

CHAPTER 02

SYSTEM DEVELOPMENT LIFE CYCLE

SDLC stands for system development life cycle

The software development Life Cycle is a structured process that enables the production of high quality, low cost software, in the shortest possible production time. The goal of the SDLC is to produce superior software that meets and exceeds all customers expectations and demands.

SDLC PHASES

Given below are various phases:

- Requirement gathering and analysis
- Design
- Implementation OR Coding
- Testing
- Deployment
- maintenance

- **Requirement gathering and Analysis:** During this Phase, all the relevant information is collected from the customer like what the customer wants to build, who will be the end users, what is the purpose of the product.
- **Design:** In this phase, the requirement gathering in the SRS document is used as an input and the software architecture that is used for implementing system development is derived.
- **Coding:** Implementation/Coding starts once the developer gets the Design document. The software design is translated into source code. All the components of the software are implemented in this phase.

- **Testing:** Testing starts must the coding is complete and the modules are released for testing. In this phase, the developed software is tested thoroughly and any defects found are assigned to developers to get them fixed.
- **Deployment:** Once the product is tested, it is deployed in the production environment or first UAT (USER ACCEPTANCE TESTING) is done depending on the customer expectation.
- **Maintenance:** After the deployment of a product on the production environment, maintenance of the product i.e. if any issue comes up and needs to be fixed or any enhancement is to be done is taken care by the developers.