

# Programming fk. 2014

## DIT950

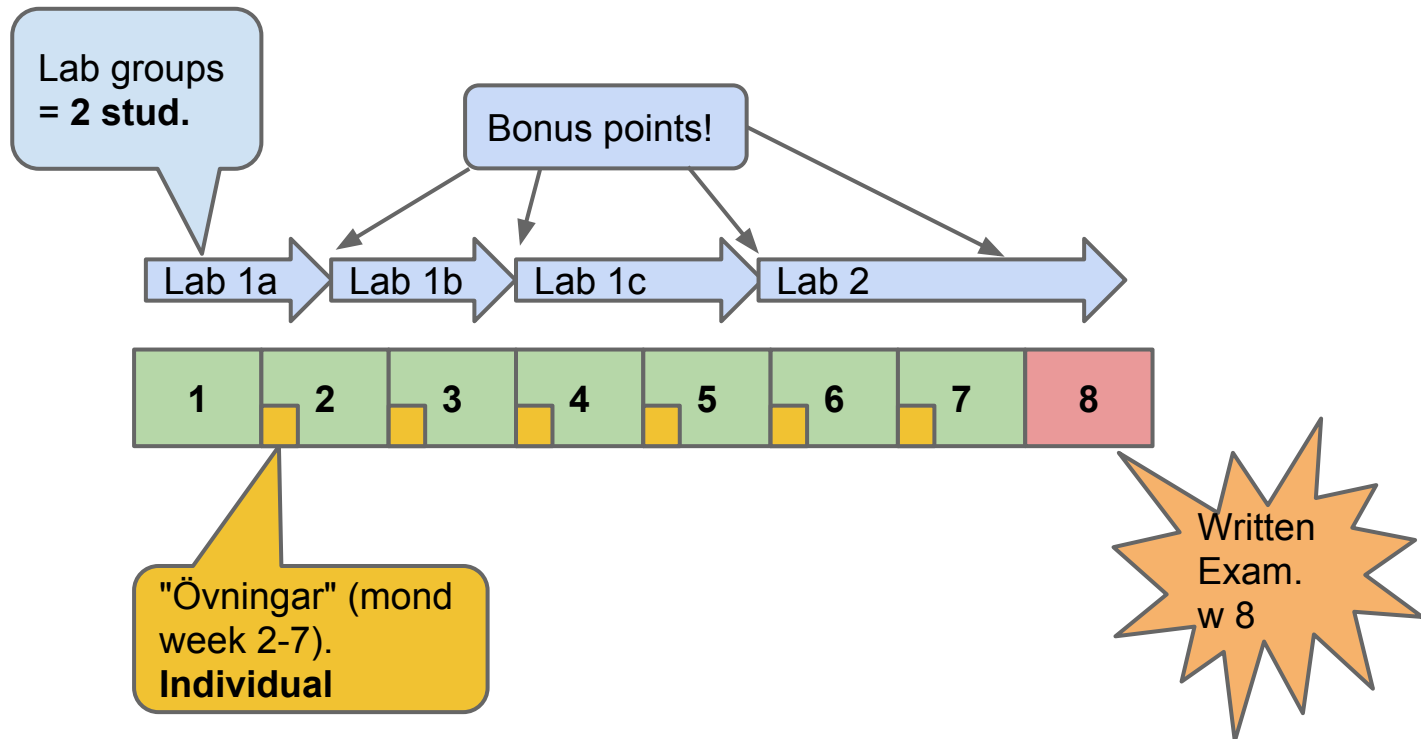
Introduction

# Language

Swedish spoken, a lot of written English (and Java :-))

