SDLC short for Software Development Life Cycle is a process used to plan, create and test softwares. It is also known as Software Development Process. SDLC consists of 10 life-cycle phases: Initiation, System Concept Development, Planning, Requirements Analysis, Design, Development, Integration and Test, Implementation, Operations & Maintenance, and Disposition. The phases are not always executed in this sequence, however, they are interdependent of each other. Depending on the project, the phases may be combined.

Three examples of common SDLC methodologies are: Waterfall Model, V-Shaped Model, and the Iterative Model.

**Waterfall Model**

The Waterfall Model is the oldest and most uncomplicated of the SDLC models. It is simple to use. The Waterfall Model is also known as the linear-sequential life cycle model because in this model, each phase must be finished before continuing to the next phase and there is no overlapping in the phases. This model is first to be used widely in Software Engineering to make certain that a project is successful. In this model, the process of development is separated into different phases: Requirement Gathering and analysis, System Design, Implementation, Integration and Testing, Deployment of system, and Maintenance.

**V-Shaped Model**

The V-Shaped Model is also known as the Verification and Validation model. The V-Shaped Model is an extended version of the Waterfall Model and is also a sequential type, which means that the next phase only starts when the previous phase is completed. It is possible to go back to make changes in a V-Shaped Model, however it is usually expensive to do so. Therefore, it is advisable to state clearly the requirements at the start of the project.

**Iterative Model**

The Iterative Model does not begin with a full list of specification of requirements for the software development. It instead, begins with specifying and implementing only a part of the project. That is then reviewed through to search for further requirements. This entire process is repeated, which is what gave the model its name, constantly evolving the software until it can be fully implemented.