it takes from the top of the building to the ground floor?
* How many people the lift can take regardless of their weight?
* What happens when the lift takes more people than the capacity?
* What happens to the people inside lift when the power failure happens?
* How many runs lift can make on power backup?
* Does the lift show right number on the floor?
* Does the lift get blocked when more than 1 floor makes request?

Negative Test Cases for Lift

* Add one more person than the specified weight and check the response of lift.
* Add more number of people regardless of weight and check the volume limitations of lift.
* Create smoke or fire inside lift and check the response.
* Try pressing the open button while the lift is moving.
* Press the stop button before reaching the specific floor.
* Put small obstacles near the sensors that detect auto-close functionality.

12) Amazon Review Page Test case

**Amazon Review Page Functional Positive**

* Fill the title, provide stars, and write descriptions and click refresh button the browser. The rating should NOT be saved. The same page should be displayed, and all the fields should be in the clear or unfilled state.
* Enter the review title, provide stars, and write a description of the product and click on the Submit button, the rating should be saved. And Thanks for rating message should be displayed, and the page should navigate to Review Your Purchases page to fill the review for other purchased products.
* Verify the maximum characters allowed for the title and description text box.
* After the user rating, it should be considered for calculating the overall rating of the product.
* After user rating from user1, it should be visible for user2 when user2 looks at the score of that product.
* After the user rating, if the rating is more than 3, then similar products from the same seller should be recommended to the customer.
* Depending on the number of stars, compare the current product with the same type of product from a different seller, and change the overall ranking of the product in the Amazon search algorithm.
* Rating provided activity should be updated/logged in user notifications. In case if the user wants to change the review after using the product, he/she can got warnings and search for his/her old reviews and edit them.
* Users should get access to a review of the product which he/she has purchased and not for other products.
* All the discussions & ratings should be accessible/ notified to the seller to improve the product and customer experience of the product.

**Amazon Review Page Functional Negative:**

* Try to submit the review rating without filling any field, Verify the warning message for respective fields is appearing correctly or not.
* **Amazon Review Page Non-Functional:**
* All the elements, Text boxes, Star rating, and Buttons should be appropriately aligned for better usability.
* The rating feature should work properly in all browsers and in all OS ( having GUI).
* **Amazon Review Page Performance:**
* Saving and navigating back to the search page should be very quick, even though a massive number of users are rating a particular product. Simulate the scenario with a load testing tool.
* The rating feature should work properly when the internet speed is low, and a proper loading mask should be displayed.

**Security:**

* Rating feature text boxes should be tested for SQL injection, JS execution, [HTML](https://www.w3schools.com/html/) execution.
* Rating services should use HTTPS, for saving and retrieving rating information.

## 13) How will you test Amazon.com website?

1. can we access webpage on browser?
2. can we open web site on different devices with different browsers?
3. All the search boxes, dropboxes, menubars, buttons are on the place.
4. login, logout, registation component test.
5. static + dynamic content tests?
6. find the capability of each component.
7. test each component one by one
8. system tests
9. security tests for the website
10. performance test
11. memory test for the website

Sanity test: UI level name

Regression: Login, registration, search, checkout, review page, geographical user,

14) Test case for amazon search box.

Search Box Test Cases

* Does the search box show a search page without any search query?
* What does the search page show if you enter nothing in the search box and hit enter or press the finder icon?
* What does the search box do if the search query is not entered?
* Check if the search box is present or not.
* Check if the search box length is as per the specification.
* Check the length of the query to be added into the search box.
* Check the characters allowed to be entered into the search box.
* Does the search box present auto suggestions when the query is being typed?
* Does the search box offer typo corrections for the search query?
* Does the search box allow searching with incorrect spellings?
* Check if the amazon page offers default focus at search box or not.

Search History Test Cases

* Does the search history page keep the history of your previously searched products on amazon?
* Does the search history page offer you an option to hide the history of previously searched products?
* Does the search history page offer matching products related to the search keywords?
* Does the search history page allow you to disable tracking the search completely?
* Does disabling search history make any change to the suggestions offered by search-box?
* Does disabling search history stop certain products being featured?
* Does disabling search history reverts back to the default setting in a new session?

