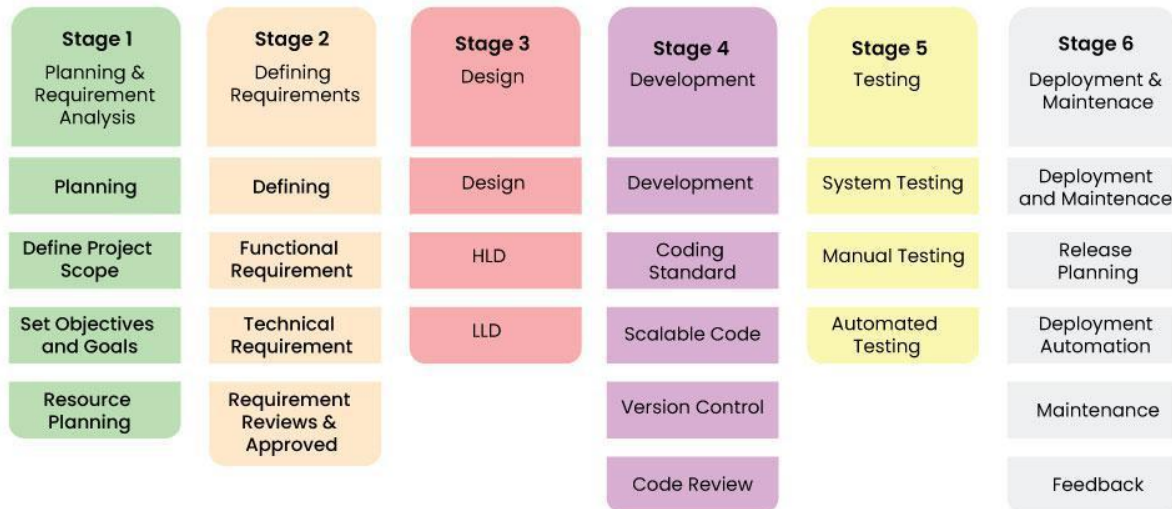**SDLC(Software development life cycle):**

It is a methodology that defines the entire procedure of software development step-by-step.

The goal of SDLC life cycle model is to deliver high-quality, maintainable software that meets user's requirements.

Stages:

6 Stages of Software Development Life Cycle

1. **Planning and requirement analysis:**

   They gather information from customer inputs and sales department/Market surveys.

   Basic project is designed with available information.

2. **Defining Requirements:**
   It uses Software requirement specification (SRS).This document has all those things that needs to be defined and created during entire project cycle.

3. **Design:**
   SRS is a reference for software designers to come up with the best architecture for the software. Hence the requirements defined in SRS, multiple designs for product architecture are present in the DDS Design Document Specification.

4. **Develop product:**
   In this stage developers use a particular programming code. They also use compilers , debuggers, interpreters.

5. **Testing:**
   For smooth execution, Minimal testing is conducted for each stage.

6 . Deploy and maintenance:

This phase also includes making changes in hardware and software to maintain its operational effectiveness like to improve its performance, enhance security features