



# UNIVERSIDADE FEDERAL DE SANTA CATARINA

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## SCRUM exercise: Welcome to SCRUMIA

The objective of this activity is to simulate project management using SCRUM in a practical example. In this activity, the participants in groups of 6 people, will plan the product backlog, and plan and execute one sprint within a hypothetical project.

### The Participants

Each of the 6 members of each group assumes of the typical roles using SCRUM:

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

## The Project: Welcome to SCRUMIA

The project is part of a new initiative to attract people from the earth to visit SCRUMIA (a distant planet of the earth) on vacation. As part of this initiative, the company DOESEVERYTHING where you work, has already negotiated several contracts with the following clients:



**Client: Green Foot** Director of the airline FLYHIGH  
Green Foot is very interested in offering flights to SCRUMIA seeing this as an excellent business opportunity. Therefore, He is contracting you to build airplanes in order to be able to cope with this new business demand.

Client requests: Green Foot			
ID	User stories	Profit	Happiness points
E1_1	As the owner of an airline, I want 10 new airplanes.	\$ 100	+4
E1_2	As the owner of an airline, I want 5 new airplanes.	\$ 50	+3
E1_3	As the owner of an airline, I want 3 new airplanes.	\$ 10	+1
E1_4	As the owner of an airline, I want 2 new airplanes.	\$ 10	+1



**Client: Purple Belly** Tourist guide  
Purple Belly loves to travel and knows already every corner of SCRUMIA. He is fascinated with the idea of new tourists coming to visit SCRUMIA, but is seriously concerned with their protection against meteor showers that occur frequently on SCRUMIA. As a means of prevention, he requests the production of hats for protection.

Client requests: Purple Belly			
ID	User stories	Profit	Happiness points
E2_1	As a tourist guide, I want 10 hats for protection.	\$ 60	+2
E2_2	As a tourist guide, I want 5 hats for protection.	\$ 40	+2
E2_3	As a tourist guide, I want 3 hats for protection.	\$ 30	+1
E2_4	As a tourist guide, I want 2 hats for protection.	\$ 20	+1



**Client: Big Eyes** Sailor  
For years now, Big Eyes offers boat trips to visit a beautiful island off the coast of SCRUMIA. Currently, he is studying the possibility of increasing the number of boats in order to be able to offer this trip also to visitors from earth.

Client requests: Big Eyes			
ID	User stories	Profit	Happiness points
E3_1	As an owner of a marine tourist enterprise, I want 10 boats.	\$ 70	+8
E3_2	As an owner of a marine tourist enterprise, I want 5 boats.	\$ 30	+6
E3_3	As an owner of a marine tourist enterprise, I want 3 boats.	\$ 20	+4
E3_4	As an owner of a marine tourist enterprise, I want 2 boats.	\$ 10	+2

## The Activity

The director of your company has already negotiated the contracts and elicited the respective user stories. To document the results, put all the cards in the product backlog on the task board on the wall.

### STEP 1. Estimate user story points

Estimate the number of user story points for each of the user stories in the product backlog. Document the results by circulating the respective value on the card, e.g.:

E1_3 3 airplanes			
Profit	S\$	Happiness	+1
	10	points	
Estimate	1 - 2 - 3 - 5 - 8 -		
	impossible		

### STEP 2. Sprint planning

Now you need to plan a sprint. The sprint will last 3 periods (each one with duration of 2 minutes). Estimate the velocity of your team, estimating how many story points you will be able to finish during this sprint. Remember, that only team members (pigs) can execute building tasks.

Transfer the user stories to be done during this sprint to from the product backlog to the sprint backlog column in the task board. (Note: NO more user stories can be added later to the sprint).

### STEP 3. Execution of the sprint

#### STEP 3.1 Kick-off meeting

The team members (pigs) choose the user stories from the sprint backlog that they intend to realize during the 1. period in the sprint. The respective cards are moved to the column "in execution" on the task board.

#### STEP 3.2 Execution of Period 1

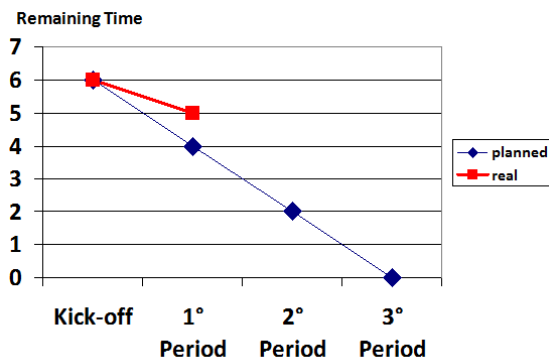
The team members (pigs) execute the respective building activities with respect to the user stories in the "in execution" column in order to produce the expected results.

#### STEP 3.3 Daily SCRUM Meeting Period 1

A daily SCRUM meeting is held with respect to Period 1.

Cards relating to completed user stories are moved to the column "Completed" in task board. Cards related to unfinished user stories remain in the column "in execution" and should be continued in the next period.

The remaining time to complete the planned scope for this sprint is estimated and documented on the burndown chart.



Problems encountered during period 1 are also discussed and improvement suggestions for the next periods are made.

It is also planned what will be done during the next period. The user stories planned to be realized in Period 2 are moved to the “in execution” column of the task board.

#### STEP 3.4 Execution of Period 2

-as above-

#### STEP 3.5 Daily SCRUM meeting Period 2

#### STEP 3.4 Execution of Period 3

-as above-

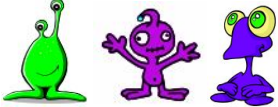
#### STEP 3.5 Daily SCRUM meeting Period 3

#### STEP 4. Sprint review meeting

The product owner identifies and tests the user stories which have been completed during the sprint. If accepted by the product owner, the respective cards are moved to the column “release” on the task board.

#### STEP 5. Release

Now, each group calculates the results of the activity in terms of happiness points and profit gained considering only the user stories in the release column of the task board. Each group also identifies the number of times in which a deviation from the planned remaining time in the burndown chart occurred.

RESULTS		
Happiness points	Profit	Number of variations in the burndown chart
		

The winner is the group with the largest number of happiness points and profit and the least number of variations on the burndown chart.