

# INF5120 and INF9120

## ”Modelbased System development”

Lecture 3: 30.01.2017

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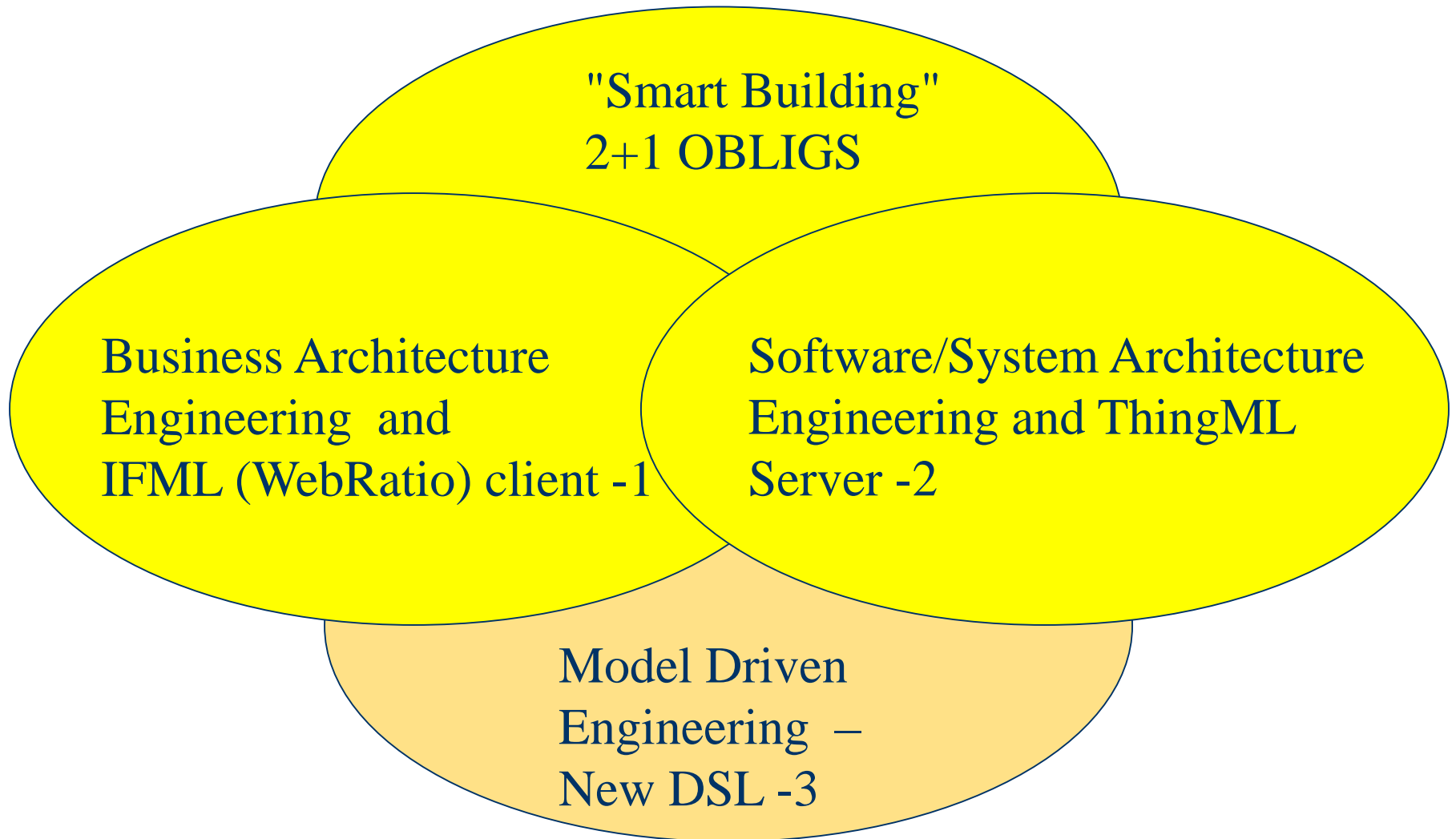
**This Lecture, January 30, 2017**

