

## Module Summary: Image Captioning with Generative AI

Congratulations! You have completed this module. At this point in the course, you know:

- Image captioning AI enables transforming the visual information of images into machine-readable language.
- By transforming visual data into text, image captioning AI paves the way for deeper content discovery, engaging social media presence, and efficient data management across various fields.
- The Bootstrapping Language-Image Pre-training (BLIP) model can perform various multi-modal tasks, including image-text retrieval and image captioning.
- Gradio is an open-source Python package that allows you to build a demo or web application for your machine-learning model or a Python function. Gradio supports various inputs and outputs, such as text, images, files, and more.

In this module, you worked on a project for building an AI that analyzes images, generates descriptions, and creates a text index for them. This project involves:

- Implementing an image captioning tool using the BLIP model from Hugging Face's Transformers.
- Using Gradio to provide a user-friendly interface for our image captioning application.
- Adapting the tool for real-world business scenarios, demonstrating its practical applications.