**ADTA 5770: Generative AI with LLM**

**Semester Project – Group Final Report**

# Overview

The semester project aims to develop a knowledge-based Question-Answer and Search System. The project is done using the Cloud Integrated Development Environment (IDE) System (CIDES) provided by Google Cloud Platform (GCP) Vertex Ai services.

Students work on the project in groups throughout the semester to complete all the project assignments. At the end of the semester, each group must submit the semester project group report as part of the group submission portfolio.

# Semester Project: Introduction

**INSTRUCTOR’S NOTES**:

*--) Provide a brief introduction to the semester project, including the selected domain field*

…

# Semester Project: Knowledge Base

**INSTRUCTOR’S NOTES**:

*--) Provide information about the PDF files included in the knowledge base*

*--) Provide information about HOW the PDF files were collected*

*--) Provide a general description of the contents of the files*

…

# Semester Project: Business and Technical Requirements

**INSTRUCTOR’S NOTES**:

*--) Provide a summary of the business and technical requirements of the semester project*

…

# Semester Project: System Analysis

**INSTRUCTOR’S NOTES**:

*--) Provide a summary of the system analysis of the semester project*

…

# Semester Project: System Design: High-Level Design

**INSTRUCTOR’S NOTES**:

*--) Provide a summary of the high-level design of the semester project, including at least one image*

…

# Semester Project: System Design: Detailed Design

**INSTRUCTOR’S NOTES**:

*--) Provide a summary of the detailed design of the semester project, including at least one image*

…

# Semester Project: System Development: Coding

**INSTRUCTOR’S NOTES**:

*--) Provide a report about how the Q&A Search system has been developed.*

*--) Include the information about PHASES (1 – 10) …*

*--) Include information about the LLM model, i.e., Gemini, used for the project*

…

# Semester Project: Testing and Operationalization

**INSTRUCTOR’S NOTES**:

*--) Provide a report about how the Q&A Search system has been tested*

*--) Provide a brief description of the prompts and how to get responses*

…

# Semester Project: Q&A Search System: Prompts and Responses

**INSTRUCTOR’S NOTES**:

*--) Provide a summary of WHAT/HOW of running 10 prompts to get responses using the Q&A Search system*

…

# Semester Project: Group Contribution

**INSTRUCTOR’S NOTES**:

*--) Rate each group member’s contribution to the semester project during the semester.*

* … Name of member 1: x%

# HOWTO Submit

The group must submit the semester project group final report to the OneDrive group folder.

After the group has submitted the portfolio, the group leader must inform the instructor about the submission by emailing the instructor ([Thuan.Nguyen@unt.edu](mailto:Thuan.Nguyen@unt.edu)).

**Due date & time: 8:00 AM – Monday 04/28/2025**

**IMPORTANT NOTES:**

*--) Every group member* ***must attend*** *the* ***FINAL CODE REVIEW*** *on* ***Monday 04/28/2025*** *to get credits for group gradings.*