

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

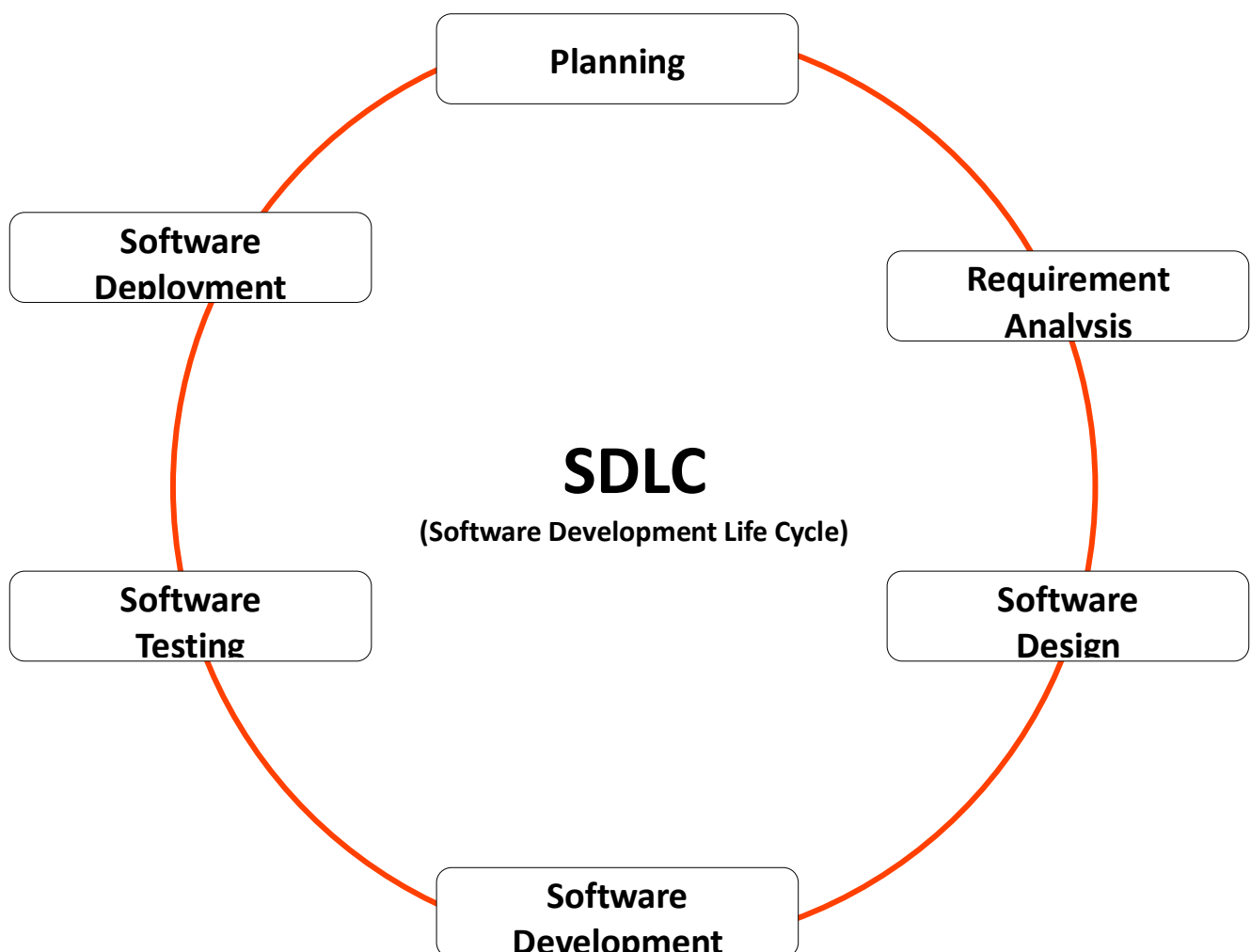
SDLC :

The Software Development Life Cycle (SDLC) is a structured process used to develop high-quality software. It ensures a systematic approach to software creation, focusing on delivering robust, efficient, and reliable systems.

Phases of SDLC :

There are following phases in SDLC Life cycle :-

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



SDLC Phases Overview :

1. Requirements

- **Importance:** Gathering detailed and precise requirements is crucial to ensure the project's success. It involves understanding what the users need and expect from the software.
- **Key Activities:** Stakeholder meetings, requirement analysis, documentation.
- **Output:** Requirement Specification Document.

2. Design

- **Importance:** This phase transforms requirements into a blueprint for constructing the software. It ensures that the system's architecture is well thought out.
- **Key Activities:** System design, architecture design, creating design documents.
- **Output:** Design Specification Document.

3. Implementation

- **Importance:** Actual coding and development happen in this phase. It's where the software is built according to the design specifications.
- **Key Activities:** Writing code, integrating systems, developing databases.
- **Output:** Source Code, Executables.

4. Testing

- **Importance:** Ensuring that the software is free from defects and meets the requirements. This phase helps in identifying and fixing bugs.
- **Key Activities:** Unit testing, integration testing, system testing, acceptance testing.
- **Output:** Test Plans, Test Cases, Test Reports.

5. Deployment

- **Importance:** Deploying the software to a production environment where users can start using it. It also includes post-deployment support and maintenance.
- **Key Activities:** Deployment planning, release management, monitoring.
- **Output:** Deployed Software, Deployment Reports.

Interconnection of Phases

- **Requirements ↔ Design:** The design phase depends on the requirements phase to understand what needs to be built.
- **Design ↔ Implementation:** The implementation phase uses the design specifications to build the software.
- **Implementation ↔ Testing:** Testing checks the implemented code to ensure it meets the design and requirements.
- **Testing ↔ Deployment:** Once testing is complete and the software is deemed ready, it moves to deployment.