Research Charter and Proposal

SLIIT



by Dr. Janaka Wijekoon

Research Project
2021 Regular batch



What is next

- **Topic Assessment**
 - Accepted (minor and major Corrections) → Proceed and Submit Charter Form
 - Resubmit (minor and major Corrections) ->
 - Correct the forms addressing the comments and re-submit it by 15th February 2021.
 - This requires Supervisor advices so have regular meetings
 - Submit the Charter form by 17th of February 2021
 - Rejected
 - Contact Supervisor and submit a new topic assessment form by 17th of February.

Cloud director structure and marking rubrics

Project Proposal Report

Drafting and the Content



Importance

- A good proposal is an important tool for organizing time and resources to complete the project with high standard.
- It is an **informal "Contract"** to establish an agreement about the contents and limits of the final output.

IMPORTANT: What RP Team needed



4 individual proposal reports explaining how your individual components you are developing within the year to achieve your final system



Deadline: Initial Draft to Supervisor: 25th of February 2021

Final report for marking: Two Weeks after Presentation date



NOTE: Those who stepped to the re-proposal presentation also have to submit the proposal report with the above mentioned deadline.

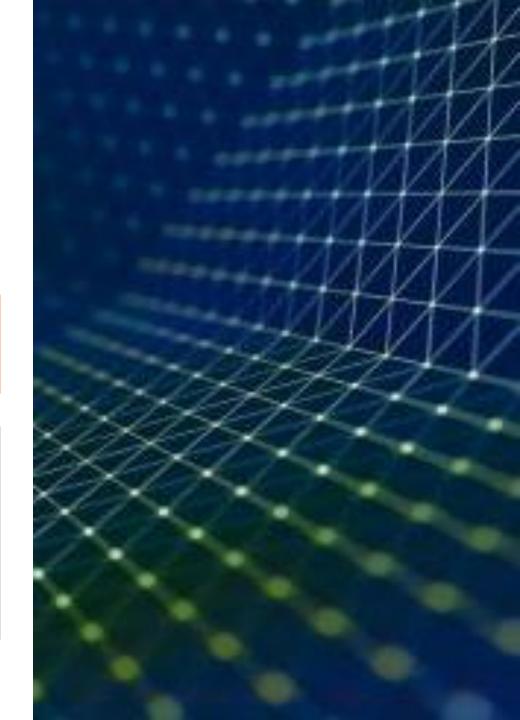
Proposal Presentation Details

One team will get 1 hour of presentation Time

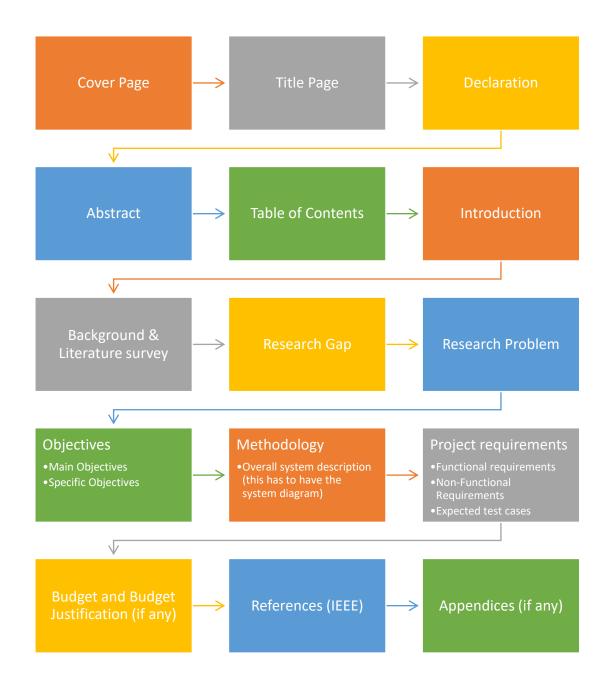
- 40 mins of Presentation time
- QnA is 12 Mins

Presentation should clearly explains each members

- Research question
- Objectives
- Methodology / system diagram / algorithms / technologies
- Budget
- Requirements
- Expected outcomes



Structure of the Proposal report



Content: Introduction

Note: All statements provided should be supported by the literature



Has to have **an overview of the domain** you are researching



Overall background of the problem you will be solving



Contribution to the existing knowledge in your field and to overall scientific development.



Why is this research important, what is its significance, and how will its outcomes affect the funders and the society on the whole?

