

## LECTURE -12

# FYP Proposal Writing

### Course Instructors

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## FYP Supervisor Approval

- All team members need to take approval from their potential FYP supervisor.
- All groups must fulfil the departmental FYP Selection Criterion i.e.
  - Group CGPA of a student group should be between 2.00 to 3.00
  - Number of group members can be 2-3.
- Each supervisor can only supervise two groups.
- Next step is to write FYP Proposal.

## FYP Proposal

- The proposal has the following components.
  - Abstract.
  - Introduction.
  - Literature Review.
  - Problem Statement.
  - Hypothesis.
  - Motivation of the project.
  - Methodology.
  - Results and Discussion.
  - Conclusion and future work.
  - Acknowledgement.
  - References.
  - Gantt Chart.

## I. Title

- The title should be concise and informative.
- Must be inline with the actual project.
- Examples
  - Prognostic Maintenance of Jet Aircraft Using Data Analytics Techniques.
  - IOT based Waste Management System.
  - AI based Flood Monitoring System.
  - Detection and Classification of Citrus Fruit Disease through Image Processing.

## 2. Abstract

- Is a short summary of your project.
- Main purpose is to summarize the research, not to introduce the research area.
- Should include the research problem, the rationale for the study, the hypothesis, the methodology and the main findings of the project.
- Should not have any mathematical equations or references.
- For more information on abstract, please refer to Lecture 10 (Writing Research Articles).
- Text should be in Times New Roman, font should be size 12 and line spacing should be 1.5 .

### 3. Introduction

- Introduction provides the background information for the work reported in the proposal.
- Provides the context for the project and sets the stage for the problem that you are trying to solve.
- Presents the rationale of the project and indicate why is it worth doing.
- In the introduction, you should use evidence (facts, figures, and works by other authors) to convince us that your chosen research topic is
  - Relevant.
  - Not already over-researched.
  - Feasible (in terms of scope, resources and a time frame)

## 4. Literature Review

- The purpose of the literature review is to identify what past research has been carried out and how it links to your research problem.
- Should include publications of reputed conferences/journals.
- Indicate how your research relates to and extends the existing literature, showing that your research topic has not been undertaken. Be specific in selection of your research literature.
- Cite While You Write (CWYW).

## Continued..

- References in literature review section should be in square brackets e.g.
  - Ali[1], for single author where Ali is his last name.
  - Ajmal and Afzal[2] for two authors with their last names separated by 'and'.
  - If the number of authors are more than three, then use Gul et. al.[3] where Gul is the last name of the first author.
- Use of any citation manager software will automatically accomplish the above formatting and auto generated references list.
- Literature review has extensively been covered previously. Please refer to Lecture 10.



## 5. Problem Statement

- Indicates the exact problem that you are trying to solve using the project.
- It expresses the words that will be used to keep the efforts focused throughout the project.
- Problem statement should be feasible (in terms of scope, resources and a time frame).

## 6. Hypothesis

- Hypothesis is a prediction of a relationship between one or more factors and the problem under study that can be tested.
- Based on your experience with the study problem, it might be possible to develop explanation for the problem which can then be tested. If so, you can formulate hypothesis in addition to study objectives.

## 7. Motivation of the Project

- Why this project?
- What motivates you to work on this particular problem?
- Answer the following questions:
  - Why is this study being undertaken?
  - What is the possible contribution of this study: scientific, policy, a program, practical contribution?

## 8. Objectives

- The problem indicated in the problem statement would be addressed by achieving the objectives.
  - Aims are general, objectives are specific.
- Summarizes what is to be achieved by the study.
- Should closely relate to the statement of the problem.
- Should specify **what** you would do in the project and **for what purpose**.
- No paragraphs are generally required.
- Write aims and objectives using brief and crisp bullet (or numbered) statements

## 9. Methodology

- What methods/techniques will you use to solve the problem in hand?
- For example
  - Selection of appropriate method.
  - Data collection and analysis techniques.
  - Tools/techniques to be used.
  - Data processing, analysis, interpretation techniques.

## Continued..

- The proposed method(s) to be used for the study should be explained and justified i.e.
  - You need to explain how and why the method is appropriate for the study, and how it is feasible.
- Flow chart of how the methodology will be carried out. If possible, outline different phases of your study and how the completion of one phase leads logically into the next.

## 10. Results and Discussion

- What are the possible results of your research work?
- How will these results be useful and what do you expect to contribute from presenting these results?
- Indicate how your study will address the aims and objectives of the project that you have identified in the previous sections. Express how your findings can be generalized.

## II. Conclusion and Future Work

- Conclude the FYP proposal by briefly discussing what has been discussed so far.
- Discuss how the project idea can be enhanced/improved for any future work.



## 12. Acknowledgment

- A place to thank people who provided/ will provide support for the project.
- Sources of financial support (if any) are also stated here.

## 13. Gantt Chart

- Activity wise timeline for the project in the form of a chart.

Work/Schedule Plan	Month Year	Month Year	Month Year	Month Year	Month Year	Month Year
Literature Survey						
Experimental work						
Sample Testing						
Observation and calculation of Results						
Thesis writing						

## Tables Format

- The Tables captions/titles should be above the table as shown below. The data in tables may not be a repetition of the Figures.

**Table 3:** SPI values for drought classification (Reference if any)

S. No.	Classification	SPI value
1	Extreme wet	$\geq 2.00$
2	Severe wet	1.50 to 1.99
3	Moderate wet	1.00 to 1.49
4	Mild wet	0.50 to 0.99
5	Normal	0.49 to $-0.49$

## Figures Format

- Paste high resolution diagram in picture format with clear and readable labelling.
- The figures should not repeat the data or statistics available in the Tables.
- The figure caption/title as shown should be below the figure.

