

# Activity: SDLC (Practice)

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## 1. In your own understanding, how do you describe the SDLC?

The Software Development Life Cycle or (SDLC) 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) involves several distinct stages, including planning, design, building, testing, and deployment. Popular (SDLC) models include the Waterfall model, Lean model, and Agile model.

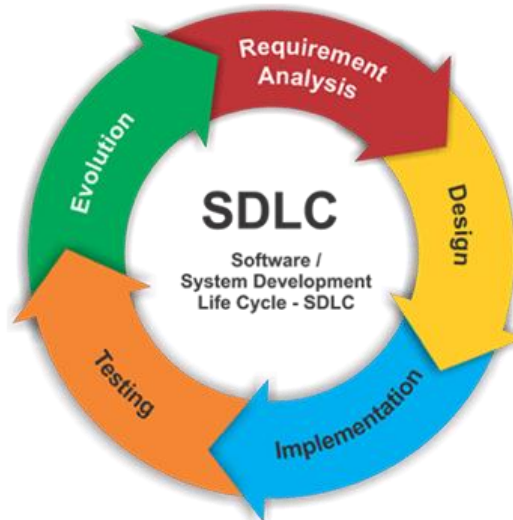
## 2. List and explain the benefits of SDLC.

The most advantage of (SDLC) is that it promotes planning ahead of time and allows defining costs and staffing decisions, identifying goals, measuring system performance, and validating points at all phases of the development life cycle to improve the quality of the end product.

### 3. Understanding SDLC Stages:

#### a- Describe each stage of Software Development Cycle

Identify the current problems



- **Plan**

In the Planning phase, project leaders evaluate the terms of the project. This includes calculating labor and material costs, creating a timetable with target goals, and creating the project's teams and leadership structure.

Planning can also include feedback from stakeholders. Stakeholders are anyone who stands to benefit from the application. Try to get feedback from potential customers, developers, subject matter experts, and sales reps.

Planning should clearly define the scope and purpose of the application. It plots the course and provisions the team to effectively create the software. It also sets boundaries to help keep the project from expanding or shifting from its original purpose.

- **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.

- **Build**

The implementation/Coding phase 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.

- **Code Test**

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.

Retesting, regression testing is done until the point at which the software is as per the customer's expectation. Testers refer SRS document to make sure that the software is as per the customer's standard.

- **Software Development**

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.

In the case of UAT, a replica of the production environment is created and the customer along with the developers does the testing. If the customer finds the application as expected, then sign off is provided by the customer to go live.