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SPM SOFTWARE PROJECT MANAGEMENT

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System Development Life Cycle

The full form of SDLC is "**System Development Life Cycle**." SDLC is a structured approach by which a system is created and maintained by the use of information technology. It can be tried in networks and online services but it is mostly used in software development.

When it is applied to any software, then SDLC is also called "application development life-cycle". Some SDLC models have at least five stages, while some may have as many as ten stages.

A typical SDLC framework that is used to build a software application must include these seven stages:

- **1. Planning** This is the most important part of SLDC. There must be some steps like why a specific program is needed, who will be the end users using this software, how much will it cost to develop it, and how long will it take to build it etc.
- **2. Defining** In this stage, the general development plan is funneled into a specific criteria. The specific requirements of a program are defined. At this stage, the development team can decide which programming language should be used to create that program.
- **3. Designing** This process includes preparing the User Interface and determining how the program is going to function. For large applications, it is very common to create a design

document specification (DDS), which needs to be reviewed and approved before actual development begins.

4. Building – This building stage typically involves a large amount of software development process. Wherein it includes programming of source code, creating graphics, and compiling assets into an executable program.

A single programmer is involved in small projects, while many teams can also work together in large projects. For example, one team designs the user interface, while the other team writes the source code.

Whereas for multiplatform applications, individual teams are assigned to different platforms.

- **5. Testing -** While in this testing phase, the developer tries to find all kinds of unknown issues and also fix any bugs that arise in the program. Some testing is done internally, while a beta version of a software is provided to a group of users for public testing.
- **6. Deployment** Once a program passes the testing phase, it is ready for deployment. In this stage, the software is released to the public. It is provided via an electronic download or a boxed software, which comes in a CD or DVD.
- 7. Maintenance Now that a software application has been released, it is expected to contain some additional bugs or feature requests which are submitted by the users. The development team should maintain that software by fixing bugs and adding some new features to them. Commercial software programs often include some level of technical support. These above-mentioned stages are called cycles because all these stages are repeated every time a new major version of the software is released.

Although many minor updates are done in the maintenance stage, most of the software companies are present in business, they also regularly release paid updates (version 2, version 3, etc).

It is also important that when a new major version is to be released, then the development team first creates a plan (stage 1) and then continues SDLC in other stages.