# Gen AI Apps: Transform Your Work

Congratulations on completing the fourth course of the Gen AI Leader learning path. This course summary is your review guide. Print it for a handy reference as you continue your gen AI learning journey.
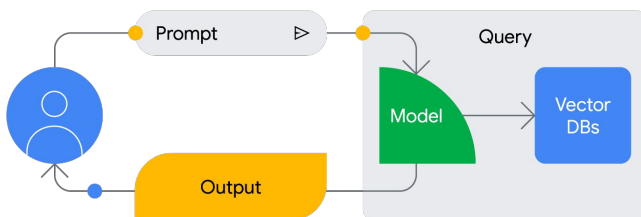
## Prompting techniques

**Zero-shot:** Asking the model to complete a task with no prior examples.

**One-shot:** Providing the model with one example to learn from.

**Few-shot:** Giving the model multiple examples to learn from.

**Role:** Assigning a persona to the model to influence its style, tone, and focus.

**Prompt Chaining:** Engaging in a back and forth conversation with the AI.

## Model guidance and refinement

**Grounding:** Connecting the AI's output to verifiable sources of information.

**RAG:** Retrieval-Augmented Generation

1. **Retrieving relevant information:** The AI model retrieves relevant information from a vast knowledge base.
2. **Generating output:** The model then uses this retrieved information to generate the final output.



## Gemini tooling for personal productivity

**The Gemini app** is Google's generative AI chatbot, where you can get help with writing, planning, learning, and more.

**Google Workspace with Gemini** integrates gen AI into familiar Workspace apps, allowing you to do things like compose emails in Gmail, generate images in Slides, and summarize notes in Meet.

**Gemini for Google Cloud** is your AI assistant for Google Cloud. It can help you write and debug code, manage and optimize cloud applications, analyze data in BigQuery, and strengthen your security posture.

**NotebookLM** allows you to upload your files and then acts as a research assistant, summarizing key points, answering questions, and generating ideas, all while staying grounded in your source material.

## Streamlining Prompting Workflows

- **Reusing Prompts**: Saving prompts as templates for repeated use.
- Leveraging **Prompt Chaining**: Continuing conversations within the same chatbot to maintain context.
- Using **Saved Info** in Gemini: Storing specific information for the model to use consistently.
- **Gems** are personalized AI assistants within Gemini. They provide personalized responses tailored to specific instructions, streamline workflows like templates, prompts, and guided interactions.