15) Create a test plan and test cases for the Vending Machine

1) Functional:  
====================  
- check what kind of coins machine accepts.  
- check machine accept paper ruppes as well.  
- check max , min amount that machine accepts  
- check if machine accepts coins when there is no item available.  
- what if coin box is full and items available in machine...  
- check if inserted more money then required for an item.  
- what if inserted less money then required for item.  
- what if user wants to have more then one item in one transaction  
- what is user wants to cancel the transaction after inserting the coin.  
- what if user inserted forge currency.  
- what if user inserted currency of different country.  
- what if coin/ruppe inserted is in two pieces  
- what if machine hanged in middle because of some techincal issue, is there any manual for user to reach out to claim back the money.  
- If battery or electricity is out during transaction.  
- What if there is no item, can user give some message to owner for fill up the machine.  
- Is machine secure enough from theft.  
- Is there any alrm if user want to give.  
- Is there any other way of payment other then inserting the coins  
- How machine works during night, day , mornig, rain etc.  
- what temprature machine can bear  
  
  
2) Stress Testing:  
Verify that at what level vending machine stops accepting orders?  
  
3) Load testing  
verify what is the threshold of the machine  
  
4) Usability testing  
verify who will use this machine i.e what is the age group  
  
5) Security testing.  
a. should not be broken.  
b. Coins must be stored in safe place.  
  
6) Performance testing :  
How many transacactions does this machine handles in a day?

**16)** Write test cases for the given scenario. **Customers choose to buy a book using the credit card payment option.**

1.select the wrong credit card type and try entering card details.check for error  
2.enter wrong/invalid expiry date for credit card  
3.check for boundary values for the credit card number  
-enter less than 4 digits and press next  
-enter 5 digits and press next  
-enter alphabets  
4..check for boundary values for the credit card ccv number

Step1 Verify the credit card type  
Step2 Verify the name on card  
step3 verify the card number is valid  
Step4 Verify the expiring date is valid  
Step5 verify the start date if applicable  
step6 verify the card issue number is valid if applicable  
step7 verify the card security code is valid  
step8 verify the card holder address match the credit card details.  
step9 verify invalid credit card number should be declined  
step10 verify if credit card have insufficient fund payment should not be authorized.  
step11 verify if all credit card details are correct payment should be authorized.

|  |
| --- |
| 17) There was a bug found in production.**What could be the reason QA didn’t catch it earlier?**  Verify Prod Environment: 1) Check if the issue reported in Prod environment is a valid defect 2) Check if valid inputs were used in Prod environment 3) The bug reported could be out of FRD scope or it could be a enhancement feature  Verify Environment: 4) Verify if Prod and QA had the same environment or is there any difference 5) Try clearing cache, browser history and check if bug is getting reproduced in Prod  Verify Internet: 6) Verify if Prod and QA had similar internet connectivity setup (like VPN, LAN, Wifi) 7) Verify if QA Location and Prod Locations are same (Onshore/Offshore)  Verify Deployment:: 8) Verify if QA and Prod had same build or if different versions are deployed 9) Verify if there was any code missed during deployment from QA to Prod 10) If none of the above is the reason, then possibly QA would have missed it, so log a new defect with priority |

18) Good links:

<https://artoftesting.com/login>

<https://www.techbeamers.com/amazon-quality-assurance-engineer-interview-guide/#amazon-qa-interview-1>

https://www.careercup.com/page?pid=testing-interview-questions

https://www.geeksforgeeks.org/Amazon-topics-interview-preparation/

https://www.thebalancecareers.com/what-is-the-star-interview-response-technique-2061629

https://interviewsteps.com/blogs/news/amazon-leadership-principles-interview

<https://www.linkedin.com/pulse/how-successful-amazon-qae-interview-chandrasekhar-muttineni-cham-/?trackingId=jtZU1tVghKsGDkYNXDV69g%3D%3D>

20) Tiny url testing scenario:

1. For links check if it is mouse hover or clickable link.

2. Verify the hand icon on mouse hover on the link.

3. Verify tooltip on mouse hover and tooltip text should be aligned with the design. (Check with maximum character).

4. Verify link color functionality when the user hovers mouse or click on Link.

5. On mouse hover, it should display color as per the requirement.

6. On mouse hover, link address should be displayed at the left bottom of the browser window. (Depends on the requirement).

