

CMP 499A - Mr. Yusuf on Project Writing Meeting - 1st

Brief: In this meeting Mr. yusuf gave tips on project writing. He covered the preliminaries, chapter 1, 2 and 3.

Everyone doing machine learning should have a section for the algorithms they are using in their Chapter 3 (e.g knn, cnn, etc)

You are to write your projects following the **APA 7** format.

https://www.youtube.com/watch?v=zeSIXD6y3WQ&ab_channel=Scribbr

The font's should be **Times New Romans 12**

We will perform plagiarism test on your study / project so don't go and copy someone else's work or project from the internet and attempt to use that for your project

Helpful videos on plagiarism:

https://www.youtube.com/watch?v=Uk1pq8sb-eo&ab_channel=Scribbr https://www.youtube.com/watch?v=uQhVDH9p7aU&ab_channel=Scribbr

Using Tables

Tables should first have the table number and then the table description (italic), before the table e.g $\stackrel{\bullet}{\rightarrow}$

Table 2
Example of Empirical Analysis of related work

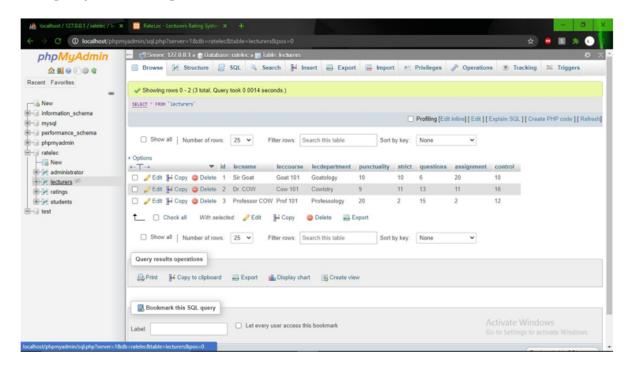
| S/N | Name | Title | Method | Findings | Limitation |
|-----|-----------------------------|---|--|------------------------------|-------------------------------------|
| 1 | Meweda et al., (2020) | Spectral-spatial features integrated convolution neural network for Breast cancer classification | Spectral-spatial features introduced in CNN, Random 70/30 | Max acc = 97% (40X) | Requires computing resource |
| 2 | Lie et al., (2020) | Shallow Convolutional Neural Network for Image classification | Batch normalization dropout. 80/30 | Max acc = 97% (100X) | high resource utilization. |
| 3 | Hao et al., (2022) | Breast cancer histopathological image classification based on deep semantic features and gray level co- occurrence matrix | deep semantic features and gray level co- occurrence matrix 70/30 | Max acc = 96.7%, (40X) | Requires computing resources. |

Using Figures or Images

Figures should also have the **figure number** and then the **figure description (in italics)**, before the actual **figure** e.g $\stackrel{\bullet}{\Rightarrow}$

Figure 2

Example of database implementation



How to create a table:

https://www.youtube.com/watch?v=4TUxNmcsbMM&ab_channel=BrentWard

Using figures in your work:

https://www.youtube.com/watch?v=CsYakRWCrXM&ab channel=ProjectAPA7

Reference Manger

As for your referencing, as many of you have been doing that manually by yourselves I strongly advise against doing that. Instead make use of a reference Manager such as

- EndNote (paid with unlimited storage)
- Mendeley or (free with max 2gb storage)
- Zotero (free with max 300mb storage)

Helpful links

Differences between all 3:

https://www.youtube.com/watch?v=nWlZ1rX9V7M

If you go with **EndNotes**.

https://www.youtube.com/watch?v=XpqGulJbP2l&ab_channel=StevenBradburn

If you go with **Mendeley**.

https://www.youtube.com/watch?v=PJXnfBSq4Lg&ab_channel=GradCoach https://www.youtube.com/watch? v=OzFHGFnAM2Q&ab_channel=StevenBradburn

If you go with **Zotero.**

https://www.youtube.com/watch?v=tnbwKj6-pD8&ab_channel=GradCoach https://www.youtube.com/watch?v=JG7Uq_JFDzE&ab_channel=StevenBradburn

How In-Text Citations work:

https://www.youtube.com/watch?v=opp259YvaoE&ab_channel=Scribbr Ex.

Hyland and lang (2019) recommended knn - start of line (Narrative citations)

The use of knn is recommended **(Hyland & lang, 2019)** - end of line (Parenthetical citations)

Notice the difference between the 1st - (start of line in-text citation) and the 2nd (end of line in-text citation) , how the citations are structured. Start of line uses

Narrative citations while end of line uses Parenthetical citations

If you are citing more than two authors. for example - Patrick, Gabriel, Collins. You would need to use the **et al.** with just the first name.