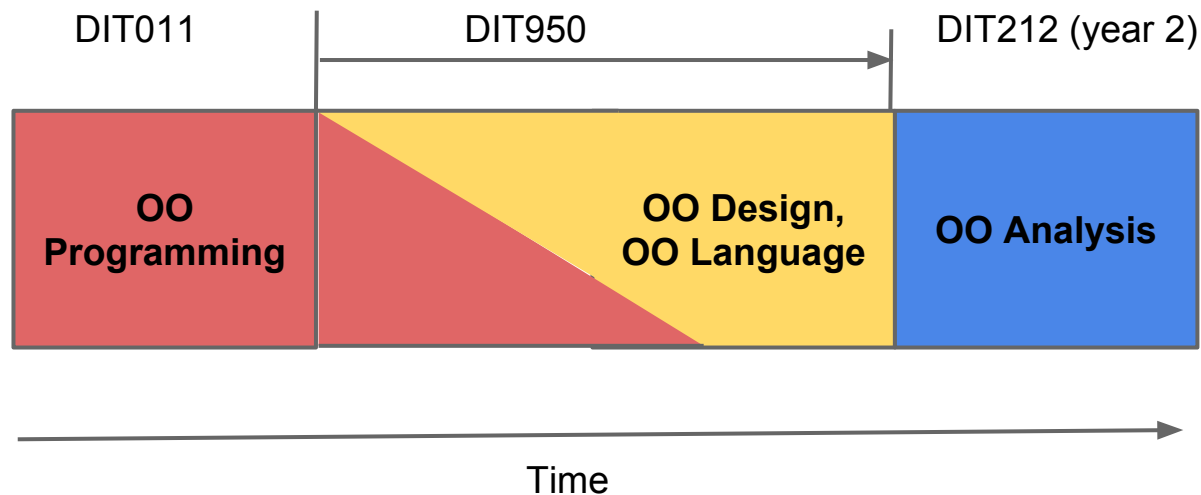
- This area is moving too quick. Swedish has a hard time to catch up ... sometimes it just doesn't happen...
- All code should be in English, incl. comments

