



SS 2008

ÜBUNGEN ZUR VORLESUNG „LOGISCHE SPEZIFIKATION“

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## Exercise 4 – CZT-Information System Specification

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In this exercise, the Community Z Tools shall be used for specification and type checking of an information system for exam registrations. Notes on installation of CZT are available in sheet Exercise 3.

The IS serves for registrations to exam dates instead of the traditional “paper” way. It allows to:

- publish dates of exams for subjects by professors,
- register to published dates of exams by students, and
- cancel the registrations by students (in advance).

The conditions for the registration of a student are the following:

1. Only one date can be reserved for each subject at a time.
  2. Only exams for subscribed subjects can be reserved.
  3. At most 3 trials for each subject.
  4. The next trial is available only if the previous result was 5.0 (fail).
- Specify the above information system for exam registrations on a level of detail, which allows to capture the requirements in CZT (using the ZCharMap plug-in). Make sure that it contains no type errors (with the ZSideKick plug-in). If there are design decisions, state them and document which choice you took.
  - Add any other reasonable conditions or requirements to design an IS which fulfils this purpose. Give reasons for your additional requirements.
  - Convert the specification into Latex format with the ZSideKick plug-in (and optionally export the latex source into a pdf file).  
Send the result to [calta@informatik.hu-berlin.de](mailto:calta@informatik.hu-berlin.de) with subject [LS ex.4] by the date indicated above.