Contents: Research gap



It's the missing element in the existing research literature



It's the gap that you fill with your research approach



What you will try to achieve with your proposal

Content: Research Problem



Problem or issues which you are planning to address in the research study



E.g.,

How do exposure to and use of ICTs in school affect future employment?

What is the impact of 'computer-literacy' instruction in schools?

How can ICTs be used to present, comment on and discuss student work, and what are the implications of such impact?

Contents: Objectives

Objectives are the goals, set out to attain in your study.

 Objectives inform readers what you want to achieve through the study

Main Objective is an overall statement of the aim of your study. It is also a statement of the main associations and relationships of the entire project or the system.

Specific-Objectives are the specific aspects of the topic that you want to investigate within the main framework of your study.

• E.g., each member's objectives in the project



If you like to read more on Proposal writing

 Refer to [1], which provides a clear explanation on research proposal writing

Content In the Cover Page



Title of the project



Project ID (The ID you received after the Charter Submission)



"Project Proposal Report"



Name of the authors



Official name of the degree



Official name of the department, Faculty, and the university



The month and year of submission

Title Page



Title of the project



Project ID (The ID you received after the Charter Submission)



"Project Proposal Report"



Name of the authors



Official name of the degree



Official name of the department, Faculty, and the university



The month and year of submission



Proposal Abstract

- An abstract summarizes, usually in one paragraph of 300 words or less, the major aspects of the entire paper in a prescribed sequence that includes [2]:
- 1. overall purpose of the study and the research problem(s) you investigated;
- 2. basic design of the study;
- major findings or trends found as a result of your analysis (This part is only needed in the final report)
- 4. brief summary of your interpretations and conclusions.



Declaration

We declare that this is our own work and this proposal does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any other university or Institute of higher learning and to the best of our knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

Signature: Date:

Signature: Date:

Signature: Date:

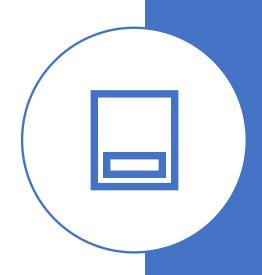
Signature: Date:

Signature of the Supervisor: Date:

Signature of the Co-Supervisor Date:

Introduction

- You must answer the following questions in the Introduction. And You have to clearly give the references when you make statements.
 - Overall background of the research have been done in this domain before.
 - What are the **relevant studies or techniques need to be mastered**, in order to do the project?
 - Where is the state of the art today?
 - How others tried to solve problems you want to tackle, and in what ways will your approach build on and vary the from previous work?



Research Objectives

Research objective(s) is/are the concrete statements that describe what the project is trying to achieve.

NOTE: The given objectives will be evaluated at the final presentation and VIVA to which those have achieved successfully

The objectives are SMART

- <u>Specific</u>
- Measurable
- Achievable
- Realistic
- <u>T</u>ime-bound.

Research Objective Example...

Implement a smart mobile application to detect student stress during the CDAP evaluation cycle using quantitative statistical analysis throughout the year



S > Implement a Mobile App



M the objective immeasurable through the quantitative analysis



A → it is achievable through the implemented system



R → given this is a team effort it is realistic



T → there is a specific deadline is given



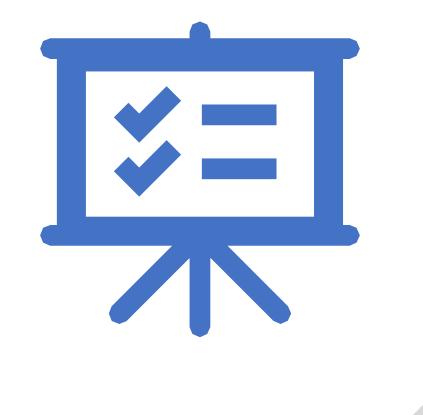
Methodology

- The system diagram has to be in this section and should clearly explain how to use the components mentioned in the system diagram to achieve the main objective of the research.
- How you propose to carry out your project?
- What are the tasks and sub-tasks identified to achieve your objective(s)?
- What materials will you need to carry out your project: equipment? computer support? graphics? others?



Methodology ...