Patrick et al. (2019) recommended knn - Narrative citations

The use of knn is recommended (Patrick et al., 2019) - Parenthetical citation

Note:

Remember when adding a citation to the start of the line it should look like the below Chibuzor

Table of Content

Please I have noticed over the years that most of students usually go through the stress of creating their table of contents manually, and make updates to them manually. This method of doing it is too much work you don't have to do. Instead of doing that manually, you can simply generate your table of content. The below link should show you how to do that

https://www.youtube.com/watch?v=gxTNbc5WkSQ&ab_channel=KevinStratvert
https://www.youtube.com/watch?v=vfAdcbOUc0Q&ab_channel=KarinaAdcock



Abstract (Preliminary pages)

This section should have the below sections

- Introduction (2, 3 lines maximum)
- Statement of problem
- Aim
- Methodology
- The result
- Recommendations

Example:

This study focuses on the development of an Ecommerce website, addressing the increasing demand for online shopping platforms. The study addresses the prevalent

challenge faced by businesses in establishing effective and user-friendly Ecommerce platforms, recognizing the critical need for robust solutions to enhance online retail experiences. The aim of this project is to design and implement a user-friendly and secure Ecommerce platform that addresses the challenges faced by businesses in establishing and maintaining effective online retail environments. The methodology involves employing Agile software development principles, incorporating continuous feedback for iterative improvements. The proposed solution has been implemented and compared with other solutions and it has been proven that the proposed solution out performs other existing solutions by 0.01%. Recommendations include further enhancements, such as integrating additional payment gateways and optimizing the user experience for mobile devices, to ensure the sustained success and adaptability of the Ecommerce platform.

Side Tips:

In your abstract don't say this paper or this project or this thesis. Instead say something like **The study**.

The abstract section should be a single paragraph as with the above example and should not be bulky, preferably half of a single page.

Chapter 1 should be a minimum of 5 pages

Chapter 4 is basically you telling us / giving an account of what you have done and it solely depends on what you stated you would do in Chapter 3

CHAPTER 1

Your aim section must align with your topic.

ex.

Project Topic - Developing a Smart Home Energy Management System

The Aim - The aim of this project is to create an efficient and user-friendly Smart Home Energy Management System.

(Aim aligns with project topic)

ex.

Project Topic - Developing a Smart Home Energy Management System

The Aim - The aim of this project is to explore the impact of climate change on polar bear populations in the Arctic region.

(Aim doesn't align with project topic)

 Your objective should involve the specific steps it takes to achieve your AIM ex.

The Aim - The aim of this project is to explore the impact of climate change on polar bear populations in the Arctic region.

Objectives:

- 1. To design a user-friendly interface for homeowners to monitor real-time energy consumption and costs.
- 2. To develop sensor integration to collect data on energy usage from various home appliances and systems.
- 3. To implement machine learning algorithms to analyze historical energy data and provide personalized recommendations for optimizing usage.
- 4. To integrate smart controls to enable users to remotely manage and schedule energy-consuming devices.
- 5. To evaluate the effectiveness of the SHEMS in terms of energy savings, cost reduction, and user satisfaction through user feedback and data analysis.
- If your objectives in Chapter 1, say design database, you must show database design figure in Chapter 3, if it says evaluation process using questionnaire's then you have to show an evidence of that in chapter 3.
- If you say design you should state what u'll use for the design e.g Figma and co, you should have interface designs in your chapter 3 showing us the login page if there is one and what not. And then in chapter 4 your work should have actual screenshots of the implementation

• The Objectives you stated in your chapter 1 should be measurable and achievable

CHAPTER 2

This is where you get to brag about your skill and tell the audience (the supervisors, and the school) what you are doing and why what you are doing has an advantage to some or all of the other solutions out there today.

ex.

Someone in the past sets solved a problem but right now their solution is outdated in it's design, slow, buggy e.t.c. but the proposed solution in this study will be better yada yada yada

- You could also talk about the differences in methodology from what other people
 have used in the past and talk about how what you are currently using for this
 project is the better
- You could go ahead and even point out past projects that lacked evaluation and speak on how yours has one

Empirical Study

CHAPTER 3

The research design should have diagrams such as the Activity, Sequence, Entity, Usecase, ... all the diagrams Dr. Ann taught us. Even more such as GUI and whatever you feel adds value to the study

Note:

- Your work should speak for itself. If your work speaks for itself nobody would have to ask you much questions during presentation.
- Just by anyone picking up your project document they should be able to easily understand what you are working on via your topic, your aim validating your topic

and your objectives showing the steps involved in achieving your aim

- The project / study isn't yours so stop using "I decided to use" etc, stop personalizing it. The study belongs to you, your supervisor and your school. Instead use "The study ...", not any work etc.
- Don't use Yes or No in your work instead use, strongly agree or disagree etc

NET TIME:

We'll discuss chapter 4 & 5.

Lastly, note that each objective must have certain methodologies that are followed to achieving that objective.