

## Assignment1

**1.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 stand for software development life cycle, it explains all necessary phases for developing a software, there are 5 phases of SDLC:

1. Requirement and Feasibility
2. Design
3. Coding
4. Testing
5. Deployment
6. Maintenance



**1.Requirement and Feasibility:** This is first phase for or first step for software development, in this phase we analyze the requirement and resource for developing the feature or product and analyze the feasibility about resources that collecting this resources are feasible or not.

**2.Design:** In this phase we design the flow chart of application, Design phase consist of two part: High level design and Low level design. In High level design we create the flow or guide to navigate through the software/application, High level design is just a overview of how one can navigate through application. Low level are detailed description of every feature which we encounter in high level design.

### **3.Coding:**

At this stage, the fundamental development of the product starts. For this, developers use a specific programming code as per the design in the DDS. Hence, it is important for the coders to follow the protocols set by the association. Conventional programming tools like compilers, interpreters, debuggers, etc. are also put into use at this stage. Some popular

languages like C/C++, Python, Java, etc. are put into use as per the software regulations. In this phase developers do coding using low and high level design and classes schemas.

#### **4: Testing:**

After the code is generated, it is tested against the requirements to make sure that the products are solving the needs addressed and gathered during the requirements stage. In this phase tester do testing of every logic written by developers by unit testing to increase the quality of software.

**5: Deployment:** In this phase software is deployed so user can use software. 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.

**6. Maintenance:** in this phase developers maintain the software from so no bugs can the user experience. Once when the client starts using the developed systems, then the real issues come up and requirements to be solved from time to time. This procedure where the care is taken for the developed product is known as maintenance.