Task 2: **Generate text:**

* Write down your main 5-7 takeaways from this course, ask Chat GPT to generate one pager instructions for two different roles (2 of BA, QA, PM), from this takeaway points
* Provide ChatGPT sample text paragraph with your own style (informal/formal/etc).
* Tune prompt and sample "you style paragraph to achieve cleaner, smarter text"

**GPT LINK: https://chatgpt.com/share/66faa51c-ea28-8006-9d0b-6e9f0db72464**

My Prompt:

this are my takeways for the course that took in Ai Bootcamp for DataArt

1.Generative AI, particularly Large Language Models (LLMs), has become a crucial tool for IT specialists across various roles, including developers, QA, business analysts, and project managers.

2.While Generative AI is powerful, it has limitations. It can write code snippets and generate text, but it cannot write full applications, fix complex bugs, or replace human expertise entirely.

3.Retrieval-Augmented Generation (RAG) is an important technique that combines the power of LLMs with external knowledge retrieval, addressing limitations like knowledge cutoff and lack of access to private data.

4.Implementing a basic RAG system can be relatively quick and easy, but creating a production-ready solution requires addressing challenges such as hallucinations, irrelevance, and context precision/recall.

5.Proper evaluation of RAG systems is crucial and involves both isolated component testing and end-to-end assessment. Specialized frameworks and metrics have been developed for this purpose.

6.Advanced RAG techniques, such as improved data preparation, embedding strategies, and post-retrieval optimizations, can significantly enhance the performance and reliability of these systems.

7.Prompt engineering is a key skill for effectively using LLMs, involving techniques like zero-shot, few-shot learning, chain of thought, and ReAct prompting to improve model outputs.

generate one pager instructions for two different roles (2 of BA, QA, PM) , from above takeaway points

GPT RESPONSE:

**One-Pager Instructions for Business Analyst (BA)**

**Objective:** Enhance your role by leveraging AI and RAG systems for more efficient and accurate business analysis.

1. **Leverage Generative AI for Analysis:**
   * Use Large Language Models (LLMs) to draft business requirement documents, generate insights, and perform initial data analysis.
   * Remember, LLMs can assist with repetitive tasks and data exploration but rely on human expertise for critical decisions and deeper analysis.
2. **Understand Limitations of AI:**
   * AI can’t replace human intuition in stakeholder communication, decision-making, or understanding context-specific requirements. Be aware of the boundaries when using AI to support your work.
3. **Harness Retrieval-Augmented Generation (RAG):**
   * Implement RAG systems to incorporate external knowledge when analyzing specific industries or technologies. Use RAG to pull from both historical and real-time data sources, enhancing your reports with fresh and relevant information.
4. **Evaluate AI Output:**
   * Collaborate with tech teams to ensure the quality of AI-generated outputs. Evaluate the relevance and accuracy of the AI-generated content by isolating components for testing and conducting thorough end-to-end assessments.
5. **Refine with Prompt Engineering:**
   * Use techniques like zero-shot and few-shot learning when interacting with AI models to get accurate answers. Ask clear and concise questions for better results in requirements gathering.

**One-Pager Instructions for Quality Assurance (QA)**

**Objective:** Integrate AI-driven tools into the QA process to improve testing efficiency and accuracy.

1. **Utilize Generative AI in Testing:**
   * Leverage Large Language Models (LLMs) to generate test cases, write test documentation, or even simulate potential user interactions with the application. However, validate all AI-generated content for quality and relevance.
2. **Be Aware of AI Limitations:**
   * Generative AI can assist with test automation scripts or code snippets but may struggle with complex edge cases or fixing intricate bugs. Always review AI-generated code or scenarios for accuracy.
3. **Incorporate RAG for More Accurate Testing:**
   * Use Retrieval-Augmented Generation (RAG) to test systems based on up-to-date information, especially in applications relying on dynamic or real-time data. Test both the AI model’s internal logic and its external data retrieval for precision.
4. **Rigorous Evaluation of RAG Systems:**
   * Conduct both component-based and end-to-end evaluations of RAG systems. Develop specialized QA metrics and frameworks to test the relevance, accuracy, and reliability of AI-driven outputs.
5. **Leverage Advanced QA Techniques:**
   * Implement prompt engineering strategies like few-shot learning to generate relevant test cases, identify edge cases, and build effective regression tests. Refine test inputs using the AI's ability to predict likely scenarios.

My Prompt:

"Currently, I'm busy with my CIA and exam Which is going to be started in the next two to three weeks. So I need to be prepared for that. I like to talk with this too, with my class teacher and mentor about this, that it is good to go through Zoom call with a person. But make sure this line that I gave you, do not add to that chart. Make it like a way that he is not able to join the Zoom call or something called he need to take some concern from other people as well. Make it nothing like that way" the above paragraph is my way of style of writing the above two different roles (2 of BA, QA, PM), from the above takeaway points in the ways to style paragraphs to achieve cleaner, smarter text

GPT RESPONSE:

Here’s how the one-pager instructions for **Business Analyst (BA)** and **Quality Assurance (QA)** could be revised to match your writing style:

**One-Pager Instructions for Business Analyst (BA)**

Right now, as a BA, it's crucial to leverage Generative AI, especially Large Language Models (LLMs), for improving efficiency in your work. Whether it's drafting business documents or performing initial analysis, LLMs can help. But be mindful—while AI is powerful, it has its boundaries. It can support repetitive tasks but cannot fully replace your judgment or handle complex decision-making. It's still your role to evaluate and refine the results.

Moreover, Retrieval-Augmented Generation (RAG) systems can assist by pulling in real-time or external knowledge, giving you a broader context for analysis. Still, AI outputs need thorough evaluation. Always collaborate with tech teams to assess the accuracy of the results.

To get the best from these models, prompt engineering techniques, such as few-shot learning, will come in handy. Asking clear, specific questions will refine the outputs and help in gathering more precise requirements.

**One-Pager Instructions for Quality Assurance (QA)**

In the QA role, Generative AI can be a valuable tool for generating test cases and automating routine tasks. But it's important to remember that AI won’t handle every scenario perfectly. It’s good for writing test documentation or scripts, but human expertise is still needed, particularly for spotting complex bugs and edge cases.

RAG systems are valuable when testing applications that rely on external data, ensuring the system stays up to date and performs reliably. However, testing these AI-driven solutions demands extra attention. Always perform thorough end-to-end evaluations, especially focusing on relevance and precision.

When using AI to create test cases, prompt engineering can be a significant asset. Techniques like few-shot learning can help generate the right scenarios for testing. It’s about understanding how to ask the AI the right questions to ensure it outputs the correct solutions.