Course : Generative AI-assisted software testing

Optimize your software testing with generative AI and advanced LLMs

Practical course - 2d - 14h00 - Ref. TIB

Price : 1720 CHF E.T.

NEW

Boost your software testing with generative AI! In 2 days, explore LLM, master prompts, generate tests (manual, exploratory, automated) and test data, discover AI agents, RAG and fine-tuning. Combine innovation, efficiency and field expertise.

Teaching objectives

At the end of the training, the participant will be able to:

- Understand the opportunities for improving the processes involved in software testing, thanks to generative AI
- Acquire the right mindset with a generative AI-based assistant and understand the inherent risks
- Acquire the right prompt engineering reflexes
- Practice generating manual, exploratory, automated end-to-end or unit tests
- Practice with data generation, improvement research on existing tests, test report analysis
- Understanding the AI agent concept

Intended audience

Anyone interested in improving software testing processes supported by generative AI.

Prerequisites

Participants should have a good knowledge of testing processes. For automated tests, basic knowledge of java or python development is recommended.

Course schedule

PARTICIPANTS

Anyone interested in improving software testing processes supported by generative AI.

PREREQUISITES

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TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

1 Acquiring the right mindset with generative AI

- Improve testing activities with LLMs.
- Security, legislative and energy risks and LLMs.
- Errors and hallucinations in LLM operation.
- Prompt engineering for LLM queries.
- Artificial intelligence, automation and software testing.

Hands-on work

Production of various prompts and prompts techniques with chatgpt, claude or mistral accounts.

2 Testing techniques and prompt engineering

- Test development and design with the help of generative AI.
- Support exploratory testing with generative AI.
- Rapid creation of data and datasets with generative AI.
- Test report analysis and visualization.

Hands-on work

Use of chatgpt, claude or mistral accounts. Creation of AI-assisted test artifacts for each chapter point.

3 Advanced techniques and prompts for developers and automation specialists

- Generative AI-assisted unit testing for developers.
- Accelerate creation and improve end-to-end business testing with generative AI.
- AI agent seen as a test assistant.

Hands-on work

Use of chatgpt, claude or mistral accounts. Creation of unit test code and automated GUI tests using generative AI and insertion into existing code (JUnit, Web Driver, Playwright and Cypress) Analysis of the operation of an AI agent developed in java/python.

4 Contextualizing AI models for business contexts

- Customize AI models.
- Understanding RAG - Retrieval Augmented Generation.
- Understanding fine-tuning.
- Demonstration of the 2 techniques at the operator's workstation.

Storyboarding workshops

Future opportunities.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

Dates and locations

REMOTE CLASS
2026 : 8 June, 14 Sep., 23 Nov.