Assignment 1 – Project Proposal

Weight: 20%

Requirement: Proposal Presentation and Proposal Document (Report)

Deadline: 3rd Week of the semester. Date will be published in Courseweb

Section 1 – Project Proposal (document) [10%]

1. **Background** – Briefly state the nature of the business and the client.
2. **Problem and motivation**

   a. Provide a <u>problem</u> statement and then elaborate by explaining the current problem and the current process.

   b. <u>Motivation</u> – State the benefits the client/users will receive by addressing the problem.
3. **Aim and objectives**

   a. <u>Aim</u> – provide a high-level statement to indicate the aim to be achieved by your project to address the problem discussed (state the specific nature of the solution).

   b. <u>Objectives</u> – Provide the steps to complete to achieve the aim. These steps should be measurable. They can be used in the project plan.

4. **System overview** with system diagram– State and discuss the functional requirements, related non-functional requirements, and related technical requirements (they may slightly change later when you do proper requirements engineering).

5. **Literature review** – Identify similar solutions and critically review each indicating their pros and cons. At the end, provide a summary, concluding why the existing systems are not suitable or further improvement is necessary.
6. **Methodology** – State all the methods, tools, and technologies you plan to use for this project. You may categorize the methods into requirements engineering methods, design methods, development tools and technologies, testing methods, integration methods, etc. Always state the alternatives and justify your selection.
   Include a work breakdown structure (tabular format) under this section.

7. **Evaluation Method**- State how the system will be evaluated.

8. **References** – You should cite references especially when you discuss the background of the client and when you justify the selection of your methods. Please do not provide statements based on your imaginations and always make sure to be based on literature. The references should be valid sources like official web sites, research papers, books. All the references should be cited in the main text.

9. **Appendix** – Include additional diagrams and descriptions in appendix. All the content should be referred to in the main text.

- File name – **Proposal-<batch>*<GroupID>*.pdf**
- The cover page should include the name of the project, correct group number, Team members and the date of submission.

- Number of pages -20 to 30 (excluding appendix).
- Submit the document (.pdf) via the link in the courseweb and it should be available for the evaluator during the presentation (more instructions will be provided when the presentation is scheduled).
- Consider the given marking scheme and make sure you have included all the sections to obtain the allocated marks.

Marking Guide

The content must be clearly written in a concise manner. The contents should be directly relevant to the selected topic

Section	Marks
Background	5%
Problem [10%] and motivation [5%]	15%
Aim [5%] and objectives [10%]	15%

System overview
   Functional requirements [10%]
   Related non-functional and technical requirements [5%]
	15%

Literature review Identify similar solutions and critically review each [10%] Summarize highlighting why they cannot be used or need for improvement [5%]	15%
Methodology All the SE related methods, tools, and technologies[10] with justification [10%] Work breakdown structure [5%]	25%
Evaluation Criteria	5%

References
   Valid references in IEEE format
   All the references are cited properly
	5%

Total	**100 %**

Section 2 – Presentation + viva [10%]

- Presentation and viva will be scheduled during the ITP module sessions.
- All the members of the group MUST participate in the presentation, and absent members will not be given an additional schedule or marks.

Content

- **Introduction [2-3 mins]** – There should be an introduction section to briefly state the background, problem, aim and objectives, system overview, literature review, and methodology. One member or multiple members can present this section.
- **Features of the system [each member 2-3 mins]** – Each member has to present the feature(s) they will be working on. They must be realistic and achievable and should have sufficient scope. Each member will be individually marked based on their presentation and viva.

Marking Guide

Section	Very Good (4 points)	Good (3 points)	Average (2 points)	Need (Improvement (1 Point)
Project Requirements (25%)	All requirements and objectives are identified. Evaluation criteria is clear (4 points)	Many requirements have been identified. Evaluation criteria and objectives are not complete (3 points)	Some requirements and objectives identified. Evaluation criteria is not specific to the project (2 points)	Some requirements and objectives are identified but not sufficient (1 point)
Knowledge (25%)	Demonstrated evidence of extensive research effort and depth of knowledge on the topic.	Demonstrated evidence of limited research effort and initial thinking on the topic.	Did not show evidence of the research effort or depth of thinking on the topic.	Not made any effort to research on the topic
Content (25%)	Contents is well organized and clear. The underlying logic was clearly articulated and easy to follow. Diagrams or analyses enhanced and clarified presentation of ideas.	The contents are organized and clear. In some areas, the logic and/or flow of ideas were difficult to follow. Diagrams were consistent with the text	The presentation lacked overall organization. The reader had to make considerable effort to understand the underlying logic and flow of ideas. Diagrams were absent or inconsistent.	Not given sufficient effort to communicate clearly
Viva (25%)	Demonstrates in-depth understanding	Not very confident	Demonstrates some understanding	Unclear answers