A system development life cycle or SDLC is essentially a project management model. It defines different stages that are necessary to bring a project from its initial idea or conception all the way to deployment and later maintenance.

The seven phases of SDLC include planning, analysis, design, deployment, testing, implementation, and maintenance.

1. Planning:

During this phase, all the relevant information is collected from the customer to develop a product as per their expectation. Any ambiguities must be resolved in this phase only. For Example, a customer wants to have an application which involves money transactions. In this case, the requirement has to be clear like what kind of transactions will be done, how it will be done, in which currency it will be done, etc.

1. Analysis:

An analysis is done to check the feasibility of the development of a product. In case of any ambiguity, a call is set up for further discussion.

Once the requirement is clearly understood, the SRS (Software Requirement Specification) document is created. This document should be thoroughly understood by the developers and also should be reviewed by the customer for future reference.

1. Design:

In this phase, the requirement gathered in the SRS document is used as an input and software architecture that is used for implementing system development is derived.

1. Implementation or 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.

1. Testing:

Testing starts once 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.

1. 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.

1. 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.