Building Agentic AI with Amazon Bedrock AgentCore

Cursusduur: 1 Dag **Cursuscode: GK910036** **Trainingsmethode: Virtual Learning**

Beschrijving:

Explore the core principles and strategies for designing Agentic AI systems using AWS services.
In this course, you'll learn how Agentic AI differs from traditional conversational systems, and how to use tools like Strands Agents SDK, and Amazon Bedrock AgentCore to build autonomous, goal-driven solutions that solve real-world problems.
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Virtueel en Klassikaal™

Virtueel en Klassikaal™ is een eenvoudig leerconcept en biedt een flexibele oplossing voor het volgen van een klassikale training. Met Virtueel en Klassikaal™ kunt u zelf beslissen of u een klassikale training virtueel (vanuit huis of kantoor)of fysiek op locatie wilt volgen. De keuze is aan u! Cursisten die virtueel deelnemen aan de training ontvangen voor aanvang van de training alle benodigde informatie om de training te kunnen volgen.

Doelgroep:

- Software developers
- Technical Professionals

Doelstelling:

- In this course, you will learn to do the following:
- Define agentic AI characteristics and differentiate them from traditional AI systems.
- Identify the core agent components and their interactions.
- Describe how Bedrock AgentCore services support agentic AI.
- Deploy agents by using supported frameworks with AgentCore Runtime.
- Describe the core features of AgentCore Runtime.
- Configure serverless execution with session isolation.
- Configure AgentCore Identity for enterprise security requirements.
- Create policies to secure agent tool calls using AgentCore Policy.
- Implement secure token management and permission delegation.
- Ensure compliance with data governance and audit requirements.
- Implement different tool integration patterns, including built-in tools and protocol-based tools.
- Design and deploy Model Context Protocol (MCP) servers and clients for extensible agent capabilities.
- Describe common authentication patterns for agent tool use.
- Configure AgentCore Gateway components for secure and authorized tool access.
- Implement agentic memory patterns for different use cases.
- Configure AgentCore Memory operations for context-aware development.
- Optimize memory performance for production workloads.
- Configure AgentCore Observability for production monitoring.
- Implement Amazon CloudWatch integration and specialized tracing.
- Describe the core features of AgentCore Evaluations.
- Integrate agentic systems with production APIs and services.
- Design deployment strategies for production environments.
- Assess production readiness and establish continuous improvement processes

Vereiste kennis en vaardigheden:

Examens en certificering

We recommend that attendees of this course have:

- Agentic AI Foundations

None

Vervolgcursussen:

None

Cursusinhoud:

Module 1: Foundations of Agentic AI Patterns

- Agent building blocks
- Amazon Bedrock AgentCore introduction

Module 2: AgentCore Runtime and Framework Integration

- Supported frameworks and implementation
- AgentCore Runtime overview
- Infrastructure and deployment

Module 3: Security and Identity Management

- Security and identity management
- Securing your agents with AgentCore Identity

Module 4: Tool Integration and AgentCore Gateway

- Amazon Bedrock AgentCore Policy
- Built-in tools and custom integration
- Model Context Protocol (MCP)
- AgentCore Gateway
- Implementing AgentCore Gateway
- Amazon Bedrock AgentCore Policy

Module 5: Agentic Memory Implementation

- Agentic memory core concepts
- AgentCore Memory
- Securing AgentCore Memory

Hands-on Lab: Enhance and Scale Agents with Amazon Bedrock AgentCore (demo only available at launch, labs released shortly after)

Module 6: Production Monitoring and Observability

- Monitoring agents with AgentCore Observability
- Verifying agent performance with AgentCore Evaluation

Module 7: Course Wrap-up

- Next steps and additional resources
- Course summary

Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk 030 - 60 89 444

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