

Assignment 01: SDLC – Software Development Life Cycle

1. Requirement Analysis

- Understand what the user needs
- Define project goals, features & constraints
- Forms the foundation for all other phases

2. System Design

- Convert requirements into technical architecture
- Design UI, database, modules & system workflow
- Acts as the blueprint for developers

3. Implementation (Coding)

- Developers write the code based on design
- Each module is built, integrated, and refined
- Converts ideas into a real working system

4. Testing

- Verify functionality, performance & security
- Detect and fix bugs before release
- Ensures the product meets user expectations

5. Deployment

- Release the software for actual users
- Install, configure & launch in the real environment
- End-users start using the system

6. Maintenance

- Fix issues, update features & improve performance
- Long-term support after deployment
- Ensures system remains reliable and up-to-date

Flow:

Requirements → Design → Implementation → Testing → Deployment → Maintenance

Each phase depends on the one before it, creating a continuous workflow.