

LAB MANUAL

Sprint Planning Simulation (Detailed)

Tool Used: Taiga

Lab Duration: 2 Hours

Lab Type: Hands-on Simulation

Agile Framework Context: Scrum / Adaptive Software Development

Focus Area: Sprint Planning as a Decision-Making Activity

1. Aim of the Lab

The aim of this lab is to **simulate a real-world Sprint Planning meeting** and help students understand **how scope, priority, effort, and uncertainty are balanced** while committing to sprint goals.

2. Learning Objectives

After completing this lab, students will be able to:

- Conduct a Sprint Planning session using Agile principles
 - Define a clear **Sprint Goal**
 - Select user stories based on priority and team capacity
 - Break user stories into executable tasks
 - Understand the impact of uncertainty and change on sprint commitments
 - Use Taiga to support planning transparency and collaboration
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3. Roles in the Simulation

Students will assume the following roles (individually or in groups):

- **Product Owner (PO)** – prioritizes backlog, clarifies requirements
- **Scrum Master (SM)** – facilitates sprint planning
- **Development Team** – estimates, commits, and plans execution

If working individually, the student plays **all roles sequentially**.

4. Project Context

Project Name: Sprint-Planning-Simulation

Scenario: Online Course Registration System (OCRS)

5. Lab Structure & Time Allocation

Phase	Activity	Time
Phase 1	Sprint Preparation	30 min
Phase 2	Sprint Planning Meeting – Part 1 (What?)	30 min
Phase 3	Sprint Planning Meeting – Part 2 (How?)	40 min
Phase 4	Commitment, Risk & Reflection	20 min

PHASE 1: SPRINT PREPARATION (30 MINUTES)

Step 1: Prepare the Product Backlog (15 Minutes)

Instructions:

1. Log in to **Taiga**
2. Open the project: Sprint-Planning-Simulation
3. Navigate to **Backlog**

Ensure the backlog contains at least 6 user stories, such as:

- As a student, I want to register so that I can enroll in courses
- As a student, I want to browse courses
- As a student, I want to drop a course
- As an admin, I want to add courses
- As an admin, I want to update course schedules
- As a student, I want email notifications

Student Tasks:

- Assign **priority** to each story
- Assign **story points** (e.g., 1, 3, 5, 8)
- Add **acceptance criteria**

Expected Outcome:

A refined and prioritized backlog, ready for sprint planning.

Step 2: Define Team Capacity (15 Minutes)

Instructions:

Assume:

- Sprint duration: **2 weeks**
- Team size: **3 developers**
- Each developer capacity: **10 story points**

Student Task:

- Calculate total sprint capacity
→ Example: $3 \times 10 = 30$ story points
- Note capacity limitations (meetings, learning, risks)

Expected Outcome:

Realistic understanding of **capacity-based planning**.

PHASE 2: SPRINT PLANNING MEETING – PART 1 (WHAT?) (30 MINUTES)

Step 3: Define the Sprint Goal (15 Minutes)

Instructions:

The Product Owner proposes a sprint goal.

Example Sprint Goals:

- “Enable basic course enrollment for students”
- “Allow students to manage enrollments independently”

Student Tasks:

- Write **one Sprint Goal**
- Ensure all selected stories support this goal

Expected Outcome:

Clear **Sprint Goal** visible to all team members.

Step 4: Select User Stories for the Sprint (15 Minutes)

Instructions:

1. Starting from the **top of the backlog**
2. Select stories that:
 - o Align with Sprint Goal
 - o Fit within sprint capacity

Student Tasks:

- Move selected stories into **Sprint 1**
- Stop adding stories once capacity is reached

Expected Outcome:

Sprint backlog with **committed scope**, not overloading the team.

PHASE 3: SPRINT PLANNING MEETING – PART 2 (HOW?) (40 MINUTES)

Step 5: Break User Stories into Tasks (20 Minutes)

Instructions:

For **each user story**, create tasks such as:

- UI design
- Backend logic
- Validation
- Testing
- Documentation

Student Tasks:

- Assign tasks to team members
- Estimate effort informally (hours or complexity)
- Add task descriptions clearly

Expected Outcome:

User stories decomposed into **actionable tasks**.

Step 6: Identify Risks & Dependencies (20 Minutes)

Instructions:

For each user story, identify:

- Technical risks
- Requirement uncertainty
- External dependencies

Student Tasks:

- Add risk notes in comments
- Mark stories as “high risk” if applicable
- Discuss mitigation actions

Expected Outcome:

Sprint plan reflects **real-world uncertainty**.

PHASE 4: COMMITMENT, CHANGE & REFLECTION (20 MINUTES)

Step 7: Sprint Commitment (10 Minutes)

Instructions:

- Team reviews sprint backlog
- Confirms commitment based on:
 - Capacity
 - Risk
 - Sprint Goal clarity

Student Task:

- Add a comment stating:

“Team commits to Sprint 1 with the above scope.”

Expected Outcome:

Shared ownership of sprint commitment.

Step 8: Mid-Sprint Change Simulation (10 Minutes)

Scenario Introduced:

“Management requests email notification feature to be included immediately.”

Student Tasks:

- Discuss impact on sprint goal
- Decide:
 - Reject change
 - Defer to next sprint
 - Swap with an existing story

Expected Outcome:

Understanding that **Sprint scope is protected**, but decisions are transparent.

6. Deliverables

Students must submit:

- Screenshot of backlog before sprint
 - Screenshot of Sprint 1 backlog
 - Sprint goal statement
 - Task breakdown screenshots
 - Risk notes and reflection
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7. Evaluation Criteria

- Correct sprint goal definition
 - Logical story selection based on capacity
 - Quality of task decomposition
 - Handling of mid-sprint change
 - Reflection quality
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8. Conclusion

This lab demonstrates that **Sprint Planning is not a scheduling activity**, but a **collaborative decision-making process** balancing value, risk, and capacity.

Effective sprint planning enables predictability while preserving adaptability.