vTransfotech

Class-1

29th feb2020

1. What is QA engineer?

QA engineer test software for bug and defect before it gets launched for the consumer. When developer write code, they make mistake and qa developer are the one to find and fix mistake

* What is Jira? (defect tracking software)

Jira is a tool where we keep track of the defect of the software it is also known as ticketing tool. Jira have many functionality

After analyzing the consumer requirement if we find defect, we have to write them down in somewhere that’s when Jira comes

* What is the Jira product?

1. Jira core-use in fitness related product and task management
2. Jira software-include Jira core and agile mythology
3. Jira service desk-use for support project can give better experience to customer and your service provider faster and better way
4. Jiraops-it is used to centralize alert and use to notify right people at right time

So, there is 2 method we follow to make a software agile method and waterfall method

* What is agile?

17people comes with a philosophy and it called agile in agile we divide the work in small chunks (user story).so we can say that agile is a philosophy to rapidly deploy an application in more organized way

They give 2 thing 4 value and 12 principle

4 values are

1. Individual and interaction over process and tool
2. Focus on working software over documentation
3. Customer collaboration over contract negotiation
4. Response to change over following a plan

* Waterfall method

In waterfall we focus on tool process and method we always follow a plan and we cannot change the plan

* Types of application

1. Dextop application-Microsoft word
2. Client server application-gas station software
3. Web base application-Facebook, amazon
4. Mobile application-Facebook WhatsApp
5. Responded going and coming back is call api protocol (gas machine)

* What is unit testing

When a developer test software for the first time it’s called unit testing

Unit testing only focus on the smallest element of software design

Ex-calculator when we test it, we test every element separately. Raw code testing. Unit testing can be automated by **junit or cucumber**

Unit level test is important to stop security hazard

* What is test case

Before doing anything there is a documentation process in this industry that call test case.

We write down the test we follow in test case

* What is static code analysis

Sonar cube automatically checks where security hazard coming from it called static code analysis

* Html, CSS, java script (hypertext markup language)

Html is the language of a webpage. Whatever element we have on the webpage is called html

CSS add style to the webpage. How the webpage is going to look is call CSS

Java script are the popup content animation in the website. The functionality of these element is call java script

* Everyone helping everyone in the team is call cross functional team
* Software development team

1. 1ba (business analysts)
2. 2ux designer
3. 3developer (front end, back end)
4. 3qa engineer (manual, automation, lead)
5. 1lead, scrum master
6. 1product owner (representative of an owner who works with the team)

* What is regression testing

We do regression testing by re executing the test against modified application to make sure that modified code doesn’t break anything which was working earlier

2nd class 1st March 2020

* Software development life cycle

1. Project kick off
2. Requirement gathering
3. Analysis
4. Design
5. Development
6. Test
7. Deploy
8. Maintain

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* Every sprint starts with a sprint planning meeting. Scrum master facility meeting
* Whatever customer want is call functional referred document(ford)
* User story is small chunk of ford
* What is edit box

Where we have typed the information in call edit box

* What is test case

While checking the software functionality we have write down every single step its call test case

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* Stlc(software test life cycle)

1. Requirement analysis
2. Design analysis
3. Test planning
4. Test case writing
5. Test case execution

* Silk (test execution)

1. Smoke testing-quickly testing major functionality it also calls sanity check or ado
2. Functional testing-testing one pedicular functionality of an application for positive and negative
3. Integration testing-combining different functionality and testing it as a one
4. End to end testing-
5. Regression testing-we do the test from the beginning. it’s an automated test. we do regression test when we go from one environment to another

* What is build

When developer write code, they create a package. How new code and old code compile together it’s called build. Write code create build and deploy build with old code. Where to deploy and how to deploy there are engineer for that they are call dev op

**Example**-3 different people writing code for same application in 3 different computers after they are done, they have to compile it together to create a package that’s call build and deploy the entire package to environment so that website can access new code. Deployment is an automated process and done by devops. once code get deployed

* What do you mean by deploy the code to qi?

When developer actually write code, they write it in their environment once unitest pass they deploy the code to qa environment.

but in qa there are 3 environments

functional,integration,performance,uat testing then it goes for final production

* java and selinum is use to automate the test
* Uat testing(user acceptance testing)

After uat testing it sent for production. Before sending, it checks by Jenkin and manually as well

5th class

* Scrum is a framework of agile
* Kanban and xp are 2 other frameworks in agile
* Backlog is a list of tasks which need to be executed
* If you join a company and don’t know what to do ask for canban board to see the work

Story telling

Hi, my name is Ashraf. During my last project I have worked with mobile

for this project we a had a team of 11 people

1ba,3dev,3qa,2ux designer,1scrum master, In order to find out the client requirement our be had several meeting with with our client.in order to make our project more easier the client wanted to introduce a member for our team who will work with us and will be giving us constant feedback while we were developing the application for the clien.that person we are going to call product owner and we is the 11th member of our agile team. After that ba arranged a requirement reveal meeting for that I was the one who arranged all the material we are going to need in the meeting. During the meeting we are talking about the project what is doable and what is not then we divided the work into 12 sprints. And we were discussing about the user story of the gui or frond end is there going to be link in the gui how many edit boxes there in the front end will be is there in requirement of a drop down or not.

