

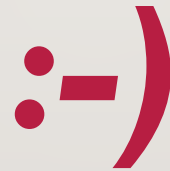
SMA:  
Software Modeling and Analysis

*Practical Session*

***Week 02***

***You have to attend the discussion to reveal such slides.\****

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*\*Disclaimer:*

*The content that has been shown on this slide is irrelevant for the exam.*

# Assignment 02

***Preview***

# A02 - Exercise 01

## **Nature of Smalltalk and GT**

- a) Which threat arises when you develop in a live system?
- b) What is a message in Smalltalk?
- c) What is a block in Smalltalk?
- d) How do Smalltalk, Pharo and GT relate to each other?
- e) What are counterparts of GT tools in your favorite development environment?

# A02 - Exercise 02

## Object inspection

- a) What is the difference between a String and a Symbol in Smalltalk?  
Why is it important?
  
- b) Implement provided pseudo code in Smalltalk.

```
int scoreOfPlayerA, scoreOfPlayerB;
if(scoreOfPlayerA > scoreOfPlayerB)
    print "Player A Won"
else if(scoreOfPlayerA < scoreOfPlayerB)
    print "Player B Won";
else
    print "Match is declared as draw";
```

# A02 - Exercise 02

c) **includes: anObject**

How many classes in GT implement the message above?

How many messages in GT use that particular message?

d) Which message in GT can be sent to a class to find all its subclasses?

# A02 - Exercise 03

## CallGraph

Find the top ten most frequently invoked methods in the provided CallGraph representation.

*1) You have to download the Git repo containing the CallGraph implementation:*

```
Metacello new baseline: 'SMAForGt';
```

```
repository: 'github://onierstrasz/sma-examples/src'; load.
```

*2) Download `Calls.txt` and move it into your GT image folder.*

*3) You'll find examples in the "CallGraph Demo" slides.*