# Organisation

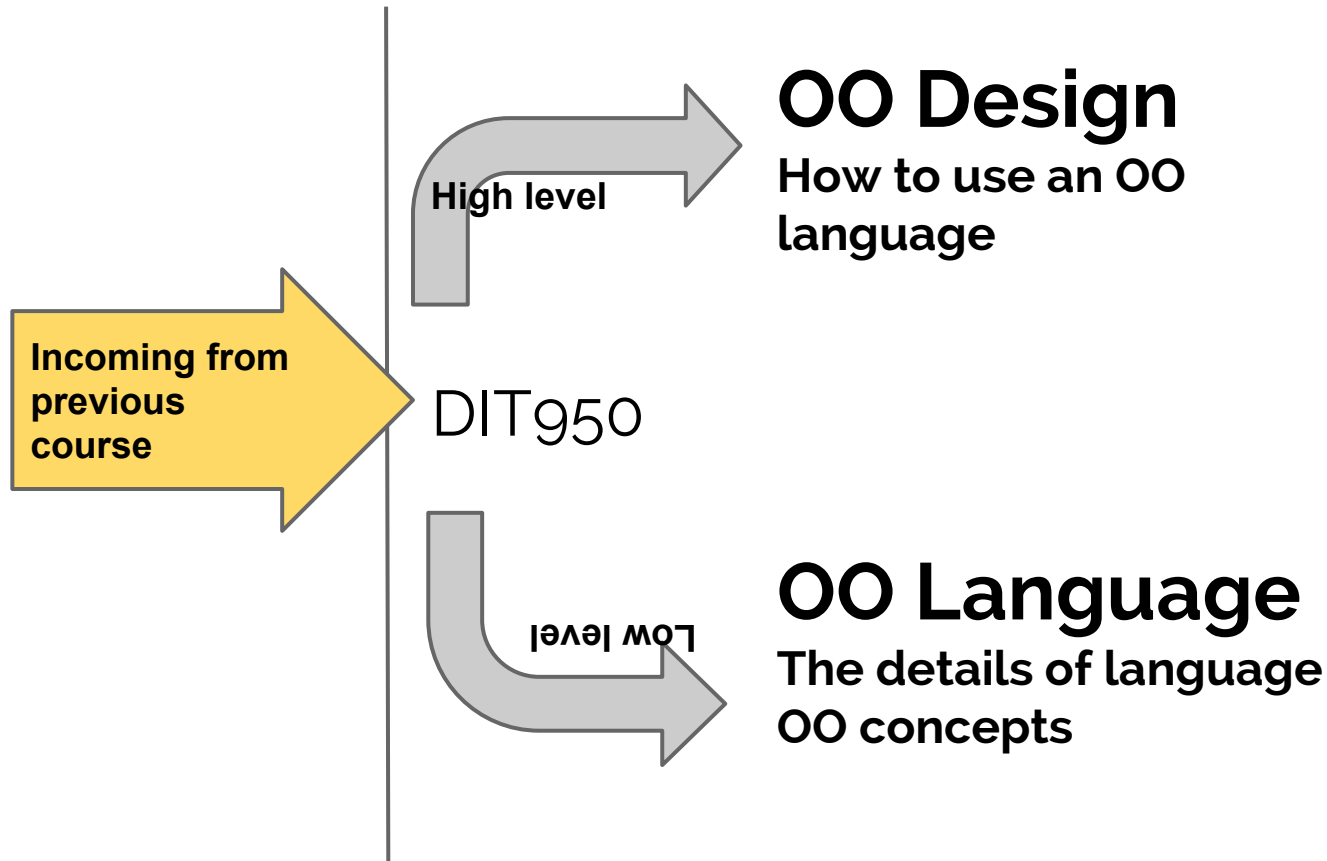


# Course Position

Course is part of the OO-path



# Content



# Content, cont

OO Language is a rather well defined (formal) topic

- There are yes or no's
- Exercised during the "Övningar"

OO Design is a rather fuzzy topic

- Vague definitions (same name for similar or near similar notions)
- Often many options, harder to get yes or no's
- No "formula" to create a design
- Exercised in the labs

# Content, cont, cont

Content organize in "topics" (each topic involves language and design)

- Imperative programming
- Types
- State
- Dependencies
- Design
- Inheritance
- Parallelism
- Generic types
- Java 8 (if time)

# Guest Lecture

Gabriele (assistant and phd student) will do a guest lecture!

- Will give some insight into CS research



# Literature and Resources

From previous course (Java Direkt)

Slides (course page)

Web links (course page)

Papers (course page)

...and code samples (course page)

**"The code is the book!"** (all slides with an \* has a  
"matching" code sample)

# The Java Language Specification



# JLS, cont.

The ultimate, final resource

The official specification of the language, should be possible to find answer to any language question

Latest version: [Java SE 7 Edition](#) (Java SE 8 close to release)

Also a JVM specification, not used in course

Course goal: Make yourself a bit familiar with JLS

# Development Environment

- Linux (for developer by developers)
- NetBeans, integrated development environment
  - Maven, project management system
  - JaCoCo, quality tool
  - JUnit, testing tool
- STAN, quality tool

Everything open source (or community) download and install ... more to come...

# NetBeans

Must run the below (open shell and write):

```
/chalmers/groups/ws-devel/netbeans-7.4/bin/netbeans
```

Handled out lab code organized as Maven projects

- Special (bit complex) folder structure, check out before starting with labs (NetBeans > Files tab or use shell)
- Checkout target directory!

Super short demo .. now ...!

# The Slides

I will try not to "read the slides" during the lectures

I'll try to talk more freely from the slides (in between sketch some things on blackboard)

- Possible I'll miss a slide or two, ... you should run the slides for your self

# Your Contribution

Questions appreciated!

Comments and suggestions during the course are welcome, feel free to ask...

Also see course PM on course page...

Course student representatives... ? Someone?