What is SDLC

- Framework / Process / Model / Guideline / Approach.
- describes activities performed at each stage of software development project
- Defined steps to software project

Benefits:

1. Clear Goals & Responsibility
2. Project Tracking & visibility.
3. Improved quality product.
4. Decrease proj. mgmt overhead.

1. Analysis & Planning

- Gather Business requirements from clients / stakeholders
- Evaluate feasibility of product / project.
  - └ Cost of production
  - revenue potential
  - Technical / operational / economic / legal / schedule feasibility.
- Resource Allocation → tools, people, scheduling

- Scope of work (SOW) : High level document
  ↓
  - details what is being built
  - what will be seen at end of proj.

- Project specs
- Deliverables
- Timelines. ───→
- Agreement

* Timeframe may be days or months depending on scale & nature of project.

- Analysis & Planning (1 - 3 wks)
- Requirements Gathering (1 - 2 wks)
- Design & Prototyping (2 - 4 wks)
- Software Development (4 - 6 wks)
- QA Testing (1 - 2 wks)
- UAT Testing (1 - 2 wks)
- Deployment (1 wk)
- Maintenance & updates (repeat) (Hypercare period 1 wk → Hotfix if required)

2. Requirements

- Gathering requirements from business users.
  - └ schedule meeting / workshops
  - └ Share template to business user to fill & return.

Stakeholders for meeting: (Brainstorming)
- Business team (clients)
- Business Analyst
- Project manager
- Technical Architect
- Lead Developer

What to discuss in meeting :

- How existing system work / any existing system in place
- Who is going to use app (actors)
- What input / output required
- 3rd party APIs / tools
- Security & privacy requirements
- Possible limitations.

* Should not immediately begin coding after this

Next steps :

1. Business Analyst prepare Software Requirements Specification Document (SRS / user stories)
   if Agile

① └─ | **Functional & Non functional requirements** |

- What the software should do.
  eg: • Login form for user
  - Registration form

* important for this
SRS to be detailed

• Business users / clients
need to review SRS
& agree.

- Quality constraint
- How software should behave
  eg: • Performance / Response time
  - Accessibility   • Availability
  - Scalability   • Maintainability
- Every page should load in 3s
- App should be accessible over browser & mobile
- Available 99% of time

② | **Technical Requirements** |

- Tech stack ⎤ Tech
- database   ⎦ architect
             will provide