# Software Engineering

**Project Proposal Writing** 

#### Contents

- Team Formation
- SWOT Analysis of Team
- Idea Generation
- Proposal Writing
  - Introduction/ Overview (200-300 words)
  - Problem Statement (200-300 words)
  - Motivation (200-300 words)
  - Expected Features/ Requirements
  - Development Approach
    - Model
    - Tools & Technology
  - Budget Estimation
  - Timeline
  - Conclusion

#### **Team Formation**

- Team Name
- Team Members (4-6)
- Assign Role

### **SWOT Analysis of Team**

- Strengths
- Weaknesses
- Opportunities
- Threats

#### Idea Generation

- Identify domain (Education, Healthcare, Agriculture, Social Problem, Al Application)
- Observe real world Problems
- Brainstrom possible Ideas/ Solutions
- Evaluate and select best idea
  - Feasibility
  - Impact (Social or economical)
  - Innovation
  - Scope
  - Learning Value

### **Proposal Writing Template**

- Introduction/ Overview (200-300 words)
  - Introduce the domain or area of application
  - State what the waterfall will do and who the intended users are.
  - Highlight its importance and expected impact.
- Problem Statement (200-300 words)
  - Limitations of current systems or manual processes
  - Why is the problem significant?
- Motivation (200-300 words)
  - Why did you choose this idea? What inspired you?
  - How will it benefit users, organizations, or society?
  - What potential improvements or innovations does it bring?

### **Proposal Writing Template**

- Expected Features/Requirements
  - List the core functions of your application.
- Development Approach
  - Model: Waterfall/incremental/Agile
  - Tools & Technology: Web/ Mobile App/ Frontend, Backend, DB
- Budget Estimation
  - Development Cost
  - Tools & Subscription
  - Deployment & Maintenance
- Timeline
  - SDLC
- Conclusion

#### Submission Deadline

- Project Idea Submission
  - Team details, Title, brief idea [google sheet]
  - Deadline: 11 Oct
- Project Proposal Submission
  - 15 October (Github & hardcopy)
- Proposal Presentation: 21 Oct
- Github:
  - Create a repository and add all team member as collaborators
  - Submission: Proposal, design, code

## Thank you

### Course Contents (CSE-3103)

- Basic of SE
  - Chapter: 1,2, 3(Agile)
- Software Requirements Specification (SRS) & Design
  - Chapter 5: Understanding Requirements
  - Chapter 6 & 7: Requirements Modeling
  - Chapter 9, 10, 11: Design
- Development
  - Design Pattern (Lab)
- Software Quality Assurance & Testing
  - Chapter 16, 17, 18
- Project Management (Lab)