7. Verify hyperlink provided should open in same window, Tab / new Window, Tab.

8. Verify hyperlink should not show any 404 error or any other error after opening.

9. Verify loader functionality if available. (System should load data as per requirement within mentioned time or seconds).

10. Verify the login page should be displayed whenever necessary rights are required to view data.

11. If the link contains image then the image should load properly and should be visible.

12. For broken links use an add-on to identify the number of broken links on the page.

13. Verify web links are developed based on accessibility standard 2.0 (AA level) minimum.

14. If the web page is responsive then all weblinks should open in the mobile browser window as per requirement.

15. Verify hyperlink provided for web link should be as per requirement.

16. Verify loading time for hyperlinks.

17. All hyperlinks should open in all standard browsers.

18. Verify color for web link in all browsers.

19. From the security point of view, hyperlinks should pass XSS attack scenarios.

20. Verify each HTML element which is associated with hyperlink should have a unique ID for example if the page contains 2 buttons then both should have 2 different ID.

21. Any reader (narrator, jaws etc) should read it as Link with the address of hyperlink.

Let us know if any other scenarios are missing to test web link

**20a) What are the main considerations when building an automation framework?**

* Handle scripts and data separately, hybrid framework
* Reusability to the highest extent
* Programming language
* logging
* Create libraries – App specific and tool specific actions
* Whatever method and libraries we write, it’s a good practice to mention the definition of each methods
* Reporting
* Screenshot taking while failing a step, which should be attached with the report.
* Having a DriverScript, which could control the whole skeleton of the framework, like driver instantiation, closing, which test case to run etc
* Follow coding standards with proper error and exception handling and assertion and validation
* Offer high extensibility
* Less maintenance
* Script/Framework version control
* Page object- locator map – design pattern
* Build management tool- Maven
* Unit testing framework- testNG/Junit
* Same script should run in different environment without very minimal in framework.
* For web- browser compatibility testing or cross browser should be included.
* For mobile script framework should be have featured to run same script in iOS, android, emulator(for development), mobile center, if the requirement is there.
* Framework should support CICD
* Framework should be have clear distinction to run smoke and regression suite easily
* Framework should be having configuration file (config.properties) which should be having framework specific configuration data.
* Parallel execution using grid
* sauce lab integration
* Email
* README.md for documentation, which should be having diagrammatical presentation of the architectural design of the framework

# 20b) What are the challenges of testing on mobile?

### 1. Screen Size

Screen sizes of mobile devices vary. Apple’s screen sizes range from 3.5’’ to 12’’. Android screen sizes range from 2,6’’ to 6’’. These changes occur whenever any new model is launched. Apps have to be tested to ensure they work across these different screen sizes. Testers must check the performance of different layouts and elements against different pixel densities and aspect ratios.

### 2. OS Fragmentation

Different mobiles have different operating systems which are upgraded often. Fragmentation is a big issue for Android which has multiple different OS. Apple’s OS fragmentation is a smaller issue than Android. Regardless, testers are faced with the challenge of testing mobile apps for multiple operating systems.

### 3. Battery

Mobile apps can be demanding on batteries. They consume a lot of power. Using multiple apps as people often do drains battery life faster. A [mobile application testing company](https://www.kualitatem.com/mobile-testing) must factor in power consumption by mobile apps while designing their testing processes.

### 4. Changing user requirements

Mobile app upgrades are frequent as user requirements change. Mobile features go through continuous feature upgrades. Agile processes are best suited for developing mobile apps as changes can be put into every sprint. With all these changes, new bugs are detected that must be fixed. Testing challenges grow because of the rapidly changing environment of mobile apps development.

