

**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 Phases:**

SDLC (Software Development Life Cycle) has the following phases.

**1.Planning and Requirement Analysis:**

- Requirement analysis is the most important and fundamental stage in SDLC.
- Planning for the quality assurance requirements and identification of the risks associated with the project is also done in the planning stage.

**2.Analysing Requirements:**

- Once the requirement analysis is done the next step is to clearly define and document the product requirements and get them approved from the customer or the market analysts.
- This is done through an **SRS** (Software Requirement Specification) document which consists of all the product requirements to be designed and developed during the project life cycle.

**3.Design:**

- Design phase translates requirements into a comprehensive blueprint outlining the architecture, components, and user interface of the software.

**4.Implementation:**

- Implementation phase involves coding and building the software based on the designs and requirements defined earlier.

**5.Testing and Integration:**

- Testing phase involves verifying and validating the software to identify defects, errors, and ensure it meets quality standards.

**6.Deployment:**

- Once the software is certified, and no bugs or errors are stated, then it is deployed.
- Then based on the assessment, the software may be released as it is or with suggested enhancement in the object segment.
- After the software is deployed, then its maintenance begins.

**7.Maintenance:**

- Once when the client starts using the developed systems, then the real issues come up and requirements to be solved from time to time.
- In this phase we make sure to update the software from time to time.

