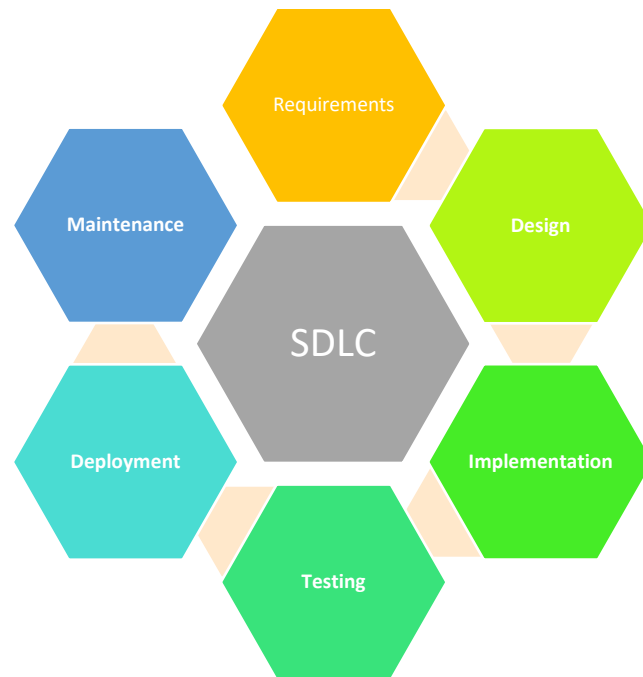


Assignment 1

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.

Solution :

Software Development Life Cycle



Phase 1: Requirements

- Gather and document user needs and requirements
- Define project scope, objectives, and constraints
- Identify potential challenges and opportunities
- Establish clear goals and expectations

Phase 2: Design

- Create a blueprint for the software solution
- Architectural design, database design, user interface design, and system specifications
- Design decisions shape the structure, functionality, and user experience of the final product

Phase 3: Implementation

- Actual development of the software
- Write code, integrate components, and build features based on design specifications

- Collaboration and communication among team members ensure consistency, code quality, and adherence to coding standards

Phase 4: Testing

- Quality assurance to identify and fix defects, errors, and vulnerabilities
- Unit testing, integration testing, system testing, and user acceptance testing
- Ensure software meets functional, performance, and security requirements

Phase 5: Deployment

- Install software in production environment, configure settings, and prepare for launch
- Effective deployment strategies minimize downtime, streamline transition, and maximize user adoption

Phase 6: Maintenance

- Continuously monitor, update, and support software throughout its lifecycle
- Bug fixes, feature enhancements, performance optimizations, and addressing user feedback
- Maintain software's relevance and reliability to maximize its value and longevity



Interconnection of Phases

- Each phase builds upon the previous one, ensuring a systematic approach to software development
- Outputs from one phase become inputs to the next, promoting efficiency and quality
- Collaboration and communication among team members and stakeholders are crucial throughout the SDLC process



Importance of SDLC

- Ensures software meets customer expectations and requirements
- Minimizes risks and ensures cost-effectiveness and time efficiency
- Provides a framework for managing changing requirements and working collaboratively
- Enhances risk management, cost estimation, and customer satisfaction