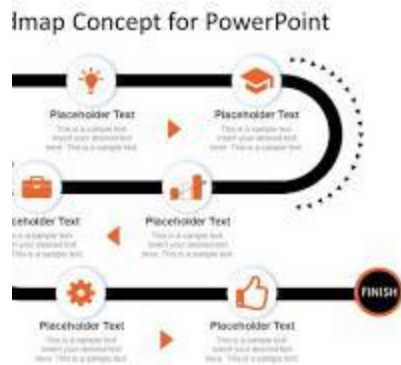**Assignment 1: SDLC Overview - Create a one-page infographic that outlines the SDLC phases (Requirements, Design, Implementation, Testing, Deployment), highlighting the importance of each phase and how they interconnect.**

SDLC: A Journey from Idea to Implementation
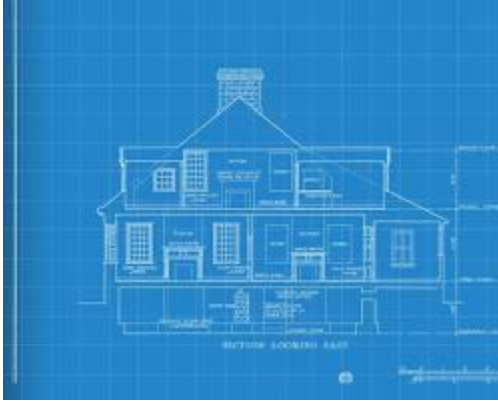

roadmap or journey

1. Requirements Gathering

- **Understanding the Need:** Clearly define the problem the software will solve.
- **Gathering User Stories:** Collect detailed descriptions of user needs and expectations.
- **Creating Use Cases:** Visualize how users will interact with the software.

puzzle piece

2. Design

- **Architectural Design:** Create the overall structure of the software.
- **Database Design:** Design the database to store and retrieve data efficiently.
- **User Interface (UI) Design:** Design the user interface for a seamless user experience.

blueprint

3. Implementation

- **Coding:** Write the code based on the design specifications.
- **Testing:** Conduct unit tests to ensure code correctness.
- **Integration:** Combine different modules into a cohesive system.

computer code

4. Testing

- **Functional Testing:** Verify that the software meets functional requirements.
- **Performance Testing:** Assess the software's speed and efficiency.
- **Security Testing:** Identify and fix vulnerabilities.
- **User Acceptance Testing (UAT):** Validate the software with real users.

magnifying glass

5. Deployment

- **Deployment Planning:** Define the deployment strategy and timeline.
- **Installation:** Install the software on target systems.
- **Configuration:** Configure the software to meet specific requirements.
- **Go-Live:** Release the software to end-users.

rocket launching

Interconnected Phases:

- **Requirements** feed into **Design** to shape the solution.
- **Design** guides **Implementation** to build the software.
- **Implementation** produces the software for **Testing**.
- **Testing** ensures quality and prepares for **Deployment**.
- **Deployment** delivers the software to users.