

Review Points for the Final Exam

*INFS4206/7206
Metamodeling
Semester 2, 2005*



Duration and Marks

- **2h working - 1 hour each part**
 - 10 minutes perusal - 5 minutes each part
- **50 marks = 50% of final assessment, 25 each part**
 - 1 mark about 2.4 min
- **Metamodeling part has 4 question groups, covering 4 main topic areas, varying marks different groups**
 - Several questions in each group
 - Mixture of tactical knowledge and strategic theory
- **Solutions MUST be in the exam paper**
 - Rough working paper will be provided

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Main topic areas

- **Metamodeling**
- **MOF - based metamodels**
- **Model-Driven Architecture**
- **Advanced Topics**
 - RDF
 - OCL
 - Problems with mappings

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Metamodeling

- **Metamodeling**
 - Metamodel is a model for a modeling system
 - Distinction between normative and informative aspects
 - Classes model versus instances model
 - Conceptual model for database called a repository, which stores model instances
 - Integrity constraints, queries on repository
 - Lots of metamodels
- **MOF - based metamodels**
- **Model-Driven Architecture**
- **Advanced Topics**

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MOF - based metamodels

- **Metamodeling**
- **MOF - based metamodels**
 - MOF Classes model
 - MOF Instances model
 - Metalevels
 - Structure of a MOF metamodel
 - Packages, layering, abstract classes, multiple inheritance L
 - Profiles and their limitations
- **Model-Driven Architecture**
- **Advanced Topics**

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Model-Driven Architecture

- **Metamodeling**
- **MOF - based metamodels**
- **Model-Driven Architecture**
 - Mapping from PIM to PSM
 - What difficulties arise, and why
 - How fix the difficulties
 - Extent-descriptive predicates
- **Advanced Topics**

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Advanced Topics

- **Metamodeling**
- **MOF - based metamodels**
- **Model-Driven Architecture**
- **Advanced Topics**
 - **RDF**
 - RDF as a metamodel
 - RDF can do things MOF can't
 - **OCL**
 - Navigation among instances
 - Read OCL language features: functions, invariants, iterators
 - **Problems with mappings**

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Consultation

- **I will be available for consultation**
 - Monday 31.10 10-12
 - Thursday 3.11 10-12
 - Other times by appointment
- **Come prepared with concrete questions**
- **Come in a group if you wish**

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GOOD LUCK!



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