# L2\_Project Management.pdf

- 9 Sammensætning af teams
  - 9 Belbin Team Roles
  - 17 Agreement of Collaboration (Group AC)
- 21 Project planning
  - 24 Work Breakdown Structure (WBS)

A tree containing finer and finer division of the work to be done. Leaves are small pieces of work which one can estimate a completion time for.

Basis for estimations on, time, cost, manpower, dependencies, ...

- 33 Planning poker
- 38 Risk Management
- 44 Scrum

## L3\_Development\_Processes.pdf

- 1 Development Processes
  - Answers the questions
  - What will you produce
  - When will you be done
  - What will it cost
  - How will you handle changes
- 8 Developer and Customer rights
- 13 The null process
- 14 The waterfall process
- 15 The V model
- 17 Iterative development process
  - 18 Iterative vs. incremental
  - 22 Rational Unified Process (RUP)
- 31 Agile methods
  - 34 Extreme Programming (XP)
- 41 The ASE process

#### L4 Quality Management.pdf

6 - Review phases

Planning - Preparation - Meeting - Postmeeting

15 - Configuration management

# L5\_System\_Test\_TFJ.pdf

- 9 Black vs white box testing
- 13 Test levels

# L6\_Sys\_Specification.pdf

- 14 Who uses a system specification
- 16 Requirement specification
- 23 Types of requirements

- 36 Levels of requirements (goal, domain, product, design)
- 49 Elicitation (Finding requirements)
  - 54 Elicitation techniques

### L7\_Accepttest.pdf

- 1 Acceptance test
- 8 Equivalence classes

#### L7\_UseCase.pdf

- 4 What is a **use case** (Described from the users view, not the systems)
- 9 Use case example
- 13 Actors
- 17 Actor-Context diagram
- 22 Stereotypes (<<actor>>, <<include>>, <<extends>>)
- 23 Use Case diagrams
- 32 Scenario formats (Brief, Casual, Fully dressed)
- 45 Use Case writing guidelines
- 52 How to develop a Use Case

## L8\_SysMLIntroduction.pdf

Start altid med at lave en stor kasse og et felt i øverste venstre hjørne til "Diagram header" (Slide 5). Diagramheaderen skal indeholde [Diagram kind] [[Model element type]] [model element name] [[Diagram name]](Slide 6). Eks. "bdd [block] Camera [Hierarchical system structure]". Tingene i paranteser kan udelades.

9 - Forskellige SysML diagramtyper

# L8\_SysMLStructuralDiagrams.pdf

- 3 Block Definition Diagram and Internal Block Diagram (**bdd** and **ibd**). *Blocks are defined in a bdd and used (as parts) in an ibd*
- 6 Blocks
- 12 bdd
- 18 ibd (An ibd always relates to a block on a bdd.)
- 26 items, item flows and ports (define part/block interface)
  - 27 items (stuff that flows)
  - 27 item flow (item and flow direction. Between two ports)
  - 28 ports (interaction points on the boundary of a block)
- 34 bdd and ibd example

#### L9\_SysMLBehaviouralDiagrams\_SequenceDiagrams.pdf

3 - Sequence diagrams (sd) models interactions between parts of a block

Solid line, open arrowhead - asynchronous message

Solid line, closed arrowhead - synchronous message

Dashed line, open arrowhead - Return message

12 - Fragments (alt, opt, loop, par) drawn in a box with fragment name at top left corner

13 - Reference blocks, reference other sequence diagrams

### L10\_SysML Behavioural Diagrams - State Machine Diagrams.pdf

- 5 State details (entry, do, exit, buttonPushed, ...)
- 7 Transitions (trigger, guard and effect) written trigger[guard]/effect

## L12\_SystemApplicationModel.pdf

- 8 Applikationsmodel
  - 9 Boundary og control stereotyper i UML
- 23 Domain model example
- 24 Application model example

# L13\_SystemDesignArkitektur.pdf

- 7 Architecture Design Qualities
- 10 Cohesion
- 11 Coupling

## L14\_HWSW\_Design.pdf

- 3 Software arkitektur design
  - 4 4+1 view modellen
    - 9 Logical view
    - 10 Deployment view
- 13 Hardware arkitektur design
- 26 Analysis and Design Steps (Summary)
  - 27 Example use case diagram
  - 28 Example actor interaction diagram
  - 29 Example domain model diagram
  - 30 Example bdd diagram (subsystsms)
  - 31 Example software design diagram
  - 32 Example ibd diagram (hardware design)
  - 34 Example pkg diagram (logical model)

#### **VIGTIGE BEGREBER?**

Acceptance tests = System test. Opfylder systemet de mål der er defineret i kravspecifikationen? Demonstration af systemets funktionalitet.

Elicitation = finding product requirements. Can be hard because customers don't know what they want

Unit test - Integration test - Acceptance test (System test)

Actor - An actor describes an object, external to the system, who interacts with the system (persons, other systems, HW devices)

bdd - Define blocks and their relationship to their parts.

ibd - Defines interconnection and interfaces between the parts of a block, and the information flow between parts.

**Block** - Fundemental model element (hardware, software, person, water, ...). Like a C++ class. Drawing a block can be seen in (L8\_SysMLStructuralDiagrams.pdf slide 6+7) **Ports** - In ports have an arrow into the block. Out ports have an arrow out of the block. Inout blocks has lessthan and greaterthan sign (<>). Ports have a name and an item type (name: item). Ex. L8\_SysMLStructuralDiagrams.pdf slide 31.

**Domænemodellen** beskriver problemdomænet, men ikke selve applikationen. **Applikationsmodellen** beskriver applikationen for et givent subsystem.