



Applying SCRUM: Welcome to SCRUMIA

Purpose

The purpose of the exercise is to plan and execute a sprint of a hypothetical project applying SCRUM as part of a project management course.

Goals and objectives

Goal

On the cognitive level, the learning objective of the activity is to reinforce concepts and to teach the competency to apply the knowledge on project management using SCRUM covering the cognitive levels remembering, understanding and application in accordance to the revised version of Bloom's taxonomy of educational objectives (Anderson and Krathwohl, 2001).

Objectives

After the session, the participants will be able to plan and execute a sprint as part of SCRUM-based project management.

Primary target audience

The activity is intended to be used as part of project management courses (either as part of university courses or professional training) targeted to teach project management professionals and students. A pre-requisite for the application of the activity is that the participants have a basic understanding of project management and SCRUM taught before the execution of this activity, e.g., through lectures.

Group size

Groups are composed of at 6 participants. Each member of the groups assumes a specific role, including:

Role	Quantity	Responsibility
Scrum Master	1 person of each group	Responsible for coordinating the management activities and updating the task board.
Product owner	1 person of each group	Responsible for the management and prioritization of the product backlog and release documentation (and the outcome of the project).
Chicken	1 person of each group	Within this activity, they represent an auditor checking the correct execution of the activities of another group.
Pigs	The rest of the group (3 persons)	Members of the project team, who actively participate in planning and execution of the tasks.

Duration

Step	Time
Explanation	15 min
1. Estimate user story points	5 min
2. Sprint planning	5 min
3.1 Kick-off meeting	2 min
3.2 Execution of period 1	2 min
3.3 Daily SCRUM meeting period 1	2 min
3.4 Execution of period 2	2 min
3.5 Daily SCRUM meeting period 2	2 min

3.6 Execution of period 3	2 min
3.7 Daily SCRUM meeting period 3	2 min
4. Sprint review	2 min
5. Release	2 min
Debriefing	15 min

Physical setting

Room size depends on the number of groups providing sufficient space for each group for the planning and execution of the project. At least one desk should be available for each group as well as sufficient wall space for each group's task board.

Materials and equipment

Slides for the explanation and execution of the activity

Description of the activity (one per group)

Task board (one per group) (the task board is made of a paper poster of approximately DIN A0 size, gluing the burndown template in the burndown column)

User story cards (one set per group)

Red pen (one per group)

Tape for fixing the user story cards on the board (one per group)

Process

Step
Explanation
1. Estimate user story points
2. Sprint planning
3.1 Kick-off meeting
3.2 Execution of period 1
3.3 Daily SCRUM meeting period 1
3.4 Execution of period 2
3.5 Daily SCRUM meeting period 2
3.6 Execution of period 3
3.7 Daily SCRUM meeting period 3
4. Sprint review
5. Release
Debriefing

For details see description of the activity.



Figure 1. Students of a Project Management Course of the Computer Science Undergraduate Course at the UFSC - Federal University of Santa Catarina/2009.

Debriefing main points

The debriefing is directed to reflect on the usage of SCRUM to manage projects in general, as well as comparing SCRUM to traditional project management approaches, including discussion questions, such as: What is done during the sprint planning? How does the sprint planning influence the project performance? How does the task board support project monitoring? Which project management knowledge areas are covered in the sprint planning with respect to the PMBOK?

In a second part of the debriefing the objective is to briefly reflect on the activity as a learning opportunity, discussing questions, such as: What did you learn through this activity? How can you apply this in your daily work?

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References

Anderson LW, Krathwohl DR (eds) (2001) A taxonomy for learning, teaching, and assessing: a revision of bloom's taxonomy of educational objectives. Longman, New York