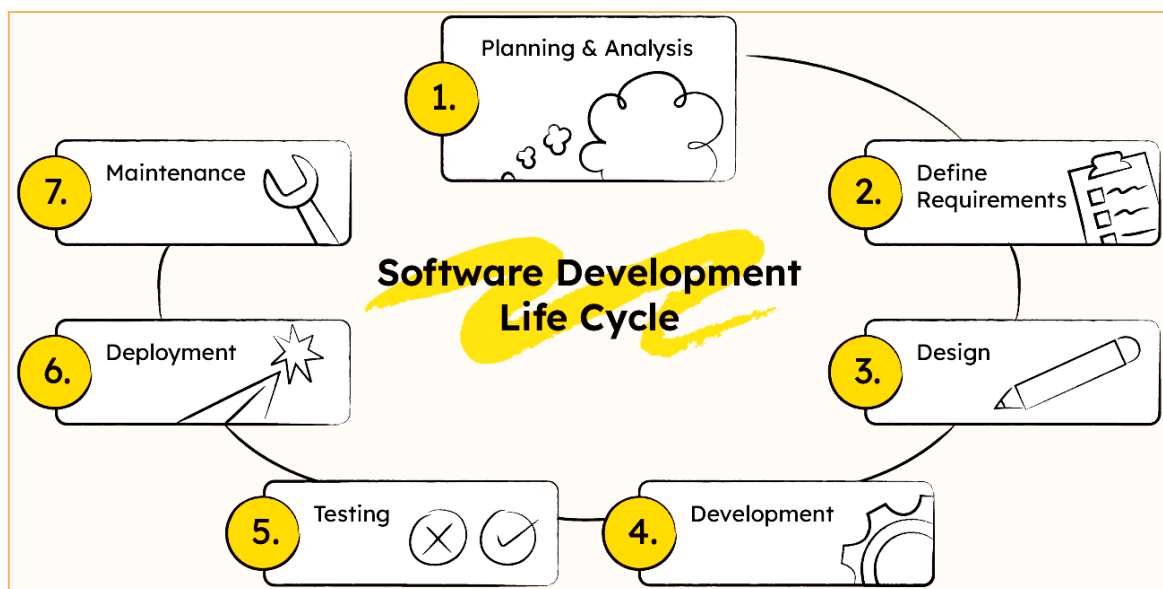


Assignment 1: SDLC Overview - Create a one-page infographic that outlines the SDLC phases (Requirements, Design, Implementation, Testing, Deployment), highlighting the importance of each phase and how they interconnect.

SDLC is a systematic approach that generates a structure for the developer to design, create and deliver high-quality software based on customer requirements and needs. The primary goal of the SDLC process is to produce cost-efficient and high-quality products. The process comprises a detailed plan that describes how to develop, maintain, and replace the software.

The 7 Phases Of SDLC (Software Development Life Cycle):



Planning, Feasibility, Design, Coding, Testing, Deployment, Maintenance

Stage 1: Project Planning -> Project planning is a vital role in the software delivery lifecycle since this is the part where the team estimates the cost and defines the requirements of the new software.

Stage 2: Requirements -> The second step of SDLC is gathering maximum information from the client requirements for the product. Discuss each detail and specification of the product with the customer. The development team will then analyze the requirements keeping the design and code of the software in

mind. Further, investigating the validity and possibility of incorporating these requirements into the software system. The main goal of this stage is that everyone understands even the minute detail of the requirement. Hardware, operating systems, programming, and security are to name the few requirements.

Stage 3: Design -> In the design phase (3rd step of SDLC), the program developer scrutinizes whether the prepared software suffices all the requirements of the end-user. Once the design specification is prepared, all the stakeholders will review this plan and provide their feedback and suggestions. It is absolutely mandatory to collect and incorporate stakeholder's input in the document, as a small mistake can lead to cost overrun.

Stage 4: Coding -> In this fourth stage of SDLC, the tasks are divided into modules or units and assigned to various developers. The developers will then start building the entire system by writing code using the programming languages they chose.

Stage 5: Testing -> Once the developers build the software, then it is deployed in the testing environment. Then the testing team tests the functionality of the entire system. It is done to ensure that the entire application works according to the customer requirements. After testing, the testing team might find some bugs or defects and communicate the same with the developers. The development team then fixes the bugs and sends it for a re-test. This process goes on until the software is stable, bug-free and working according to the business requirements of that system.

Stage 6: Deployment -> Once the testing is done, the product is ready for deployment. It is released for customers to use. The size of the project determines the complexity of the deployment. The users are then provided with the training or documentation that will help them to operate the software. Again, a small round of testing is performed on production to ensure environmental issues or any impact of the new release.

Stage 7: Maintenance -> The actual problem starts when the customer actually starts using the developed system and that needs to be solved from time to time. Maintenance is the seventh phase of SDLC where the developed product is taken care of. According to the changing user end environment or technology, the software is updated timely.