**SDLC**

The SDLC is short for Systems Development Life Cycle. And is also referred to as the application development life-cycle. It is to describe a process for planning, creating, testing and deploying an information system. The SDLC applies to a big variety of hardware or software configurations. As a typical system can consist of only hardware, or only software, and in also both.

The first step of the life cycle is

**Initiation**

It begins there is a identification of a need a proposal of a concept is then initiated or created.

**System Concept Development**

This part of the process defines the boundaries of the conceived concept itself. It includes the systems boundary document, cost benefit analysis, risk management plan and feasibility study.

**Planning**

The next part is developing a project management plan and various other planning documents and this provides the basis for acquiring the various other documents needed to achieve a solution.

**Requirement Analysis**

This analyses the needs of the user and comes up with the requirements of the user. Need to come up with the Functional Requirements Document.

**Design**

This transforms the detailed requirements into detailed Systems Design Document Focuses on how to deliver the required functionality.

**Development**

This converts a design into a complete information system. This includes acquiring and installing systems environment. Creating and testing databases, preparing test case procedures and test files. Compiling and refining programs and the test readiness review and procurement activities.

**Integration and Test**

The is the testing portion of the developed system. To check whether it fits the requirements specified in the Functional Requirements Document.

**Implementation**

This includes the implementation preparation, implementation into a production environment, and resolution of problems identified in the Integration and Test Phases.

**Operations and Maintenance**

This portion describes the tasks required to operate and maintain the information systems in a production environment.

**Disposition**

This describes the end of system activities.

**SDLC MODELS**

Here I will talk about 3 different SDLC models.

1. Waterfall Model

This model is basically finish one phase, then move on to the next. No going back. Each stage relies on information from the previous stage and has its own project plan. Waterfall is easy to understand and relatively simple to manage. The disadvantage of this is that early delays and throw the whole timeline off. And since there is little rooms for revisions once a stage is completed, problems can’t really be resolved until the maintenance stage. For projects that need flexibility or a long term projects, this model would not be advised.

1. Spiral Model

This is in fact one of the most flexible SDLC methodologies, and takes cue from the Iterative model and its repetition, the project passes through four phases over and over in a spiral until completed. Allowing for multiple rounds of refinement. This model allows for building of a highly customized product. And user feedback can be incorporated from early on in the project. The risk is that you carry is that you might have a project that goes on and on.

1. Big Bang Model

Among SDLC methodologies this follows no specific process. And very little time is spent on planning. The majority of resources are thrown toward development. Typically used for small projects with one or two people. It is a high risk method as if the requirements are misunderstood, when you reach the end, you may have to re-do everything.