**Introduction to Web and App UI development  
with WebRatio (with IFML)**

# Course parts (16 lectures) - 2017

- January (1-3) (Introduction to Modeling, Business Architecture and the Smart Building project):
- 1-16/1: Introduction to INF5120
- 2-23/1: Modeling structure and behaviour (UML and UML 2.0 and metamodeling) - (establish Oblig groups)
- 3-30/1: WebRatio for Web Apps/Portals and Mobile Apps – and Entity/Class modeling – (Getting started with WebRatio)
  
- February (4-7) (Modeling of User Interfaces, Flows and Data model diagrams, Apps/Web Portals - IFML/Client-Side):
- 4-6/2: Business Model Canvas, Value Proposition, Lean Canvas and Essence (Smart Building project) - User stories and Use case
- 5-13/2: IFML – Interaction Flow Modeling Language, WebRatio advanced – for Web and Apps
- 6-20/2: BPMN process, UML Activ.Diagrams, Workflow and Orchestration modelling value networks
- 7-27/2: Modeling principles – Quality in Models
- 27/2: Oblig 1: Smart Building – Business Architecture and App/Portal with IFML WebRatio UI for Smart Building
  
- March (8-11) (Modeling of IoT/CPS/Cloud, Services and Big Data – UML SM/SD/Collab, ThingML Server-Side):
- 8-6/3: DSL and ThingML, UML State Machines and Sequence Diagrams
- 9-13/3: UML Composite structures, State Machines and Sequence Diagrams II
- 10-20/3: Architectural models, Role modeling and UML Collaboration diagrams
- 11-27/3: UML Service Modeling, ServiceML, SoaML, REST, UML 2.0 Composition, MagicDraw
- 27/3: Oblig 2: Smart Building – Internet of Things control with ThingML – Raspberry Pi, Wireless sensors (temperature, humidity), actuators (power control)
  
- April/May (12-14) (MDE – Creating Your own Domain Specific Language):
- 12-3/4: Model driven engineering – Metamodels, DSL, UML Profiles, EMF, Sirius Editors
- EASTER – 10/4 og 17/4
- 13-24/4: MDE transformations, Non Functional requirements
- 1. Mai – Official holiday
- 14-8/5: Enterprise Architecture, TOGAF, UPDM, SysML – DSLs etc.
- 8/5: Oblig 3 - Your own Domain Specific Language
  
- May (15-17): (Bringing it together)
- 15-15/5: Summary of the course – Final demonstrations
- 16-22/5: Previous exams – group collaborations (No lecture)
- 17-29/5: Conclusions, Preparations for the Exam by old exams
- June (Exam)
- 13/6: Exam (4 hours), (June 13<sup>th</sup>, 0900)-1300

# Course components



# Next Lecture, February 15, 2016

## Business Architecture, Business Engineering and Business Model Canvas

- Introduction to Agile development
- Introduction to Team management – using Upvawe.io – for Scrum and Kanban
- Business Modeling, Business Engineering
- Lean Startup – Lean Canvas

# WebRatio, [www.webratio.com](http://www.webratio.com)

80% MAINTENANCE COST CUT >

900% PRODUCTIVITY INCREASE >

50% TIME-TO-MARKET CUT >

CHOOSE YOUR WEBRATIO PLATFORM TO ENTER THE

**IFML**

**MOBILE PLATFORM**  
Build amazing mobile apps in days, not months, without writing a single line of code.  
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**BPM PLATFORM**  
Build tailored BPM applications with a fine-grained user experience definition.  
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**WEB PLATFORM**  
Focus on creative tasks and build composite web applications in a fraction of the time.  
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**ENTERPRISE PLATFORM**  
Build omni-channel applications with a consistent user experience.  
[LEARN MORE](#)

The advertisement features a woman working at a desk in the background. The 'IFML' text is positioned to the right of the platform cards, with two arrows pointing from it to the 'MOBILE PLATFORM' and 'WEB PLATFORM' cards.



# WebRatio Platform Modeler

# IFML General overview

## IFML General Overview

IFML Modeling with WebRatio Platform

Modeler Beginner Model Interaction Flow

1,469 views Published on Nov 29, 2013 | Time 6 min

IFML

Applies to: 7.2 or higher

Developing the front-end of a user application is a costly and inefficient process for a number of reasons.

WebRatio Platform has solved the User Interface modeling challenge by developing an interaction Flow Modeling Language, or IFML, which covers the existing gap in front-end application development. IFML supports the platform-independent description of graphical user interfaces for applications accessed or deployed on such systems as desktop computers, laptop computers, PDAs, mobile phones, and tablets.

