

Agile & DevOps in Practice

Site:	AmaliTech LMS
Course:	Agile & DevOps Practices
Book:	Agile & DevOps in Practice

Printed by:	Yram Abotsi
Date:	Sunday, 15 February 2026, 10:31 AM

Table of contents

- 1. Overview**
- 2. Sprint 0: Planning (Setup)**
- 3. Sprint 1: Execution**
- 4. Sprint 2: Execution & Improvement**
- 5. Final Deliverables**
- 6. Submission & Grading Rubric**

1. Overview

Objective

To demonstrate that you can independently apply Agile principles and DevOps practices to plan, execute, and iteratively deliver a working solution.

Assessment Brief

You will individually design, plan, and deliver a small working prototype or service over two simulated sprints. The emphasis is **not** on the size of the product, but on **how well you apply Agile and DevOps practices** throughout the entire process.

Project Structure & Instructions

You will follow a structure of three sprints: one for planning (Sprint 0) and two for execution (Sprints 1 & 2).

2. Sprint 0: Planning (Setup)

Your goal in this sprint is to prepare your entire project for execution.

- **Define a Product Vision:** Write 1-2 sentences for your prototype.
- **Create a Product Backlog:** Write at least 5 user stories.
- **Refine the Backlog:** For each story, add acceptance criteria. Prioritize the backlog and estimate the effort (using story points or relative sizing).
- **Establish Standards:** Define your team's "Definition of Done" (DoD).
- **Plan Sprint 1:** Select 2-3 stories from your backlog to complete in Sprint 1.

3. Sprint 1: Execution

Your goal in this sprint is to deliver your first increment of working software and establish your DevOps pipeline.

- **Deliver Work:** Complete and deliver at least 2 of your planned backlog items.
- **Use Version Control:** You must use Git and have a commit history that reflects iterative, incremental delivery (no "big-bang" commits at the end).
- **Set up CI/CD:** Implement a basic CI pipeline (e.g., GitHub Actions, GitLab CI).
- **Implement Testing:** Write and integrate unit or integration tests that run in your pipeline.
- **Conduct a Sprint Review:** Produce a document or short demo (e.g., screenshots, write-up) showing what you delivered.
- **Conduct a Retrospective:** Write a reflection identifying at least 2 specific improvements for your process in Sprint 2.

4. Sprint 2: Execution & Improvement

Your goal in this sprint is to apply feedback and deliver the next increment.

- **Apply Feedback:** Implement the process improvements you identified in your Sprint 1 Retrospective.
- **Deliver Work:** Complete and deliver at least 2 more backlog items.
- **Add Monitoring:** Add basic monitoring or logging to your application (e.g., console logs, error tracking, a simple health endpoint).
- **Conduct a Sprint Review:** Produce a document or demo for the work completed in this sprint.
- **Conduct a Final Retrospective:** Write a final reflection on your process, including improvements and key lessons learned.

5. Final Deliverables

You must submit all of the following artifacts:

1. **Backlog & Sprint Plans:** Your complete product backlog, sprint plans, user stories, estimates, and Definition of Done.
2. **Codebase:** A link to your code repository (e.g., GitHub) showing your full commit history.
3. **CI/CD Evidence:** Your pipeline configuration file (e.g., `main.yml`) and screenshots or logs of successful (and failed) pipeline runs.
4. **Testing Evidence:** Your test files and screenshots of test results.
5. **Sprint Review Documents:** Your demos, screenshots, or write-ups for both Sprint 1 and Sprint 2.
6. **Retrospectives:** Your written reflections for both Sprint 1 and Sprint 2.

6. Submission & Grading Rubric

Dimension	Weight	What Good Looks Like
Agile Practice	25%	Clear backlog, prioritization, acceptance criteria, and proper sprint planning.
DevOps Practice	25%	CI/CD pipeline is working, tests are integrated, and basic monitoring/logging is included.
Delivery Discipline	20%	Commit history reflects iterative work (no "big-bang" commits at the end).
Prototype Quality	20%	The solution is working and meets the acceptance criteria defined in the user stories.
Reflection	10%	Retrospectives show meaningful improvement and lessons learned between Sprint 1 & 2.