**Day1: Date:15/09/2021**

**Software Testing:**

**What is Software**:Set of programs which we are running to get desired output

* Particular sets of input which will be processed or manipulated and will give you the output.
* EX:Paytm( Buy the products)

Software is a collection of instruction & data that tells a computer how to work.

**Testing**:In order to check / to find a defect( Testing Functionality of application) according to customers requirement that is called Software Testing.

Difference Between Manual Testing & Automation Testing

**Manual Testing**

Testing the functionality of an Application repeatedly or again and again according to customer requirement

Ex: testing any application with manual effort.

Ex: Using whatsapp you have send message personally

**Automation Testing**

Testing the functionality of an Application according to customer requirement

We have to write code in automation tool( selenium) that is called as Automation Testing

When a code is stable the only we can perform Automation Testing

**Difference Manual Vs Automation**

**1.**Manual Testing is done manually by QA analyst whereas automation is done by using scripts with the help of automation tools.

2.Manual Testing is not accurate because of possibilities of human errors where as automation process is more reliable

3. Manual Testing is Time consuming process where as automation is very fast

4.Manual testing we don't require any code knowledge where as in automation where required coding knowledge.

Wherever a company designs software there are three layers.



**Day2: Date:16/09/2021**

**Software Development Life Cycle(SDLC)**

**SDLC** is a step by step procedure or standard procedure for developing a new project/product.

While preparing any software the vendor has to follow a certain way or path to achieve the final product which will be working as per requirement given by the customer that process is called as SDLC

**Different Phases/Stages in SDLC(Flow Chart)**

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1. **Requirement Gathering**

Here all the informations is gathered from the customers by **Business Analyst(BA)**

Customer gives (BRS)- Business Requirement Specification(non technical document)

BRS Document contains

1. Purpose of Project
2. Scope of project
3. Scope of work
4. Features and Functionality of project

2. **Feasibility Study/ Analysis:** In the phase we are going to decide whether we the develop the project or not

BA is going to convert BRS into SRS Document(System Requirement Specification)

**Team involved in this phase**

BA( Business Analyst)

Architecture(Tools and Technology)

HR( Human Resource)

Finance( Profit or Loss calculations along with Investment)

Project Manager( who is going the handle the project)

Once BA receives feedback from their team members BA is a responsible person whether the company is going to develop the project or not.

**Day3: Date:17/09/2021**

**3.Design/Designing :**

* Design is done by Design Architect
* There are two types Of design 1. High Level Design (HLD) 2. Low Level design (LLD)
* **High Level design (HLD)-** It is how the application will look like 
* **Low Level design (LLD) :-** It is how the different modules will be looking like
* Here Front end Developer is also involved



**4. Coding & development:**

* Single line of a program is called as code
* Multiple lines will construct a program
* Multiple programs will construct software.
* Here developer will be involved
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* If a person / developer is working on both the front and back end then it is called a **Full Stack developer.**

**5. Testing:** It is a process of checking Completeness and correctness of the software.

* Here tester will be involved
* The purpose of testing is to deliver a free software or a quality product.
* Defect or Bug means something which is not working as expected.
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**6. Installation/ Implementation/ Deployment:**

* Here site engineers/ field engineers will be installing software in user Environment
* After Deployment software is available for users to use it.

**7. Maintenance :**

* After deployment if the user finds the defect or any issue, he will contact customer care (BPO).
* Developers and testers will be working on that issue and have a solution for it.