

Day - 1

- **Generative AI and Foundation Models**

- Overview of Generative AI and its significance.
- Deep dive into Foundation Models (e.g., GPT, Claude, and others).
- Understanding the competitive edge of Amazon Bedrock.
- Use cases in industries like healthcare, e-commerce, and education.

- **Amazon Bedrock Essentials**

- Features and architecture of Amazon Bedrock.
- Navigating the Bedrock Console.
- Overview of foundation models provided by AWS (Anthropic, Cohere, and Stability AI).
- Hands-on Lab: Setting up the Amazon Bedrock environment.

- **Working with Foundation Models**

- Selecting the right foundation model for various applications.
- Using Amazon Bedrock Playground for prototyping.
- API integration for inference and testing.
- Hands-on Lab: Experimenting with models and APIs.

- **Customizing Models with Proprietary Data**

- Techniques for fine-tuning models with labeled datasets.
- Continued pre-training with unlabeled datasets.
- Understanding Retrieval-Augmented Generation (RAG).
- Hands-on Lab: Fine-tuning a model using Amazon Bedrock tools.

- **Application Integration and Security**

- Amazon Bedrock API and SDK walkthrough.
- Best practices for secure authentication and authorization.
- Integrating foundation models into real-world applications.
- Hands-on Lab: Building a simple application using Amazon Bedrock APIs.

- **Deploying and Scaling Generative AI Applications**

- Deployment strategies on AWS infrastructure.
- Monitoring and logging with Amazon CloudWatch.
- Scaling applications for performance and cost efficiency.
- Hands-on Lab: Deploying a generative AI model and monitoring performance.

- **Certification Preparation and Q&A**

- Recap of key concepts and best practices.
- Mock certification exam questions and discussion.
- Open forum for Q&A and troubleshooting.