### 5. Mobile apps types

Some mobile apps are responsive, others are not. Mobile apps can be native, web apps or hybrid, containing both elements. The installation and functionality of these apps are different. These variations mean mobile apps have to be tested in different ways. One generic testing procedure will not work for all mobile apps.

### 6. Mobile networks

People move from place to place, and internet networks change. In underground places, network signals are weak. During boarding and flight takeoffs, the network may be off entirely, requiring the mobile app to work offline for features like ticket access, etc. Testers have the challenge of testing mobile apps under different networks.

### 7. Usability

Usability is the foundation of mobile apps’ success. A well-designed app has an attractive and intuitive interface. Content is easy to access. Navigation is smooth. Images adjust to screen size. Users can interact easily with the app via finger touching and tapping options. A mobile app testing company should make sure all elements of the interface are working efficiently for the user’s comfort.

## 8. Localization

Localization can be counted as one of the main mobile app testing challenges. It’s not just about the language of the app that can be changed, but how it interacts with the rest of the mobile device and how users feel about being able to change the app language to their own. Every language that will be added to the app, should be seen as new opportunity to penetrate a new market but it still remains an obstacle to overcome

**How to Test Rider app:**

* **Test the installation and Unistallation of the App**  
  - Test the login and log out of the account
* **After 1st installation opening the app, test whether it asking for device access (allow access)**
* **Check after whether Sign-up and login button exist at home page of lyft**
* **Clicking on login button, verify “What’s your number” page appear, whether it ask for registered contact no.**
* **Also verify country code dropdown exist with contact no**
* **Verify after giving contact, if ask for entering code, received my either SMS text or call**  
  - Test the emergency contact receives the SMS when a ride is started  
  - **Test the- signup for new user**  
  **- Test the current location picked when opened the app**  
  **- Test the favorite marking of the locations  
  - Test the picking of desired location**  
  - Test the vehicle availability in mins for all the types  
  - Test the vehicle availability says no when there's no active driver for that type  
  - Test the vehicle option from source to destination  
  - Test the source and destination are interstate  
  - Test the source and destination are intercountry through land  
  - Test the driver allocated for the ride can be called from the deep link of the app  
  - Test the money displayed before the ride and after ride are same when taken the given route  
  - Test the money displayed before the ride and after ride changes when taken the short/long route  
  - Test the choice of source and destination by giving lat and longs for that location  
  - Test the driver arrived indication is notified once he marked reached.  
  - Test the booking during rush hours when the demand is more  
  - Test the 'sorry cab didn't found' message when the search completes without booking a cab  
  - Test the OTP generation  
  - Test the SMS delivered for the booked cab or auto  
  - Test the OTP starts the ride. Only correct number  
  - Test by giving a random OTP number to start the ride  
  - Test the OTP number by giving vehicle number  
  - Test the auto deduction of ola money when the ride completes  
  - Test the cancellation of OLA cab/auto  
  - Test the cancellation charge applied after crossing the cancellation limit for that month  
  - Test the promo code works for each ride  
  - Test the OLA pass is applied if the pass hasn't been expired  
  - Test the fare changes for each variant like Prime, Mini, Micro  
  - Test Ola outstation verification  
  - Test the late night charges are higher than the usual  
  - Test the cab driver cancellation of the current booking notified in the SMS and Ola app  
  - Test the booking when the network has a weak signal strength

## 21 Good Questions to Ask at the End of an Amazon Interview

1. What qualities do your most successful employees have in common?
2. Can you describe a typical day in this role?
3. What defines success in this position?
4. What is the biggest challenge Amazon is facing today? How does this role help solve it?
5. What do you enjoy most about working for Amazon?

