# W8: L1 Group Task - TO DO IN CLASS

Demonstration Example:

pdf_Q&A  - attached as pdf_Q&A.ipynb

Section 1: Speech-Image – attached as Speench_toImage.ipynb

Section 2: image_caption – attached as image_caption.ipynb

**Your submission should include:**

**1. Report** – a clear summary of your objectives, methods, results, summarizing key outcomes, and highlighting what you learned and how you plan to build on it.

**2. Code or Repository Link or Files** – ensure all scripts and dependencies are included.

| W8 L1 Rubric | |
|---|---|
| **Criteria** | |
| Objectives | **10 pts**<br>**Full Marks**<br>Clear, specific objectives for all three sections (pdf_Q&A, Speech-to-Image, Image Caption) with well-defined goals for each notebook |
| Methods | **10 pts**<br>**Full Marks**<br>Detailed explanation of approach, tools, and techniques for each task: • PDF Q&A implementation methodology• Speech-to-Image pipeline and model selection• Image captioning architecture and approach |
| Results | **10 pts**<br>**Full Marks**<br>Comprehensive summary of outcomes with evidence:• Example Q&A outputs from PDF• Generated images from speech input• Image captions with corresponding images• Performance metrics or observations |
| Learning & Future Work | **5 pts**<br>**Full Marks**<br>Insightful reflection on:• Key learnings from each notebook• Challenges encountered and solutions• Concrete plans for improvement or extension• Connections to course concepts |
| PDF Q&A Notebook | **5 pts**<br>**Full Marks**<br>Fully functional, well-structured code:• Successfully loads and processes PDF documents• Clear implementation of Q&A functionality• Appropriate outputs with example queries• Well-documented code |
| Speech-to-Image Notebook | **5 pts**<br>**Full Marks**<br>Fully functional, creative implementation:• Successfully processes speech/text input• Generates appropriate images from prompts• Clear pipeline with all required components• Well-documented code |
| Image Caption Notebook | **5 pts**<br>**Full Marks**<br>Robust implementation:• Proper image loading and preprocessing• Accurate caption generation• Multiple examples demonstrating functionality• Well-documented code |