

APPLIED AND GENERATIVE AI

Citizen Development with AI Coding Agents

Level: Foundation • 2 days (expandable to 3) • Virtual, In-person

Overview

For years, building your own software tool meant learning to code or waiting in line for someone who could. AI coding agents change that. If you can describe clearly what you want, an agent can build a working tool for you, and this course teaches you how to do that well and safely, without writing code yourself.

This is a hands-on, foundation course. It is designed for non-developers and moves slowly and deliberately, because the goal is confidence, not coverage. We start with what these agents can realistically do for you and the mental shift they require: you describe intent, the agent builds. Then you learn to work with an agent in plain language, build your first small tool, and only after that take on something genuinely useful from your own work. The second half is about making a tool real and, just as important, keeping it safe, because the ability to build your own tools comes with responsibilities around data, privacy, and knowing the limits of what you have made. Rather than try to make you a programmer, we go deep on the handful of skills that let you build useful, safe tools with an agent. Every module ends with hands-on practice.

Who Should Attend

- Non-developers who want to build their own small tools and automations
- Analysts and operations staff with repetitive tasks worth automating
- Team leads enabling citizen development on their teams

Prerequisites

- Comfortable using a computer and everyday apps such as spreadsheets and email
- No programming experience required
- Access to an AI coding agent, such as Claude Code, for the hands-on labs

What You Will Learn

- Describe what AI coding agents can realistically build for you, and what still needs a developer
- Work with a coding agent in plain language, without writing code
- Build a small, useful tool that solves a real task of your own
- Test, fix, and improve a tool with the agent's help
- Bring in data and connect simple pieces together
- Apply basic security, privacy, and governance guardrails to what you build

Course Outline

Day one: from idea to a working tool

- What Citizen Development with AI Really Is
 - What AI coding agents let non-developers do now

- The shift: you describe intent, the agent builds
- What is realistic to build, and what still needs a developer
- Lab: explore a working tool an agent built, and see how it came together
- Working with a Coding Agent, No Code Required
 - Talking to the agent: describing what you want clearly
 - Reading and reacting to what it produces, without writing code
 - When it gets stuck, and how to get it unstuck
 - Lab: guide an agent to build a very small tool from a plain-language description
- Building Your First Useful Tool
 - Turning a real need into something the agent can build
 - Working in small steps and checking results as you go
 - Lab: build a simple tool that solves a real task of your own

Day two: making it real and keeping it safe

- Iterating, Testing, and Fixing
 - Trying your tool, finding problems, and describing the fixes you need
 - Knowing when it actually works
 - Lab: test and improve the tool you built
- Working with Data and Connecting Pieces
 - Bringing in a spreadsheet or a simple data source
 - Connecting a couple of steps together
 - Lab: add data to your tool
- Staying Safe: Guardrails for Citizen Builders
 - Security and privacy basics: what not to put into a tool
 - Knowing the limits and the risks of what you have built
 - When to involve IT, and how citizen-built tools fit the rules of your organization
 - Lab: run a simple safety checklist against your tool

Extended Version

The three-day version keeps the same gentle pace and adds room to put a tool to real use:

- Sharing your tool with a few colleagues
- A wider set of worked examples across common needs
- Working alongside IT and within governance
- A capstone that builds and safety-checks a tool for a real need from your own work