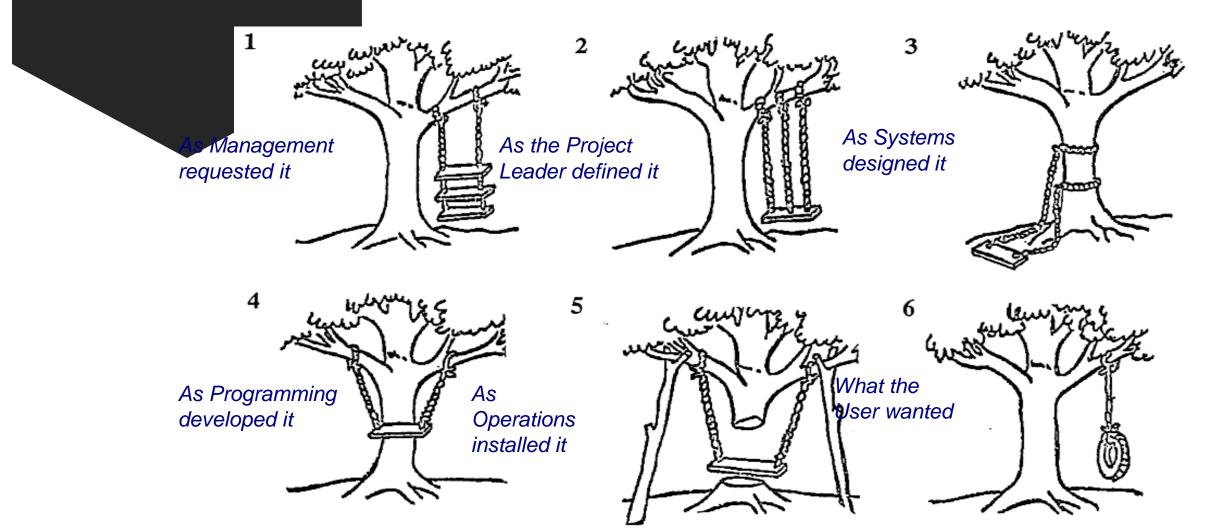
- What data is needed for the project and how will they be collected? If the project requires a survey or interviews, what the design of this product?
- What time frame do you think you will need to accomplish the identified tasks or subtasks?
- Schedules should present in standard forms like Task Charts? If you are working in a team, which teammate would accomplish which sections?
- Anticipate conclusion (results, application, or real world use of the project)



Project Requirements

- For the software solution you implement you should clearly explain the
- 1. functional requirements,
- 2. User requirements
- 3. System requirements
- 4. Non-functional requirements,
- 5. Use cases (tentative)
- 6. Test cases (tentative)
- 7. Wireframes (tentative)

You should avoid

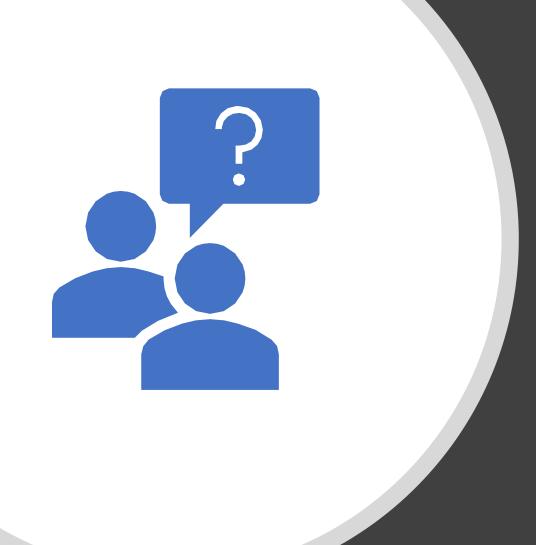




Referencing (IEEE format)

- Standard method of acknowledging sources of information and ideas of others
- Know the source or sources from which you have obtained your information
- Referencing is necessary for the following reasons:
 - to avoid plagiarism;
 - · to enable the reader to verify quotations;
 - · to enable the reader to follow up the cited authors arguments

NOTE: You may refer [3] to do a proper referencing and citation. Poor citation in both presentation and the document will reduce your marks drastically.



Questions?

References

- [1] Thomas, G., "How to do your research Project A Guide for students", Sage Publication, 3rd Ed., 2017, ISBN: 9781473948877
- [2] The Writing Center, "Writing and Abstract", Clarion University, 2009.
- [3] IEEEDataPort, "How to Cite References: IEEE Documentation Style", Online: https://ieee-dataport.org/sites/default/files/analysis/27/IEEE%20Citation%20Guidelines.pdf, Accessed Dec 2020.