

Contents

1	chap:Introduction	2
1.1	Mutlilevel Modeling, XModeler	2
1.2	Target Groups	2
1.3	Curriculum	2
2	Installing XModeler	3
2.1	Stand-Alone Version	3
2.2	Import in IDE	3
3	Curriculum	4
3.1	Modelling	4
3.1.1	OOP	4
3.1.2	Modelling Languages	5
3.1.3	MultiLevel	5
3.1.4	XCore/concept	5
3.1.5	FMMLX/concept	5
3.2	Tool handling	5
3.2.1	Basic Handling	5
3.2.2	Console	6
3.2.3	XTools	6
3.2.4	Tool Structure	6
3.2.5	Clients: Class Diagrams	6
3.2.6	XCore/tech	6
3.2.7	FMMLX/tech	6
3.3	Programming	6
3.3.1	Textual Syntax	7
3.3.2	XOCL	7
3.3.3	Sugar	7
3.3.4	Daemons	7
3.3.5	Exception	7
3.3.6	Command Interpreter & Listener	7
3.3.7	Java Kernel	8
3.3.8	sub:Java Tools	8
3.4	Project Management	8
3.4.1	Test Tool	8
3.4.2	Github/Repository/Issues	8
4	Conclusion	9

Chapter 1

chap:Introduction

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1.1 Mutlilevel Modeling, XModeler

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1.2 Target Groups

- Modeller
- Developer
- Tool Developer
- XOCL Developer

1.3 Curriculum

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Chapter 2

Installing XModeler

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2.1 Stand-Alone Version

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2.2 Import in IDE

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Chapter 3

Curriculum

...

3.1 Modelling

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3.1.1 OOP

Target group	[M], [D], [TD], [XD]
Required Learn Units	none
Subsequent Learn Units	•

Content

- object oriented paradigm (intensional, extensional)
- abstraction
- classes/Object
- attributes, operations, associations
- spezialisierung, polymorphism, encapsulation
- visibility
- instance of one class vs instance of multiple classes
- UML-Notation

Exercise

- example from teaching students

Literature

3.1.2 Modelling Languages

- Purpose
- metamodeling
- abstract syntax
- concrete syntax
- semantic

3.1.3 MultiLevel

- Multilevel Modelling paradigm
- golden braid
- intrinsics, deep instantiation, power types, meta levels

3.1.4 XCore/concept

- XCore Model

3.1.5 FMMLX/concept

- FMML_x
- Relation to XCore

3.2 Tool handling

- Starting XModeler
- Project creation
- Diagram creation
- Save/Load Files/Images/Projects
- Modelling
- Edit
- Errors

3.2.1 Basic Handling

- Console usage
- referencing Classes
- invoking operations
- basic set of commands

3.2.2 Console

- Console usage
- referencing Classes
- invoking operations
- basic set of commands

3.2.3 XTools

- purpose of XTools
- usage of XTools

3.2.4 Tool Structure

- XCore
- XOCL
- XMF
- Clients

3.2.5 Clients: Class Diagrams

- Diagram
- Mapping
- Enhancements

3.2.6 XCore/tech

- implementation of XCore
- explanation of elements

3.2.7 FMMLX/tech

- implementation of FMMLx
- relation to XCore
- level
- new()

3.3 Programming

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3.3.1 Textual Syntax

- @Class
- @Attribute
- @Package
- @Operation
- @Constructor
- import
- importparser

3.3.2 XOCL

- operations
- syntax
- basic types

3.3.3 Sugar

- purpose
- usage
- examples

3.3.4 Daemons

- purpose
- usage
- daemons
- types

3.3.5 Exception

- usage
- examples
- try/catch

3.3.6 Command Interpreter & Listener

- purpose
- usage
- examples
- implementation XOCL/Java

3.3.7 Java Kernel

- XModeler.java
- Basic components

3.3.8 sub:Java Tools

- Diagrams
- Editors
- Trees

3.4 Project Management

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3.4.1 Test Tool

- purpose
- usage

3.4.2 Github/Repository/Issues

- projects
- contribution

Chapter 4

Conclusion

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