

AWS Kiro Workshop (May 2026)

Last Modified on 08/05/2026 4:44 pm HKT

Target Audience:

1. Educators & Academic Support

- Teachers, lecturers, teaching Assistants (especially for programming-related courses)
- Research staff, including Research Assistants
- Individuals interested in applying agentic IDEs in teaching, coding, and research

2. IT & Technical Support

- IT support staff responsible for system deployment, maintenance, and user support

3. Engineering & Development Roles

- Frontend, Backend, and Full-stack Developers
- Software Engineers
- DevOps and Infrastructure Engineers

Prerequisites / Preferred Background:

- General familiarity with software development workflows
- Prior exposure to development environments such as:
 - Visual Studio Code
 - JetBrains IDEs
 - Visual Studio

Requirements:

- A laptop with administrator rights to install software

Date and Time:

- 28 May (Thu), 10:00 a.m. – 1:00 p.m.

Venue:

- Room 103, Pi Chiu Building

Workshop instructor:

- AWS Solution Architect Team

Workshop Summary: Build E-commerce Website with AI Agent Chatbot using Kiro

The hands-on Kiro workshop guides participants through building a full-stack e-commerce web application with an AI-powered chatbot using **Kiro**, an agentic IDE designed for spec-driven development. Participants will experience five core capabilities: **Vibe Coding** (rapid app generation via natural language), **Steering** (guiding AI with coding standards), **MCP Integration** (connecting external tools), **Spec-Driven Development** (structured requirements-to-implementation workflows).

Questions: elarning@cuhk.edu.hk

Copyright © 2020 The Chinese University of Hong Kong. All rights reserved.

The ecommerce website scenario was selected because it provides the richest demonstration of Kiro's full feature set. A 3-tier architecture (React frontend, Node.js backend, SQL database) with an AI chatbot creates enough complexity to showcase every Kiro capability — from generating complete application scaffolding, to integrating AI agents with Amazon Bedrock, to automating development workflows. This breadth of use cases — product browsing, cart management, and intelligent assistance — allows participants to experience how Kiro accelerates real-world software development, skills directly transferable to any domain including education platforms, research tools, or campus systems.

Workshop Agenda:

- **Environment Setup (Setup)**
 - Check-in; verify Kiro IDE pre-installed; confirm AWS account access
- **Session 1: Kiro Introduction & AI Model Benchmark (Presentation)**
 - Overview of Kiro's agentic AI architecture; key features walkthrough; AI model choices , benchmark comparisons vs. other AI IDEs; live demo of the IDE interface
- **Session 2: Vibe Coding (Hands-on)**
 - Explain vibe coding concept & demo; Hands-on trial; Participants build a full-stack app using natural language prompts; Showcase & Discussion
- **Session 3: Steering (Hands-on)**
 - Explain project-level guidance & architectural rules; Hands-on trial; Define and enforce coding standards, project conventions, and AI behavioral rules; Best practices & discussion
- **Session 4: MCP Integration (Hands-on)**
 - Model Context Protocol overview & architecture & Demo; Connect an external data source live; Hands-on trial; Participants configure MCP servers to extend AI capabilities with external tools/data
- **Session 5: Spec-Driven Development (Hands-on / Demo)**
 - Structured AI workflow concept – Plan → Design → Implement; Guided Demo; Walk through a complex feature build using specs, design docs, and task lists; Discussion: When to use spec-driven vs. vibe coding
- **Q&A & Wrap-up (Interactive)**
 - Open Q&A; share resources & next steps; feedback survey; certificate of completion (if applicable)

Registration:

- <https://webapp.itsc.cuhk.edu.hk/ras/restricted/event?id=111473>

Contact us: elarning@cuhk.edu.hk () / ITSC Service Desk (<https://servicedesk.itsc.cuhk.edu.hk>)
(<https://servicedesk.itsc.cuhk.edu.hk>)
