Exercise for the Lecture Requirements Engineering (Elite) Summer Semester 2022 Prof. Dr. Alexander Pretschner, Markus Schnappinger, Lena Gregor Tutorial on July 12, 2022



# **Tutorial 9: Requirements Engineering in agile Processes**

This exercise sheet covers the contents of the 9th lecture.

## Exercise 1 Code as the best model of a system

(Discussion)

Consider the following statement:

Code provides the best view of a system because, first, the code can never become obsolete, and second, there are no costs associated with additional documents or models.

Do you agree with this statement or do you think it is false? Support your opinion by formulating two arguments, including an example, that either refute or support the thesis.

#### Exercise 2 RE and close interaction with the customer

(Discussion)

Consider the following statement.

In the case of close and frequent contact with the customer (e.g. Scrum process), no requirements engineering is needed for a successful development.

Do you agree with this statement or do you think it is false? Support your opinion by formulating two arguments, including an example, that either refute or support the thesis.

#### Exercise 3 User Stories

(Hands-on)

Many agile teams work with user stories. However, the Scrum Guide does not prescribe them.

- 1. What is the difference between Use Cases and User Stories?
- 2. In what kind of project do you use Use Cases, when would you prefer User Stories?
- 3. What does the abbreviation INVEST stand for in User Stories?
- 4. Analyze, critique and refine the following User Stories:
  - As a marketing manager, I want a text editor so that I can edit text.
  - As a product owner, I want to learn about user stories, so that I can write user stories.
  - As a scooter renter, I want to rent a scooter, so that I can ride it.
  - As a user, I want a test coverage of 90% to make sure I get the correct results.
  - $\bullet\,$  As a user, I want the app to work correctly, so that I can rent a scooter.
- 5. Formulate own user stories in the context of the E-Scooter. Focus on

- · payment of a ride
- · analysis of user data

Who is the user, which roles can they take? Which function do they demand, what are the reasons for that?

Have a partner analyse and critique your user stories. Incorporate the feedback and continue with the partner's user stories.

### **Exercise 4** Project Vision

(Understanding, Hands-on)

This exercise is concerned with the System Vision (or Project Vision):

- 1. What is the role of a project vision in an agile project?
- 2. What content should the vision contain?
- 3. How is it different from a slogan?
- 4. Formulate a project vision for the *Rent-a-Scooter* project together with a partner!

#### **Exercise 5** Effort estimation

(Hands-on)

As a group, assess the effort of the following tasks, cf. story points in user stories, one after the other. Pay attention to disagreements in the team, how often estimates have to be re-assessed due to new requirements and why. Report your experiences to the other groups afterwards. What influence can the size of a task have on its prioritization? Use

- the S/M/L (and XL if applicable) scale
- · absolute time units
- · planning poker
- · relative time units

#### Tasks:

Empty the dishwasher, call grandma, vacuum the apartment, call dad, go grocery shopping, mow the lawn, go to the dentist, resolve Git Merge conflict, paint fence, build wooden garden shed, repaint the kitchen, pay bills, plant tulips, repair roof, book white elephant for the niece's birthday party tomorrow, study for RE exam, study for 'Safety and Security' exam.