**22. How to write test plan and scenario for a healthcare application:**

  FA (Food assistance) and EFA - EBT (electronic benefit transfer) card

  MA (Medical assistance) - less income people, based on HH member

  CW ( Colorado works) - cash program, pregnant woman, divorce

  AF (Adult financial)- Adult financial prog (>60 or 65 yrs., wife disabled)

Eligibility for Colorado FA program

a)      You have a current bank balance (savings and checking combined) under $2,001, or

b)      You have a current bank balance (savings and checking combined) under $3,001 who share their household with one of the following:

o   A person or persons age 60 and over or

o   A person with a disability (a child, your spouse, a parent, or yourself).

Test scenario of PEAK health care

1.      Login and new registration

o   Keep login and stay no action mode for certain amount of time, asking for log-out

2.      Annualized salary and job income in a family

o   Verify primary applicant is having required amount annualized income

o   Verify primary applicant is NOT having required amount annualized income

o   Verify if applicant jointly qualify annualized income threshold

o   Verify if applicant get laid off or loose job because of any other reason recently

o   Is anyone in your home currently employed or were they employed in the last 60 days?

o   Is anyone in your home currently self-employed?

o   Is anyone in your home currently receiving goods in exchange for work?

o   Is anyone in your home paying for things that can be deducted on an income tax return? This will include legal conservator fees, alimony, penalty on early withdrawal of savings, or capital losses.

3.      Past Income and Expenses/Deductions

a)      Did anyone in your home have income from a past job, self-employment, or other sources during 2020 that they will need to include on your tax return?

b)     Did anyone in your home have past expenses during 2020 that they will need to include on your tax return?

4.      Homeless or not.

a)      Verify the applicant is homeless or not

5.      No of HH in a family

a)      Single HH

b)      More than 1 member HH

c)      No of child

d)      No of grand child

6.      Age verification of family members

7.      Pregnancy details

a)      Yes or No

8.      Relationship details

a)      Husband- wife

b)     Parental

c)      Grandparent/children

9.      Marital status

a)      Married

b)     Divorced or separated

c)      Single mother

d)     Live-in

e)     If children are married or not

10.   Combined program along with FA, e.g. FA + MA

11.   Citizenship details

a)      If spouse is NON-USA citizens

b)     If any of the family member belong to NON-USA citizens

c)      If any of the family is visa holder or green card holder

12.   Address details verification, whether primary applicant belong to Colorado states, considering USA citizenship

a)      Primary HH officially belong to Colorado state

b)     If any of the family member belong to out of Colorado

13.   HH Tax filler information

a)      Single

b)     Married filing jointly

c)      Married filing separately

d)     Head of household

e)     Qualifying Widow(er) with dependent child

14.   SSN verification

a)      Verify while applying for a brand-new benefit, whether the SSN already exist into the system.

b)     If any member of the family does not SSN.

15.   Phone no verification

a)      Verify while applying for a brand-new benefit, whether the phone-no already exist into the system.

16.   Email verification during registration

a)      Verify while applying for a brand-new benefit, whether the email already exist into the system.

b)     If it’s a brand-new application, then while registering a verification code should be send to the applicant’s email#

17.   COVID- 19

o   Verify if the registered applicant loose job# because of COVID-19 pandemic

18.   Premium amount verification for MA.

a)      Verify premium amount gets changed due to no of applicants in family

b)     Verify premium amount gets changed due to change in annualized salary

c)      Verify premium amount gets changed due to change in marital status

d)     Verify premium amount gets changed due to pregnancy

e)     Verify premium amount gets changed due to change in address of any applied family member

f)       Verify whether premium amount get changed during COVID-19

19.   Verification of benefit amount

a)      Verify benefit amount gets changed due to no of applicants in family

b)     Verify benefit amount gets changed due to change in annualized salary

c)      Verify benefit amount gets changed due to change in marital status

d)     Verify benefit amount gets changed due to pregnancy

e)     Verify benefit amount gets changed due to change in address of any applied family member

f)       Verify whether benefit amount get changed during COVID-19

20.   Different combination of Benefit program.

a)      Applying single benefit program, e.g. only FA, MA or CW

b)     Different combination of benefit program: e.g. FA + MA, or FA + MA + CW, FA + AF

21.   Medical Assistance Application Summary

This page use to appear before submitting application. Here need to verify the essential information entered during registration, like name, email#, SSN, phone no, address, HH member information are correctly displayed in the screen or not.

