

Übungen zur Modellierung, Wintersemester 2006/07

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Sprechstunde abwechselnd Montag, 15-16 Uhr

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Übungsblatt 7

Abgabe bis **6.12.2006, 14:00 Uhr**

All diagrams in hand-written form!

Aufgabe 15: UML Statechart Diagrams

We take again our scenario of the local public transport from the last and the second last exercises. We assume that a disruption was informed by a transport service.

The data about the disruption will be collected by the on-line editor. Thereupon they are checked for their completeness. If the data are incomplete, the on-line editor requests the missing data. If he received these, he checks them again for completeness; if they are not yet complete, a new inquiry takes place. If the data are complete, they will be entered into the system. Afterwards they will be checked for consistency. If the data are not consistent, they are considered as incorrect; an error is announced and the procedure breaks off. If they are consistent, the data are considered as ascertained and the on-line editor writes these on the web page. The data are considered as published thereafter and the successful publishing will be announced to the transport service.

Model the conditions of the disruption data and their transitions in a statechart diagram. Start with the on-line editor collectiiong the data. 10 Punkte

Aufgabe 16: UML Use Case Diagrams

You have learned uses and extends relations between use cases in the lecture.

- a) Describe the difference between uses and extends relations.
- b) Choose an arbitrary use case and give an example for both a uses and extends relation in your use case.

4 Punkte

Aufgabe 17: UML class diagrams, description media in UML

Since you don't want any more to draw the different UML diagrams by hand, you decide for a modelling tool to implement the different diagram types. Certainly you model the problem, before you try to make the actual implementation. While modelling you identified the following classes:

actor, activity, activity diagram, use case, use case diagram, relationship, diagram, event, class, class diagram, collaborations diagram, object, sequence diagram, behavior diagram, state, statechart diagram, state transition.

Describe the individual classes and their relations in an UML class diagram.
6 Punkte