

1. Exercises, Quizzes, Flashcards & Glossary

Number of Questions

2. Expert Instructor-Led Training

3. ADA Compliant & JAWS Compatible Platform

4. State of the Art Educator Tools

5. Award Winning Learning Platform (LMS)

6. Chapter & Lessons

Syllabus

Chapter 1: Introduction

Chapter 2: Defining a Business-Ready Generative AI System

Chapter 3: Building the Generative AI Controller

Chapter 4: Integrating Dynamic RAG into the GenAISys

Chapter 5: Building the AI Controller Orchestration Interface

Chapter 6: Adding Multimodal, Multifunctional Reasoning with Chain of Thought

Chapter 7: Reasoning E-Marketing AI Agents

Chapter 8: Enhancing the GenAISys with DeepSeek

Chapter 9: GenAISys for Trajectory Simulation and Prediction

Chapter 10: Upgrading the GenAISys with Data Security and Moderation for Customer Service

Chapter 11: Presenting Your Business-Ready Generative AI System

Videos and How To

7. Live labs

Lab Tasks

Here's what you get

1.  Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

47
EXERCISES

2. Quiz

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

150
QUIZ

3. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.

50
FLASHCARDS

4. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



5. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

6. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

7. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

8. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
 1. Best Postsecondary Learning Solution

- **2015**
 1. Best Education Solution
 2. Best Virtual Learning Solution
 3. Best Student Assessment Solution
 4. Best Postsecondary Learning Solution
 5. Best Career and Workforce Readiness Solution
 6. Best Instructional Solution in Other Curriculum Areas
 7. Best Corporate Learning/Workforce Development Solution

- **2016**
 1. Best Virtual Learning Solution
 2. Best Education Cloud-based Solution
 3. Best College and Career Readiness Solution
 4. Best Corporate / Workforce Learning Solution
 5. Best Postsecondary Learning Content Solution

6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform
2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

9. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Introduction

- Who this course is for
- What this course covers
- To get the most out of this course

Chapter 2: Defining a Business-Ready Generative AI System

- Components of a business-ready GenAISys
- Business opportunities and scope
- Contextual awareness and memory retention
- Summary
- References
- Further reading

Chapter 3: Building the Generative AI Controller

- Architecture of the AI controller
- Conversational AI agent
- AI controller orchestrator

- Summary
- References
- Further reading

Chapter 4: Integrating Dynamic RAG into the GenAISys

- Architecting RAG for dynamic retrieval
- Building a dynamic Pinecone index
- Upserting instruction scenarios into the index
- Upserting classical data into the index
- Querying the Pinecone index
- Summary
- References
- Further reading

Chapter 5: Building the AI Controller Orchestration Interface

- Architecture of an event-driven GenAISys interface
- Building the processes of an event-driven GenAISys interface
- Conversational agent

- Multi-user, multi-turn GenAISys session
- Summary
- References
- Further reading

Chapter 6: Adding Multimodal, Multifunctional Reasoning with Chain of Thought

- Enhancing the event-driven GenAISys interface
- Setting up the environment
- Image generation and analysis
- Reasoning with CoT
- Running CoT reasoning from a user perspective
- Summary
- References

Chapter 7: Reasoning E-Marketing AI Agents

- Designing the consumer GenAISys memory agent
- Building the consumer memory agent
- GenAISys interface: From complexity to simplicity
- Summary

- References
- Further reading

Chapter 8: Enhancing the GenAISys with DeepSeek

- Balancing model evolution with project needs
- DeepSeek-V3, DeepSeek-R1, and R1-Distill-Llama: Overview
- Getting started with DeepSeek-R1-Distill-Llama-8B
- Implementing the handler selection mechanism as an orchestrator of the GenAISys
- IPython interface
- Handler selection mechanism
- Handler registry
- AI functions
- Summary
- References
- Further reading

Chapter 9: GenAISys for Trajectory Simulation and Prediction

- Trajectory simulations and predictions

- Building the trajectory simulation and prediction function
- Adding mobility intelligence to the GenAISys
- Running the mobility-enhanced GenAISys
- Summary
- References
- Further reading

Chapter 10: Upgrading the GenAISys with Data Security and Moderation for Customer Service

- Enhancing the GenAISys
- Adding a security function to the handler selection mechanism
- Building a weather forecast component
- Running the GenAISys
- Summary
- References
- Further reading

Chapter 11: Presenting Your Business-Ready Generative AI System

- Designing the presentation of the GenAISys

- Building a flexible HTML interface
- Summary
- References
- Further reading

10. Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

Lab Tasks

Defining a Business-Ready Generative AI System

- Executing a Query in a Stateless Session
- Implementing Manual Session-Based Memory Handling in AI Query Execution

Building the Generative AI Controller

- Creating a Conversational AI Agent with Short-Term Memory Retention
- Creating a Conversational AI Agent with Long-Term Memory Retention

Building the AI Controller Orchestration Interface

- Creating an Event-Driven GenAISys Framework

Adding Multimodal, Multifunctional Reasoning with Chain of Thought

- Implementing Multimodal Reasoning Using CoT

Reasoning E-Marketing AI Agents

- Implementing a Consumer Memory Agent

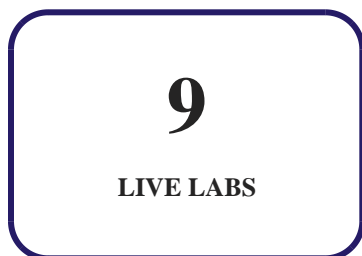
GenAISys for Trajectory Simulation and Prediction

- Adding a Generic Synthetic Trajectory Simulation and Predictive System to the GenAISys

Presenting Your Business-Ready Generative AI System

- Orchestrating a Swarm

Here's what you get



You can't stay away! Get