Explanation of the project for T-Mobile

the project was basically they want to introduce a loyalty credit card for the customer who are with them for more than a year if they have a good credit score they can apply for it when they get the card they will receive 5 usd discount for every member in their plan when they add that card as a payment method for their monthly plan.

Prictise!!!!!!practise!!!!!practise!!!

Sql(structure query language)database practice class 6 and class 7(21st and 22nd march)

* Information is meaningful representation of data.it comes in a form of a file.few database-oracle,db2,ibm
* ***Why do we need sql?***

To match the front end data with the backend data

* ***Vale are case sensitive keyword are no case sensitive***
* ***Three tier architecture***

Front end,website(html,css,java script)what we see in the front

Application server is business logic(make sure user is adult)

Database where all the data store

A close up of a piece of paper

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Colum

/

Now practice time

remember



Colum=field

Row=record

\*means select all

; semicolon is use to end statement,we need semicolon to separate

‘’colone we use it in where clause ’ cotation can be used

--comment(double dash means comment if we put it database will ignore statement)

Order by we use it to rearrange in in ascending (small to large)/descending(large to small)

()parenthesis separate

Commit means hard save

* ***Select \* from customers;***

Question type

Give me the customername colum from customers table

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In order to find out only customername,country colum from customers database we have to write down

Ex-select customername,country from customers;

* ***Select distinct(is is use to return different value,we also use it to don’t get repeate)***

Question type

Question will have different-Select all the *different* values from the Country column in the Customers table.

Ex-select distinct \* from customers;

* ***Select where’’*** this is where we have to use colone’’ but for number we can ignore colon

It is use to filter record(where is used to fulfil specific condition)also use to update and delete

Question type

Give me all the product from product table where price is greater than 10

Ex-

SELECT \* FROM products

where price > 10

* ***sql and,or,not in represent multiple or***

when you will use and both condition need to be true

when you use or any of the condition need to be true

where not we use it when condition is not ture we prefer to use <> it

* ***using and***

select \* from customers

where country='Germany' and city=berlin';

* ***using or related to in clause***

select \* from customers

where country='Germany'or city='London';

* ***using where not <>***

select \* from customers

where country <> 'germany';

* ***using order by***

select country from customer

order by country; (asc is set by default desc we have to set it)

* ***using and,or together(we have to use ()parenthesis to use and or together)***

***we can also use in caluse in order to make the statement smaller in we have more data***

select \* from customers

where (country='Germany'or country=’spain’) and customerid > 20;

sample question

select the field from product where categoryid 2 or 8 and price is above 20

answer

SELECT \* FROM Products

where (categoryid=2 or categoryid=8) and price > 20;

another way to write it

SELECT \* FROM Products

where categoryid in(2,8) and price > 20;

* ***Null value(we cannot use =,>,< or<>) o or spce is not considered null***

select\* from customers

where address is null

* ***insert into***

to insert a data in database

Insert into customers (CustomerName,ContactName,City,PostalCode,Country)

VALUES ('Ashraf Hossain','Ash Hossain','New York',11432,'USA');

In order to check the change in database

Select\*customers

Order by customerid desc (coz the change will be at the bottom)

* ***\*\*\*\*\*\*\*\*\*\*\*sql update(where is use to update specific record)***

first you have to find the record which you intend to update

update customers set customername='ashhossain'

where customerid=103;

always select and check it to make sure you are deleting or updating the right information

* ***sql delete***

delete from customers where customerId=97

* ***\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*select top(not all database support select top)***

SELECT TOP 3 \* FROM Customers where customerid>=50;

* ***Limit(limit you have to add end of the statement)***

SELECT \* FROM Customers where country='Germany' LIMIT 3;

* ***Min and max(it works for alphabet as well)***

select min(price) from products

* ***count,avg,sum***

select count(\*) from customers

select sum(price) from products

SELECT avg(Price) from products

Example

Provide average list price of product for category\_id=1 and round the price.green mark is the syntax to use round

\*\*\*\*\*\*\*\*\*select round( avg(list\_price) ,2) from products where category\_id=1;

***Or we can find out this way***

In order to find out the average we divide the total pirce with the total number of products

