Assignment -2

Subject – Software Engineering

Submitted To:

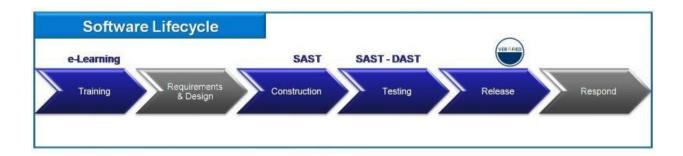Mr. Darshan Sonecha

Assistant Professor

Submitted By:

Mr. Hiren Zalavadiya

CE-TC1 (Sem - 6)

Enroll - 140970107053

What Is System Development Life Cycle?

The systems development life cycle, also referred to as the application development life-cycle, is a term used in systems engineering, information systems and software engineering to describe a process for planning, creating, testing, and deploying an information system.

Stage 1: Training

Objective – *Planning, identification*

Summary – this activity perform by the project members in this activity all members are gathering the all data or information from the customer or any common people.

Stage 2: Requirement & Design

Summary – After first stage all the information or data filter and collect the actual data and information and this all data verify the Software Requirement Specification document which consists of all the product requirements to be requirement and designed during the project life cycle.

Stage 3: Construction

Objective – After the second stage all data is how to represent in the system and which flow is performed. This all flow and figure work in this stage. And coding of the software.

Summary - Based on the requirements specified in SRS, usually more than one design approach for the product architecture is proposed and documented in a DDS - Design Document Specification.

This DDS is reviewed by all the important stakeholders and based on various parameters as risk assessment, product robustness, design modularity , budget and time constraints , the best design approach is selected for the product.

Stage 4: Testing

Summary - In this stage Developers have to follow the coding guidelines defined by their organization and programming tools like compilers, interpreters, debuggers etc. The programming code is generated as per DDS during this stage. If the design is performed in a detailed and organized manner, code generation can be accomplished without much hassle. Different high level programming languages such as C, C++, Pascal, Java, and PHP are used for coding. The programming language is chosen with respect to the type of software.

Stage 5: Release

Summary - Once the product is tested and ready to be deployed it is released formally in the appropriate market. Sometime product deployment happens in stages as per the organizations. Business strategy. The product may first be released in a limited segment and tested in the real business environmentThen based on the feedback, the product may be released as it is or with suggested enhancements in the targeting market segment. After the product is released in the market, its maintenance is done for the existing customer base.

Stage 6: Response

Summary – After releasing the product good response is very important. And maintain the all software if any new change then suddenly built new version with best features.

Some of the SDLC models:

- Waterfall Model
- Iterative Model
- Spiral Model
- Agile Model
- V- Model
- Bing Bang Model

Agile Model

The Agile movement seeks alternatives to traditional project management. Agile approaches help teams respond to unpredictability through incremental, iterative work cadences and empirical feedback. Agilest propose alternatives to waterfall, or traditional sequential development.

What is more important about agile methods is that they all focus on empowering people to collaborate and make decisions together quickly and effectively.

What is Agile process Development?

"Agile Development" is an umbrella term for several iterative and incremental software development methodologies. The most popular agile methodologies include Extreme Programming (XP), Scrum, Crystal, and Dynamic Systems Development Method (DSDM).

While each of the agile methodologies is unique in its specific approach, they all share a common vision and core values (see the Agile Manifesto). They all fundamentally incorporate iteration and the continuous feedback that it provides to successively refine and deliver a software system. They all involve continuous planning, continuous testing, continuous integration, and other forms of continuous evolution of both the project and the software. They are all lightweight, especially compared to traditional waterfall-style processes, and inherently adaptable.

Iteration Cycle for Agile Development