# Naveenya Gunasekaran Impact training

**SDLC** 

Software Development Life Cycle

SDLC is basic need to develop, design good-quality of software application. The initial stage to develop software is to prepare SDLC. According to SDLC the software will be developed step-by-step until it gets success

#### STAGES OF SDLC:

Requirement

**Planning** 

Design

Development

**Testing** 

Deployment

Maintanance

#### **REQUIREMENT:**

At initial stage, it is not easy to finalize the requirement to create software. The project manager will discuss with top management of the IT organisation. Requirements gets fufilled only by creating SRS (Software Requirement Specification). This document will be used until the entire life cycle of project development.

# PLANNING:

Once the project is set to be final, the project manager starts planning about next step.

Those includes,

Budget

Time duration

Number of developers

It is the crucial step in every software development. The planning will be done between Stakeholders.

(i.e)

Client ----->Top management of Organisation---->Project Manager

BA(Business Analysts)

#### DESIGN:

Based on SRS, designing will be started. Design is classified into two types,

i) High level design

ii)Low level design

#### HIGH LEVEL DESIGN:

It is the detailed description of the software development. It includes,

System Architecture

Database design

Modules

## LOW LEVEL DESIGN:

It includes the detailed description of each and every modules (i.e) Blueprint

#### **DEVELOPMENT:**

The development begins by the developers by using progamming language with help of SRS.

#### TESTING:

The code developed by the developers will be tested. Testings are of two types.

- i)Manual Testing
- ii)Automation Testing

#### i) MANUAL TESTING:

Here client's requirement gets tested by manual method, no automation is used. Manual testing is of 3 types:

- a)White Box testing
- b)Black Box testing
- c)Grey Box testing

#### a)WHITE BOX TESTING

Here the software is developed by developers and given to testing team. The code will be manually tested. In white box testing code will be visible. Hence , it is also called as visible box testing.

#### b)BLACK BOX TESTING

Here the developed software will changed against the requirement of client. After that if any bug appears, it will be solved. This method, code will not be visible. There are 2 types of black box testing.

**Functional testing** 

Non-functional testing

#### **FUNCTIONAL TESTING:**

In functional testing, all components will be checked by giving values. So that some output will be displayed. Incase of bug we can resolve it.

# NON-FUNCTIONAL TESTING:

It gives information about the performance and technologies used.

### c)GREY BOX TESTING

Here the person in knowledge with coding and testing will comes under grey box. It is combination of both white and black box.

# ii)AUTOMATION TESTING:

Testing up software without manually , (i.e)by automation tools is called automation testing. It will enhance the efficiency and productivity.

# **DEPLOYMENT:**

Once it is tested and error free it will be deployed within the organisation itself. The developed project will be used as like end user. If the performance is good and smooth, the organisation will get feedback from end users.

#### MAINTENANCE:

If any problem or issues arises it will be maintained by the organisation itself.