Sr. QA Engineer - Technical task

Please answer each question directly underneath. Generally speaking answers should be about **3-4** sentences long. Feel free to give longer answers where you think appropriate or to go off at a tangent if you think the question raises interesting issues. If you don’t know the answer, you can either skip the question, or have a guess!

Answers should **NOT** be copied and pasted from the web, and you must not post the questions to message boards for other people to answer.

# General questions (~15 min.)

1. What do you consider more important and why?
   1. The primary intent of Testing is to show that the system meets the user’s needs.
   2. The primary intent of Testing is to find faults.

The primary purpose of software testing is detecting faults/failures in the so that defects can be

Corrected.

And the purpose why we want the defect free software is to satisfy the needs of the customer/user.

1. In your own words, how would you define a good test?

A good test is the one which detects the defects/faults

Can be implemented with the same characteristics and satisfies the user/customer requirement.

Also, these are the tests with positive and negative tests with in the scope already agreed by the team.

1. In Selenium, what is the difference between the RemoteWebDriver and the “local” drivers?

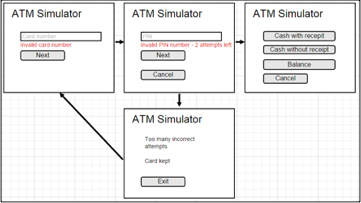
If we are using selenium grid then the test runs through remotewebdriver. If you are using any of the drivers not RemoteWebDriver, they assume. the communication to the web browser is local.

1. Describe what the Page Object Pattern is and its advantages.

Page object pattern is a design where we create object repository for the webelements.

The advantages are code reusability, maintainability and readability.

1. How do you see Testing evolving in the next 5 years?

There are more evolving techniques coming in to place for testing, as more new techniques/tools/dynamic implementation requires more focus in testing and gives us a chance to work on most robust systems.

# Exercises (~60 min.)

An ATM is required to work in the following way:

Enter a card and if the card is invalid reject the card and exit. If the card is valid then enter a PIN number. Check if the PIN is valid, and if it is not, then display a message “Invalid PIN number” and the number of attempts left. If 3 attempts are made with an invalid PIN, then the ATM keeps the card. If the PIN is valid, then display these options for the user to choose.

* Cash withdrawal without receipt
* Cash withdrawal with receipt
* Balance
* Cancel

For the whole exercise, assume that you are only working on the user journey that goes from entering a card to **displaying** the options.

1. List the tests you would produce to test this application. **State any assumptions**.

Assumption 1. The Customer has an ATM card and a pin number

Assumption 2. The ATM machine is working

1. Rewrite the previous specification as a set of scenarios using the Gherkin syntax (Given, When, Then). The output should be a complete Feature.

Task

1) Use Cucumber and Java to write and automate the following scenario using POM framework on [http://amazon.com](http://amazon.com/):

* + Search for a book
  + Add the book to the cart

Selenium browser-automation tool must be used

Feel free to add any comments to clarify areas you feel are confusing or that you wish to highlight. Also please include instructions for running the tests.

2) Using Jmeter write performance tests for login to [http://amazon.com](http://amazon.com/)