SELECT sum(Price)/count(\*)

FROM Products;

* ***\*\*\*\*\*\*\*\*\*\*\*\*\*like***

it is used in where clause to search for specified patent in Colum

There are two wildcards often used in conjunction with the LIKE operator:

% - The percent sign represents zero, one, or multiple characters

\_ - The underscore represents a single character

In order to use syntax you can use and or

Example

Find the customer name whose name starts with a and end with n

Like my name ashraf hossain

SELECT \* FROM Customers

WHERE customername like 'a%n';

example

Find a name which have a character before I at the end

SELECT \* FROM Customers

example

find the people name whose last name start with s

Select \* from customers

Where customername like '% s%'

WHERE customername like '%i\_';

example

Find all the city where it starts with b

SELECT \* FROM Customers

WHERE city like 'b%'

Example

Find city which name start with b or m and country start with s

SELECT \* FROM Customers

WHERE (city like 'b%' or city like 'm%') and country like's%';

Find a name whose last name start with k and end with n

Like adam khan

SELECT \* FROM Customers

WHERE customername like '% k%n';

Select \* from customers

Where customername like ‘(A-S)%’

* ***In( we use it to specify multiple operator in where clause)in represent multiple or***

SELECT \* FROM Customers

WHERE Country = 'Germany' or country= 'France' or country= 'UK';

Instead of writing it we can write

SELECT \* FROM Customers

where Country in ('Germany','France','UK');

example

find the people name whose last name start with s

Select \* from customers

Where customername like '% s%'

example complicated

are there any category\_ids that exist in product\_categories that are not assigned to any products in products table?

select category\_id from product\_categories

where category\_id not in(select category\_id from products);

\*\*\*\*\*\*\*\*\*\*\*example- give me distinct list of country from suppliers that exist same country as customers

select distinct country from suppliers where country in

(select distinct country from customers);

Same way you are going to use not in

example -Give me all the information about customer which are not in suppliers

select \* from customers where country not in (select distinct country from suppliers);

* ***Between (it has similarity with greater than and less than)***

Give me the list of the pirce of product in range of 10 and 20

Instead of writing

select\* from products

where price >=10 and price<=20

SELECT \* FROM Products

WHERE Price BETWEEN 10 AND 20;

* ***Group by***

Give me the list of customer in each country

SELECT COUNT(CustomerID), Country

FROM Customers

GROUP BY Country;

Example how many product exist in each category\_id

* ***\*\*\*\*\*\*\*\*Union***

SELECT City FROM Customers

UNION

SELECT City FROM Suppliers

group by city

union finding out the same data from 2 table

**example test**

* give me all the first name last name and email from contacts

select first\_name,last\_name,email from contacts;

there are agrigated function

1) Count()

2) Sum()

3) Avg()

4) Min()

5) Max()

* ***\*\*\*\*\*\*\*\*\*Joint***

Give me the list of which students have taken which course from 2 table

select c.customerName,c.customerID,o.orderid

from customers c

join orders o

on c.customerid=o.customerid

we can write syntax like this as well

select c.customerName,c.customerID,o.orderid

from customers c,orders o

where c.customerid=o.customerid

example

A screenshot of text

Description automatically generatedfind out which customer order which item?

--customer id,name,orderid,status

select c.customer\_id,c.name,o.order\_id,o.status

from customers c

inner join orders o

on c.customer\_id=o.customer\_id;

Right join

If you have to find out all the value from first table and some from second It will be left join

Table 1 table 2

which employee sold which order? Orders table

SELECT o.employeeid,o.orderid, e.firstname, e.lastname

FROM orders o

RIGHT JOIN employees e

ON o.employeeid = e.employeeid

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* ***\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Self join***

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***Syntax***

SELECT column\_name(s)   
FROM table1 T1, table1 T2  
WHERE condition;

It means joining the table itself

Give me the list of which employee works for which manager or employee?(employee and manager belong to same table)

select emp.employee\_id,emp.first\_name,emp.last\_name,emp.job\_title,

man.employee\_id,man.first\_name,man.last\_name,man.job\_title

from employees emp,employees man

where emp.manager\_id=man.employee\_ id;

***we wont use this function that much*** A screenshot of a cell phone

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* ***Create view***

CREATE view TestTablse AS

SELECT customername, contactname

FROM customers;

(When we create a view it will update in real time when we input a data)

* ***Create table***

CREATE TABLE TestTable AS

SELECT customername, contactname

FROM customers;

(A test table will be created at database)

* ***Drop table***

DROP TABLE testtable;

(it will delete testable which we have

created)

* ***Truncate table***

TRUNCATE TABLE testtable;

(it will delete inside info of table)