

LAB MANUAL

Title

Mapping Agile Manifesto to Practices

Tool Used: Taiga

Lab Duration: 2 Hours

Lab Type: Hands-on, Tool-based

Mode: Individual / Pair Work

1. Aim of the Lab

The aim of this lab is to help students **systematically map Agile Manifesto values and principles to real Agile practices and implement those practices using the Taiga Agile project management tool.**

2. Learning Objectives

After completing this lab, students will be able to:

- Explain Agile Manifesto values and principles
 - Translate Agile principles into concrete Agile practices
 - Use Taiga features such as backlog, user stories, sprints, comments, and wiki
 - Demonstrate Agile concepts such as adaptability, collaboration, and continuous improvement
 - Critically analyze the role of tools in supporting Agile values
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3. Prerequisites

Students should have:

- Basic understanding of Agile methodology
- Familiarity with Scrum roles
- Access to a Taiga account (cloud or institutional)

4. Project Context

Project Title: Agile-Manifesto-Practice-Mapping

Project Scenario: Online Course Registration System (OCRS)

Note:

This project is used only for **planning, mapping, and learning purposes**.
No coding or software development is required.

5. Lab Structure and Time Allocation

Phase	Description	Duration
Phase 1	Understanding Agile Manifesto	30 minutes
Phase 2	Mapping Manifesto to Practices using Taiga	70 minutes
Phase 3	Change Simulation and Reflection	20 minutes

PHASE 1: UNDERSTANDING AGILE MANIFESTO (30 MINUTES)

Step 1: Study Agile Manifesto Values (15 Minutes)

Instructions:

Carefully read the **four Agile Manifesto values**:

1. Individuals and interactions over processes and tools
2. Working software over comprehensive documentation
3. Customer collaboration over contract negotiation
4. Responding to change over following a plan

Student Task:

For **each value**:

- Write **one example** (1–2 lines) showing how a traditional approach fails to support this value
- Write **one example** explaining how Agile addresses this limitation

Expected Outcome:

Students understand the **philosophical shift** from traditional to Agile development.

Step 2: Study Agile Manifesto Principles (15 Minutes)

Instructions:

Study **any six** of the following Agile principles:

- Early and continuous delivery of valuable software
- Welcoming changing requirements, even late in development
- Frequent delivery of working software
- Collaboration between business stakeholders and developers
- Working software as the primary measure of progress
- Sustainable development pace
- Continuous attention to technical excellence
- Regular reflection and adaptation

Student Task:

- For each selected principle, write **one practical implication** (how it influences day-to-day project activities)

Expected Outcome:

Students can relate Agile principles to **real project behavior**.

PHASE 2: MAPPING AGILE MANIFESTO TO PRACTICES USING TAIGA (70 MINUTES)

Step 3: Create Agile Project in Taiga (10 Minutes)

Instructions:

1. Log in to Taiga
2. Click **Create New Project**
3. Enter project name:
Agile-Manifesto-Practice-Mapping
4. Select **Scrum Project**
5. Enable the following modules:
 - o Backlog
 - o User Stories
 - o Sprints (Milestones)
 - o Wiki
6. Create the project

Expected Outcome:

A Scrum-based project dashboard is visible with backlog and sprint options.

Step 4: Identify Agile Practices (15 Minutes)

Instructions:

Identify Agile practices that operationalize Agile principles, such as:

- User story-based requirements
- Product backlog prioritization
- Iterative development using sprints
- Continuous stakeholder feedback
- Team collaboration and communication
- Review and retrospective meetings

Student Task:

- For **each practice**, write:
 - o The **Agile principle(s)** it supports
 - o A **one-line justification**

Expected Outcome:

Clear linkage between **principles and practices**.

Step 5: Create User Stories in Taiga (20 Minutes)

Instructions:

1. Navigate to the **Backlog** section
2. Create **at least three user stories**

Suggested User Stories:

- As a student, I want to register so that I can enroll in courses.
- As a student, I want to drop a course so that I can manage my schedule.
- As an admin, I want to add and update courses so that students can view accurate information.

For Each User Story:

- Assign **priority**
- Assign **story points**
- Add **acceptance criteria**
- Mention the **Agile principle supported** in the description

Expected Outcome:

User stories are visible, prioritized, and clearly linked to Agile principles.

Step 6: Map Agile Principles to Taiga Features (25 Minutes)

Instructions:

1. Open the **Wiki** section in Taiga
2. Create a new page titled:
Mapping Agile Manifesto to Practices
3. Create and complete the following table:

Agile Principle	Agile Practice	Taiga Feature Used	Evidence
Welcome change	Backlog reprioritization	Product Backlog	Priority changes
Frequent delivery	Iterative development	Sprints	Sprint board
Customer collaboration	Feedback & reviews	Comments	PO comments
Individuals & interactions	Team communication	Task comments	Discussion logs
Measure progress by software	Incremental delivery	Sprint board	Completed stories

Agile Principle	Agile Practice	Taiga Feature Used	Evidence
Continuous improvement	Retrospective	Wiki	Action items

4. Attach screenshots or references as evidence wherever applicable.

Expected Outcome:

A **complete, evidence-based mapping** of Agile principles to Taiga practices.

PHASE 3: CHANGE SIMULATION & REFLECTION (20 MINUTES)

Step 7: Change Simulation (10 Minutes)

Scenario Introduced by Instructor:

“Students should receive email notifications whenever they enroll in or drop a course.”

Instructions:

1. Create a new user story for this requirement
2. Reprioritize the product backlog
3. Assign the story to a future sprint

Expected Observation:

Change is accommodated **without disturbing completed work**, demonstrating Agile adaptability.

Step 8: Reflection Questions (10 Minutes)

Students must answer the following questions clearly:

1. Which Agile principle was easiest to implement using Taiga?
2. Which Agile principle was difficult to represent using a tool?

3. How does Taiga support collaboration and transparency?
 4. Can Agile values exist without tools? Justify your answer.
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6. Deliverables

Students must submit:

- Screenshot of Taiga project setup
 - Screenshot of backlog and sprint board
 - Completed Agile principle-practice mapping table
 - Reflection write-up (150–200 words)
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7. Evaluation Criteria

- Understanding of Agile values and principles
 - Accuracy of mapping between principles and practices
 - Effective use of Taiga features
 - Quality of reflection and justification
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