Faysal Aziz

Using Generative AI

For developers - 1 day course

FA-0453 · 1 day

Agentic & Generative AI · Software Development

Introduction

This one-day intensive course is designed to immerse software developers and technologists in the dynamic world of Generative AI (GenAI) tools, focusing on their application in coding and software development. Participants will explore cutting-edge AI technologies, including Gemini, ChatGPT, and other coding AI tools, to understand how they can enhance productivity, creativity, and efficiency in the development process. Through hands-on sessions, case studies, and interactive discussions, learners will gain practical insights into integrating GenAI into their development workflows.

Learning outcomes

By the end of this course, participants will be able to:

- Understand the foundational concepts and capabilities of Generative AI in the context of software development.
- Utilize GenAI tools like Gemini and ChatGPT for code generation, debugging, and optimization.
- Apply best practices for integrating GenAI technologies into development projects.
- Evaluate the ethical considerations and potential biases in using GenAI tools for coding.
- Develop strategies to enhance collaborative coding and project management with GenAI.

Prerequisites

- Working knowledge of programming languages (e.g., Python, JavaScript)
- Experience with software development concepts and workflows
- An understanding of AI and machine learning basics is helpful but not required

Training outline

1. Introduction to Generative AI in Software Development

1. Overview of Generative AI technologies
2. Evolution and impact on the tech industry
3. GenAI tools in the market: Gemini, ChatGPT, and others

2. Getting Started with GenAI Tools

1. Setting up the environment for GenAI coding
2. Introduction to Gemini and ChatGPT
3. Other notable GenAI coding tools and platforms

3. Core Applications of GenAI in Coding

1. Code generation and scaffolding
2. Code reviews and debugging with GenAI
3. Automated testing using GenAI
4. Documentation generation and maintenance

4. Advanced Development Techniques Using GenAI

1. Customizing GenAI tools for specific development needs
2. Integrating GenAI into existing development workflows
3. Enhancing developer productivity and creativity with GenAI

5. Collaborative Coding and Project Management with GenAI

1. Using GenAI for team collaboration and communication
2. Project management enhancements through GenAI
3. Real-world case studies of GenAI in team environments

6. Ethical Considerations and Best Practices

1. Navigating the ethical implications of using GenAI in software development
2. Understanding and mitigating biases in GenAI-generated code
3. Best practices for responsible use of GenAI tools

7. Future Trends and Opportunities in GenAI for Development

1. Emerging technologies and trends in GenAI
2. Potential impacts on the software development landscape
3. Preparing for the future of coding with GenAI

8. Hands-On Workshop and Project

1. Participants will engage in a guided hands-on workshop to apply what they've learned.
2. Development of a mini-project using GenAI tools, emphasizing practical application and creativity.

The course will be delivered through a blend of lectures, interactive discussions, hands-on workshops, and collaborative project work. Participants will have access to GenAI tools and platforms for practical exercises and are encouraged to bring their own laptops for the best learning experience.

© 2026 Faysal Aziz · Kuala Lumpur