IFML describes user interaction, and control behavior of the application, as perceived by the end user.

IFML doesn't focus on the graphics and design of an application, but you can use it to deliver high quality interfaces nonetheless, by using tools for importing graphic resources or templates.



## Transcript

### Table of contents

- The Problem
- The Solution
- IFML Objectives
- IFML and Extensions
- Essential IFML Modelling Concepts
- Extension IFML Modeling Concepts

<https://my.webratio.com/learn/learningobject/ifml-general-overview-v-72?link=oln72ae.redirect&nav=14&cbck=wrReq10172>





## WEBRATIO WEB PLATFORM

**FOCUS ON CREATIVE TASKS AND BUILD COMPOSITE WEB APPS IN A FRACTION OF THE TIME**

Focus your time and energy on creative and value-added tasks. Let WebRatio Web Platform automatically handle the most tedious tasks, such as database access, service integration and page composition. Embrace our model-driven approach and achieve speed, agility and reliability.

[TRY IT NOW](#)

## WEBRATIO WEB PLATFORM FEATURES

VISUALLY DEVELOP YOUR WEB APPS

CLOUD OR ON-PREMISES DEPLOYMENT

TEMPLATE-BASED AND FULLY-BRANDED LAYOUT

BACK-END AND INTEGRATION SUPPORT

OPEN, EXTENSIBLE PLATFORM

SCALABLE AND PERFORMING WEB APP

# WebRatio Mobile Platform



## WEBRATIO MOBILE PLATFORM

**BUILD AMAZING MOBILE APPS IN DAYS, NOT MONTHS, WITHOUT WRITING A SINGLE LINE OF CODE**

Start developing, even when your requirements are unclear or volatile. Proceed at full speed with extreme agility, but at the same time with robustness and reliability. Design the App through a real prototype; no more need to use static wireframes or mockups. WebRatio Mobile Platform is designed to support you in this challenge.

[TRY IT NOW](#)

## WEBRATIO MOBILE PLATFORM FEATURES



THE EASIEST VISUAL  
MODELING LANGUAGE  
FOR UI



NATIVE DEVICE  
FUNCTIONS



TEMPLATE-BASED,  
FULLY-BRANDED,  
RESPONSIVE LAYOUT



BACK-END AND  
INTEGRATION SUPPORT



OPEN, EXTENSIBLE  
PLATFORM



1-CLICK APP BUILD

# (30 min) Introduction video for WebRatio:



Mobile development made unique | WebRatio Webinar

<https://www.youtube.com/watch?v=UNG8FK3wEjA>

# Register as a new user

Register as user at webratio.com

(use uio.no e.mail address in the WebRatio community)

Please provide your WebRatio credentials, then click "Login", or access with your preferred social account.

Forgot your password?  
Not registered yet?

or

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Start building Web & Mobile applications without writing code



**What you get with your free account:**

- Access to WebRatio Platform and Add-ons **Downloading Center**
- WebRatio **Training Materials** and **Knowledge Base**
- Membership in the **Community** and fast answers to your questions
- Tips and tricks** from industry experts

First Name  Last Name

Norway

your@email.com

Password

Confirm Password

Already have an account? [Login here](#)

By clicking "SIGN ME UP" you agree to the WebRatio [Privacy Policy](#) and [Newsletter Policy](#)

or

Twitter  
 Facebook  
 LinkedIn  
 Google+

# Installing WebRatio Mobile Platform

## Setting Up WebRatio Mobile Platform

IT Operator Beginner Set Up

1,131 views Published on Feb 23, 2015 | Time 7 min

Activate Download Install Linux Mac Register Windows

Applies to: 8.0 or higher

Downloading, registering, and activating WebRatio Mobile Platform involves several decisions that are not easy to take without proper knowledge.

Attend this lesson to understand all the steps and to find some help if something goes wrong.



Progress



## Transcript

### Table of contents

Lesson Overview

Online Registration

Install WebRatio Mobile Platform

Install WebRatio Mobile Platform for Mac

Install WebRatio Mobile Platform for Linux

Install WebRatio Mobile Platform for Windows

Activate WebRatio Mobile Platform

<https://my.webratio.com/learn/pcu1x?pcp1x=setting-up-webratio-mobile-platform-v-80&sp=page24t&link=ln230x&flbck=.sv2>