



Technische Universität München  
Fakultät für Informatik

## Tutorial 10: Requirements Management, Quality Assurance

This exercise sheet covers the contents of the **10th lecture**.

### Exercise 1 Checklists, Templates and Patterns

(Discussion)

What types of quality assurance did you learn about in the course of the lecture?

Now consider the following statements:

*Requirements created according to checklists/rules/patterns are automatically good requirements.*

Do you agree or disagree with the statement?

### Exercise 2 Relationship between RE and Change Requests

(Discussion)

Consider the following statement:

*The number of change requests received during a project shows the quality of the requirements engineering activities.  
(the more change requests occur, the worse the requirements engineering was)*

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

### Exercise 3 Requirements Smells

(Analysis)

In the following, the quality of natural language requirements is considered using the following examples. Evaluate the examples against the quality criteria discussed in the lecture by pointing out any problems that may arise and marking the appropriate place in the text.

Examples:

- As far as possible, the input data should be checked for plausibility.
- We want to hide or show an object. In particular, the 'un-hide' must be performed on the 'parent' folder.
- Both the architecture and the programming style should ensure easy and efficient maintainability.
- The document handler can refine the search result and set further filters by using the facets on the left side of the screen.
- As a visitor, I want to see the checkboxes in the different categories displayed more clearly, so that i can see more quickly that i can select and deselect categories.

- As a developer, i want a simpler deployment process.
- If needed, the app provides support.
- As a customer of this provider, I want to be able to store a larger number of emails.
- As a visitor, I want to have a meaningfully structured side menu.
- The pictures should load quickly, so that unnecessary waiting time is avoided.
- The current logo should be switched to the new one.
- A user-friendly design has to be introduced.
- The runtime should be decreased significantly.
- Arial must no longer be the font used on the website.
- For further information, see the attached document.
- Weakly meetings with the user/customer take place to ensure a short feedback cycle.
- The throughput shall be increased and the consumed power decreased. If possible, the achieved delta should be 20 percent.
- The interface of the new module does not match with the socket of the system. It has to be changed.

## Exercise 4 NLP for Requirements

(Hands-on)

NLP tools can be used to evaluate the quality of requirements. However, the automatic analysis of natural language also has its shortcomings. Formulate a requirement that is easily understandable for a human but might be a false positive when using a NLP tool.

## Exercise 5 Defining Change Request Management Process

(Hands-on)

The e-scooter software is implemented and deployed on the hardware scooter. Now, a small test phase begins to collect feedback from various stakeholders.

1. Name 5 stakeholders who are likely to provide feedback after the initial phase
2. Define a process to document, assess, prioritize, and decide on change requests concerning the **iOS app**
3. Define a process to document, assess, prioritize, and decide on change requests with are concerned **with the hardware scooter**
4. Which roles and competencies does your change request management process contain?

## Exercise 6 Change Management vs Agile Projects

(Discussion)

Consider the following statement:

*A well-defined and structured Change Management Process is not compatible with agile project management.*

Do you agree with the statement or do you think it is false?