Shashank Thakare

Assignment 10 July 2019

Q1. Different between Software Development Life Cycle and System Development Life Cycle?

A.

SDLC or the **Software Development Life Cycle** is a process that produces software with the highest quality and lowest cost in the shortest time. SDLC includes a detailed plan for how to develop, alter, maintain, and replace a software system. SDLC works by lowering the cost of software development while simultaneously improving quality and shortening production time.

Following are stages of SDLC the process -

1. Identify the Current problem:- This means getting input from all stakeholders, including customers, salespeople, industry experts, and programmers.
2. Plan:- The team defines the requirements of the new software and determines the cost and resources required. It also details the risks involved and provides sub-plans for softening those risks. In this stage, a Software Requirement Specification document is created.
3. Design:- This phase of SDLC starts by turning the software specifications into a design plan called the Design Specification. All stakeholders then review this plan and offer feedback and suggestions.
4. Build:- This SDLC stage develops the software by generating all the actual code. If the previous steps have been followed with attention to detail, this is actually the least complicated step.
5. Test.:- In this stage, we test for defects and deficiencies. We fix those issues until the product meets the original specifications.
6. Deploy:- Often, this part of the SDLC process happens in a limited way at first. Depending on feedback from end users, more adjustments can be made.
7. Maintain:- The plan almost never turns out perfect when it meets reality. Further, as conditions in the real world change, we need to update and advance the software to match.

The **Systems Development Life Cycle** (SDLC) is a conceptual model used in project management that describes the stages involved in an information system development project, from an initial feasibility study through maintenance of the completed application. SDLC can be made up of multiple steps. There is no concrete set number of steps involved. Around seven or eight steps appear commonly; however, there can be anywhere from five upwards to 12. Typically, the more steps defined in an SDLC model, the more granular the stages are.

An SDLC methodology follows these following steps:

1. **Analysis:** The existing system is evaluated. Deficiencies are identified. This can be done by interviewing users of the system and consulting with support personnel.
2. P**lan and requirements**: The new system requirements are defined. In particular, the deficiencies in the existing system must be addressed with specific proposals for improvement. Other factors defined include needed features, functions and capabilities.
3. **Design:** The proposed system is designed. Plans are laid out concerning the physical construction, hardware, operating systems, programming, communications and security issues.
4. **Development:** The new system is developed. The new components and programs must be obtained and installed. Users of the system must be trained in its use.
5. **Testing:** All aspects of performance must be tested. If necessary, adjustments must be made at this stage. Tests performed by quality assurance teams may include systems integration and system integration.
6. **Deployment:** The system is incorporated in a production environment. This can be done in various ways. The new system can be phased in, according to application or location, and the old system gradually replaced. I
7. **Upkeep and maintenance:** This step involves changing and updating the system once it is in place. Hardware or software may need to be upgraded, replaced or changed in some way to better fit the needs of the end-users continuously.