VIBE CODING · BUILDER · 12 MIN READ

Coding agents: Cursor, Claude Code, Copilot and Codex

AI that works inside a real codebase: editors, terminal agents and cloud agents that open pull requests.

Pass the check (4 of 5) online to earn the “Agent Wrangler” badge:
https://digitalbuilders757.com/university/study/coding-agents-cursor-claude-code-copilot

From builder to codebase

When your project outgrows a browser builder, or you want full control, you work in a codebase: a folder of code, usually stored in a GitHub repository. Coding agents are AI tools that read that whole folder, make changes across many files, run commands and tests, and explain what they did.

Three shapes of coding agent

- AI code editors: Cursor (and Windsurf, VS Code with GitHub Copilot) look like a normal code editor with an AI chat and agent built in. Good for watching changes as they happen.
- Terminal agents: Claude Code and OpenAI Codex CLI run in the terminal (and in desktop and web apps). You give a task in plain language; the agent plans, edits files, runs tests and reports back.
- Cloud agents: GitHub Copilot's coding agent, Codex in the cloud and Claude Code on the web work in the background on a copy of your repository and open a pull request for you to review.

How to work with an agent

- Give it the rules: most agents read an instructions file in your project (often AGENTS.md or CLAUDE.md) with how to run, test and style the code.
- One task at a time, on its own branch.
- Ask for a plan first on anything big, and read it.
- Make it prove the work: run the tests, the type check and the build, and show you the output.
- Review the diff (the list of changed lines) before you merge. Ask the agent to explain anything you don't understand.

Agents need limits

Agents can run commands on your machine or in the cloud. Use the permission settings: let them read and edit the project freely, but require approval for things like deleting files, pushing code, changing databases or spending money. Never give an agent production passwords it doesn't need.

Key terms

Coding agent
An AI that reads, edits and runs code across a whole project.

Codebase
All the code and files that make up one project.

IDE / code editor
The app you write and read code in, such as VS Code or Cursor.

Terminal (command line)
A text window where you run commands like npm install.

Cursor
An AI code editor with chat and agents built in.

Claude Code
Anthropic's coding agent that works in the terminal, desktop, web and editors.

GitHub Copilot
GitHub's AI assistant for code, including a coding agent that opens pull requests.

Diff
A view of exactly which lines were added, changed or removed.

Pull request (PR)
A request to merge one branch into another, with review and checks.

AGENTS.md / CLAUDE.md
A file in a project that tells AI agents how to build, test and follow its rules.

Try it: Ask an agent to explain before it changes

1. Open any small project in an AI editor or a terminal agent.
2. Ask: 'Explain what this project does and how it's organised, in 10 bullet points. Don't change anything.'
3. Then ask for one small change and to show the diff before saving.
4. Read the diff line by line and ask about anything unclear.

KNOWLEDGE CHECK

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5 questions. Circle one answer for each; 4 or more correct passes. Answers are at the back.

1. What does a cloud coding agent like GitHub Copilot's coding agent usually hand you at the end of a task?

A. A summary email with no code changes
B. A finished app already published live to your users
C. A video
D. A pull request to review

2. What is a diff?

A. The lines added, changed or removed
B. A type of database that stores every version of your app
C. A difficulty setting that controls how hard the agent works
D. A secret key that unlocks the repository

3. Which file do many coding agents read for project rules?

A. package-lock.json
B. AGENTS.md or CLAUDE.md
C. favicon.ico
D. .env.local

4. Which action should normally need your approval when an agent works?

A. Reading files in the project folder to understand how it works
B. Explaining code
C. Pushing code or changing a production database
D. Listing folders

5. Best way to make an agent prove its work?

A. Trust it
B. Ask it twice whether it is sure, and trust the second answer
C. Ask it to write a confident summary saying that everything now works
D. Ask it to run the tests, type check and build, and show the output

Official sites

Cursor: https://cursor.com
Claude Code: https://claude.com/product/claude-code
GitHub Copilot: https://github.com/features/copilot
OpenAI Codex: https://openai.com/codex

Last reviewed 2026-11-25. AI tools change fast; check each tool's own site for current features, plans and prices.

ANSWER KEY

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1. D: A pull request to review
Cloud agents work on a copy of the repository and open a pull request for human review.

2. A: The lines added, changed or removed
A diff shows exactly what changed. Reviewing it is how you stay in control.

3. B: AGENTS.md or CLAUDE.md
An instructions file tells the agent how to build, test and follow your project's conventions.

4. C: Pushing code or changing a production database
Anything that's hard to undo or affects real users should need a person's yes.

5. D: Ask it to run the tests, type check and build, and show the output
Evidence beats confidence: tests and builds show whether the change really works.