

## Lab 089: Spec-Driven Development with Spec Kit

Level: L200 Journey: copilot Time: ~75 min Cost: GitHub Free

info "Free-first design" Complete the guided exercise with Copilot Free or the included simulation. Paid features are optional and explicitly labeled.

tip "AI Credit impact" Low for guided work; medium/high for agentic or repeated runs.

Prefer automatic model selection, plan before acting, keep context focused, and avoid unnecessary parallel sessions.

### What You'll Learn

Turn an idea into a testable specification Create a plan and dependency-aware task list

Implement with Copilot without losing traceability Converge through tests and evidence

GH-300 alignment

Productivity and tests (10?15%). This mapping follows the GH-300 curriculum snapshot dated 2026-08-07. The official outline may retain older product wording such as ?Copilot Edits?; this lab teaches the current product experience and calls out that difference.

### Concept Map

[diagram or code sample]

### Hands-on Exercise

#### Step 1: Specify

Describe the OutdoorGear feature through users, behavior, constraints, non-goals, and measurable acceptance criteria.

#### Step 2: Plan

Ask Spec Kit and Copilot to map architecture, affected files, risks, and validation. Review the plan before allowing edits.

#### Step 3: Tasks

Split work into independently verifiable tasks and record real dependencies. Every task must trace to an acceptance criterion.

#### Step 4: Implement and converge

Execute one task at a time, run the smallest relevant tests, compare the result with the specification, and update artifacts when reality changes.

### Supporting kit

The site build generates stable PDF and ZIP downloads. The ZIP contains the lab guide and every supporting file declared for this lab.

Download generated PDF Download generated ZIP

Supporting file: templates/plan.md

Plan

Goal

Scope

Acceptance criteria

Validation

Risks and rollback

Supporting file: templates/spec.md

Spec

Goal

Scope

Acceptance criteria

Validation

Risks and rollback

Supporting file: templates/tasks.md

Tasks

Goal

Scope

Acceptance criteria

Validation

Risks and rollback