

Sukkur IBA University
Generative AI (Spring 2025)
Course Project Brief, Assessment
and Deadlines

Brief:

The course project carries a weight of 25% of overall course grading. Your project score would be graded on idea (12%) and implementation (13%).

So far, we have covered many aspects of Deep Learning, Machine Learning and Generative AI including,

1. Basic concepts of deep learning / machine learning
2. Text processing, from basics to state-of-the-art transformer architecture
3. Large Language Models (classification, text generation)
4. RAG with LLM
5. PEFT basics

This should give you enough understanding as to how and where Generative AI works and applied.

This project expects you to apply your Generative AI knowledge and practical skills acquired so far to develop something that is,

1. A whole new idea, I would be over the moon if someone comes up with a creative idea which may become a success story of this class, my aspiration
2. Implementation of some existing idea on issues related to real world, more specifically Sukkur IBA University world
3. Solve some Kaggle challenge related to Generative AI, this probably is straight forward. The challenges' problem are well defined on Kaggle, accept the challenge to solve those issues on Kaggle from 2022
4. Video, image or text processing through LLMs / Generative AI
5. Any other aspect of Generative AI that you can defend in class

Once you have an idea, please write it on 3-5 pages long idea proposal document that includes but not limited to,

1. Introduction
2. Problem Statement
3. Proposed Methodology
4. Dataset discussion, if any
5. Major Outcomes
6. Project Timeline
7. Conclusion

8. References

The idea proposal submission deadline is **April 10, 2025, 11:59pm.**

Once you have submitted your idea, the next step is to record a video of 8-10 minutes to explain your idea. Please ensure all group members are participating equally in the video preparation and presentation. Upload idea video on YouTube or Google drive, include link of the video at the end of your idea report and submit it on eLearning. The instructor will create a submission link before April 10, 2025. Once you have uploaded your idea on eLearning, the next step will be to present it in the class on April 11, 2025.

Following is complete rubric for project idea assessment (12%), remember as group you need to equally distribute time allowed for presentation in video and during the class. You will be graded on your individual performance, NOT group performance.

Assessment Rubric for Idea

Sukkur IBA University				
Project Idea Assessment (Total Score = 12% of the course)				
Course	Generative AI (Spring 2025)	Class	MS / PhD (CS)	
Course Instructor	Sher Muhammad Daudpota	Scholar Name		
Aspect	Needs improvement=0-2	Approaching Expectations=3-6	Meet Expectations=7-10	Total Score 10
Report Part (6% of the course)				
Introduction	No included	Included but could not build properly the project idea	Included and properly elaborates the project idea	
Problem Statement	Not included	Included but problem statement does not properly justify the issue	Include and properly justified the problem area	
Methodology	No discussion about methodology	The student has rightly identified the machine learning / generative AI technique to be applied on the problem but in not clear how to apply	The student is clear about the right technique for the problem and proper method to apply it	
Dataset discussion	No dataset identified through it is necessary for the problem area to identify a dataset	Data is identified but that does not match with problem statement	Proper dataset identification	
Major Outcomes	Project outcomes are not defined	Limited project outcomes identified	Project outcomes identified properly in line with project idea	
Project timeline	Not included	Included but needs improvement	Proper project timeline is included	
Conclusion	No conclusion included	Conclusion is written but not properly drawn	Proper conclusion written	
Reference	References not included through there is need of it	Reference included but limited	Proper references included	
Presentation (through video recording / class presentation) Part (6% of the course)				

Opening	No greeting at the start	Started with greeting but could not introduce the idea properly	Started with greeting and idea started well	
Material	Many aspects of project idea missed	some aspects of project idea missed	All aspects present in the proposal and expected by the instructor were presented well	
Language	Urdu/ Sindhi	English but mixed with Urdu	Correct English	
Time management	Took too long or too short to finish presentation	difference of +-2 of allocated time	Perfect, only 10 minutes were used to explain the idea	
Total Score Obtained by the Scholar				
Note: Instructor/scholar to tick appropriate block		Date of Evaluation		
Comments:				
Total Score		Signature		

- Remember, this is a group project, the Instructor has already created your groups. Please check your name in the eLearning and start discussion with your group members.
- **MUST NOT BRING A REQUEST TO ME TO CHANGE YOUR GROUP, THIS IS FINAL**
- In case your group member(s) withdraw from the course, you will work individual. I don't think such situation will occur because each of the group is having at least three members
- You can discuss idea with instructor any time, just drop him an email to set meeting time, it's your right to meet him beyond classroom and have individual discussion with him, use your right.
- I strongly recommend visit Kaggle for Gen AI problems, it is easy to justify Kaggle projects as they have already gone through process
- You should enjoy working on project, failure is guaranteed, if you see it as a burden.
- Final project submission is due on May 8, 2025, 11:59pm, followed by presentation on May 9, 2025
- Use submission links on eLearning for proposal and final submission

Sukkur IBA University				
Project Final Assessment (Total Score = 13% of the course)				
Course	Generative AI (Spring 2025)	Class	MS / PhD (CS)	
Course Instructor	Sher Muhammad Daudpota	Scholar Name		
Aspect	Needs improvement=0-2	Approaching Expectations=3-6	Meet Expectations=7-10	Total Score 10
Report Part (6% of the course)				
Introduction	No included	Included but could not build properly based the project idea already submitted	Included and properly elaborated based on the project idea already submitted	
Problem Statement	Not included	Included but problem statement does not properly justify the issue	Included and properly justified the problem area	
Methodology	No discussion about methodology	The student has rightly identified the machine learning / generative AI technique to be applied on the problem but could not apply it properly	The student is clear about the right technique for the problem and proper method to apply it	
Dataset discussion	No dataset identified through it is necessary for the problem area to identify a dataset	Data is identified but that does not match with problem statement	Proper dataset identification and usage	
Major Outcomes	Project outcomes are not defined	Limited project outcomes defined and achieved, these are not the same as discussed in project idea submission	Project outcomes identified properly in line with project idea and achieved all the outcomes	
Conclusion	No conclusion included	Conclusion is written but not properly drawn	Proper conclusion written	
Project Implementation	The idea could not be implemented	The idea is implemented but many aspects are missing	The idea is implemented as claimed in the project proposal	
Reference	References not included through there is need of it	Reference included but limited	Proper references included	
Presentation (face-to-face) Part (7% of the course)				
Opening	No greeting at the start	Started with greeting but could not introduce the project properly	Started with greeting and introduced the project well	
Material	Many aspects of project idea missed which were presented during idea presentation	some aspects of project idea missed	All aspects present in the proposal and expected by the instructor were presented well	
Language	Urdu/ Sindhi	English but mixed with Urdu	Correct English	
Project Demo	Not presented	Presented with partial implementation	Presented with proper implementation	
Time management	Took too long or too short to finish presentation	difference of +2 of allocated time	Perfect, only 10 minutes were used to explain the idea	
Total Score Obtained by the Scholar				
Note: Instructor/scholar to tick appropriate block		Date of Evaluation		
Comments:				
Total Score			Signature	

Good Luck.....