Database Systems Group, Prof. Martin Gogolla: Teaching - General remarks

- Courses in the area Database Systems / Software Engineering
- DIS/EIS: Design of Information Systems / Entwurf von Informationssystemen Summer semester

Topic: Information system design, concentrating on the Object Constraint Language (OCL) in connection with modeling languages as UML (Unified Modeling Language) or EMF (Eclipse Modeling Framework)

• Theses (Bachelor, Master) and examinations in the area Database Systems and Software Design

• **COURSE**: Design of Information Systems (8 ECTS)

WEB INFO: http://www.db.informatik.uni-bremen.de

Preferably after 4th semester; for students having experience in software development; suitable for Bachelor and Master students

LECTURES: Wed 16-18 MZH 8090, Thu 10-12 MZH 8090, Start 1st lect. week EXERCISES: Mon 16-18 MZH 6190, Start 2nd lect. week

CONTENT: Design of Information Systems with modeling languages like UML or EMF; UML diagram forms and language features; properties of the Object Constraint Language (OCL); semantics of OCL; datamodels, metamodels Tool USE (UML-based Specification Environment): internationally used UML/OCL tool; developed in Bremen; interpreter for subset of UML including full OCL; offering executable models; tool gives feedback on the developed system; for example, by animating the system; google 'gogolla publications'

tool is about MODEL EXECUTION and MODEL TESTING not about DRAWING

FORM OF EXAMINATION: (A) Writing a paper about an application designed with UML/OCL (English or German; homework, "Hausarbeit"; including presentation of results in the exercise lessons; within a group of about 3 students); (B) oral examination (20 minutes)

• **SEMINAR**: Entwicklung von UML- und OCL-Modellen mit USE (4 ECTS) (Master level)

Development of UML and OCL Models with USE (4 ECTS)

COORDINATES: Thu 14-16 MZH 8090, Start 1st lect. week

Student talks on selected topics in modeling with $\ensuremath{\mathsf{USE}}$

Oral presentation with slides

Written report on the chosen topic

Background: google 'gogolla publications'