AC215   **Projects** / Milestone 3

Milestone 3 : Midterm Presentation

Overview

In the past few weeks, we've explored the development of AI applications, focusing on:

- **Large Language Models (LLMs)** and **Retrieval-Augmented Generation (RAG)** techniques.
- **Fine-tuning models** for enhanced performance.
- Utilizing **Google Cloud Platform (GCP)** for cloud-based AI deployments.
- Managing **data versioning with DVC** and deploying applications using **Docker** containers.
- Employing **Vertex AI** for scalable model training and deployment.

For this milestone, you will present your AI application in the form of an **investor pitch**. Your objective is to communicate complex technical concepts clearly and persuasively while demonstrating the potential business impact of your AI solution. Your presentation should:

Key Dates

- **Presentation Date:** 10/28 Details on the schedule and location will be posted on **Ed**.

Presentation Requirements

Your presentation should be **5 minutes** long, followed by **1 minute** for Q&A. It should include:

1. Problem Statement and Target Audience

- **Define the Problem:** Clearly articulate the specific problem your AI application addresses.
- **Identify the Target Audience:** Describe who will benefit from your solution (e.g., specific industries, user groups).

2. Unique Value Proposition

- **Highlight Uniqueness:** Explain what sets your solution apart from existing alternatives.
- **Demonstrate Value:** Illustrate how your AI application provides unique benefits to the target audience.

3. Scalability and Efficiency

- **Technical Scalability:** Discuss how your application can scale to meet growing demands.
- **Performance Optimization:** Explain any optimizations implemented for efficiency (e.g., fine-tuning, infrastructure choices).
- **Infrastructure Considerations:** Briefly mention the technologies used (e.g., GCP, Docker, Vertex AI) and why they were chosen.

4. Future Development and Growth Potential

- **Next Steps:** Outline your plans for further development of the AI application.
- **Market Growth:** Discuss the potential for market expansion and how your solution can adapt.

Be Prepared to Answer Questions On

- **Technical Architecture and Infrastructure Choices** Why did you choose specific tools and platforms? How does your architecture support scalability and reliability?

AC215

- **Data Management and Security** How do you handle data versioning and storage? What measures are in place to ensure data security and compliance (if applies)?
- **Model Performance, Optimization, and Maintenance** What are the performance metrics of your model? How will you maintain and update the model over time?
- **Market Opportunity** What is the size of the market you are targeting? How does your solution meet a demand or gap in the market?

Presentation Guidelines

- **Audience Consideration:** Tailor your presentation to be accessible to both technical and non-technical stakeholders.
- **Engaging Narrative:** Tell a compelling story that connects the technical aspects to real-world impact.
- **Visual Aids:** Use clear and effective visuals (e.g., diagrams, charts) to illustrate key points.
- **Time Management:** Practice to ensure you cover all points within the 5-minute timeframe.

Deliverables

Note: All deliverables must be submitted via GitHub (milestone3 branch), submit full commit hash on Canvas.

1. Presentation Slides

2. Code submission, similar to Milestone 2 Any additions/modifications must be highlighted in the README.md file.

Evaluation Criteria

Your presentation will be assessed based on:

- **Technical Depth (30%):** Clarity and accuracy in explaining your AI application's technical aspects.
- **Business Acumen (25%):** Effectiveness in conveying the market potential and value proposition.
- **Clarity and Structure (20%):** Organization of content and logical flow of the presentation.
- **Visual Communication (15%):** Use of visuals to enhance understanding.
- **Engagement and Delivery (10%):** Presentation style and ability to engage the audience, including during Q&A.

Additional Resources

- **Template Repository:** AC215 Milestone 3 Template Repository

- **Presentation Tips:**

  - Keep slides concise; avoid overcrowding with text.
  - Rehearse your presentation multiple times.
  - Anticipate questions and prepare responses.