#### **Software Development Life Cycle (SDLC) for LearnSphere – An Online Learning Platform**

#### **Requirement Analysis (Defining What is Needed)**

This phase identifies the features and constraints of LearnSphere based on user needs and technical feasibility.

* **Functional Requirements**:
* User authentication (signup/login).
* Course creation and management.
* Video and document-based content delivery.
* Discussion forums for student interaction.
* Progress tracking and certification.
* **Non-Functional Requirements**:
  + Fast-loading, lightweight UI for an optimal user experience.
  + Minimalist and intuitive design for easy navigation and readability.
  + Scalability to handle increased traffic during live events.
* **Documentation**: Requirements are documented in a shared Google Doc or GitHub Issues for team reference.
* **Guidance**: Faculty or team leads ensure requirements are clear, concise, and aligned with project goals.

This step ensures LearnSphere meets both user expectations and technical standards.