22.   Payment information from customer exclusively for MA.

a)

Un-automatable coverage

o   While registering email confirmation verification code.

o   for downstream salesforce application, can’t verify captcha

o   for mobile application, digital signature

Issues faced and resolved regarding automation:

o   PDF validation after submitting the application.

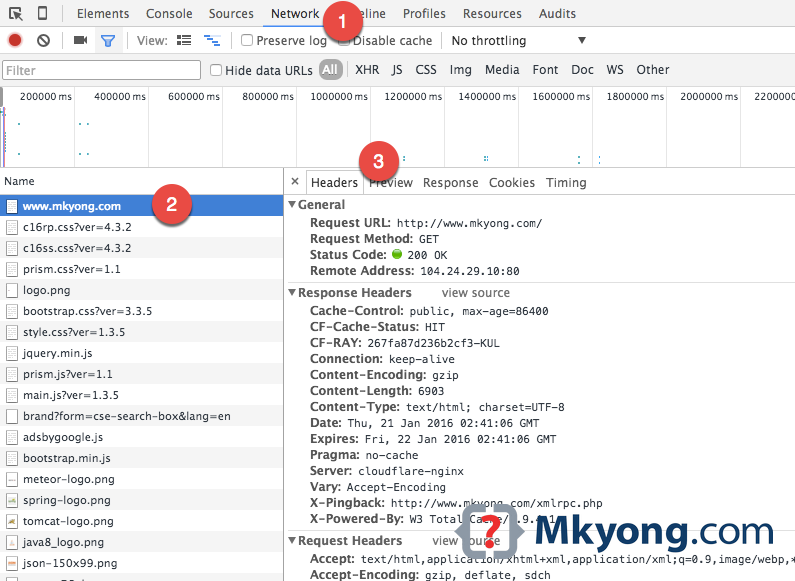
23) Test case for weather app:

1. Ensure weather widget ask to enable auto location if it was disabled.
2. Ensure weather forecast is correctly locate your place automatically if auto location is enabled
3. Ensure forecast should be available in hour by hour and day by day wise.
4. It should also show the Precipitation, humidity and wind percentage apart from the temperature.
5. There should be search fields to find weather for other places.
6. Weather forecast should also display the minimum and maximum temperature of the day.

24) How to view HTTP response code in Google Chrome?

To view the request or response HTTP headers in Google Chrome, take the following steps :

1. In Chrome, visit a URL, right click, select Inspect to open the developer tools.
2. Select Network tab.
3. Reload the page, select any HTTP request on the left panel, and the HTTP headers will be displayed on the right panel.



**25) How to debug if a mobile app crashed**

<https://www.businessinsider.in/tech/apps/news/how-do-you-fix-an-app-that-keeps-crashing-on-android/articleshow/72110840.cms>

26) Good test cases:

<https://artoftesting.com/google>

**27) Challenges in building test automation framework:**

* Choosing the right automation tool/API
* Cost effectivity, open source or paid tool
* Opting for right programming language where the team is comfortable and experienced enough.
* To be able to create automated tests quickly by using appropriate abstraction layers
* The framework should have meaningful logging and reporting structure
* Should be easily maintainable and extendable
* Should be simple enough for testers to write automated tests

**28) Key consideration in building test automation framework.**

* Re-usability of code,
* higher coverage,
* low-cost maintenance,
* and easy reporting.

29) Why LCBO:

One of the world's largest purchasers of beverage alcohol, a best-in-class, customer-first, responsible retailer and wholesaler, supporting local communities and delivering value to Ontarians. It’s full e-commerce website. The LCBO understands a great career is made up of varied days, compelling problems to solve, and human connection, so LCBO works with their employees to build a working experience that drives both the organization and the people within it forward.