

Project course 2016-2017

Introduction and important information
9.9.2016 / Jerker Björkqvist

Project Course 2016-2017

- **AGENDA 9.9.2015**
 - Welcome Introduction to project course
 - Some guests
 - Boost / Vaadin / ESlab
 - Get to know
 - Projects / teams / Booklet

Course lecturers



Jerker Björkqvist



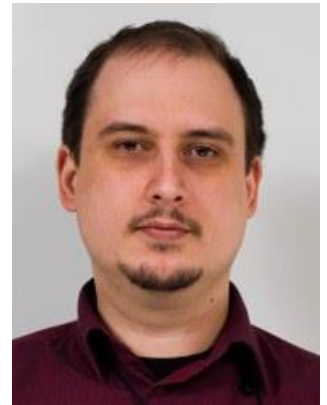
Mats Neovius



Karl Rönnholm



Annamari Soini



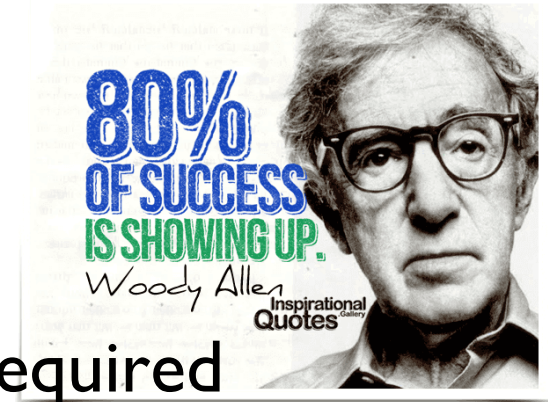
Dragos Truscan

ENJOY!

Important information!

- Reserve **3,5 hours** for the scheduled meetings on Fridays!
 - **8.30-12** room Agora 110A&B

Attendance



- Attendance to common meetings IS required
 - 2 absences will be accepted for good reasons
 - any further absence will lower personal grade
 - further absence will lower grade by 1 for each 2 NoShow
 - Attendance list circulate in the beginning of each meeting
- Why:
 - We show respect for each other and their work in this course

Audience and requirements

- Advanced level course (10 ECTS) for
 - Computer Engineering
 - Computer Science
 - Information systems
 - Any other student interested in contributing to a ICT solution
- Required background
 - Bachelor level degree or equivalent
 - Software engineering, programming and design skills
 - Systems theory, business models and project management
- General
 - Ability to work in teams



What is the project course?

- The objective is to plan, design, implement and deliver a **ICT solution** in a **TEAM**
- The team will produce the following
 - A. Demonstrator for the solution
 - B. Business / Exploitation plan for the solution
 - C. Project deliverables
- The project course is **VERY** practical
 - Almost no lectures
 - The team (that is **YOU**) is putting together necessary plans, documentation, SW, HW, integration
 - The team presents the progress and final results i various events
 - Course meetings, BOOST Turku pitch event, ICT Showroom,...
- You use theoretical skills from previous courses, and implement them in practice



Skills and competences acquired

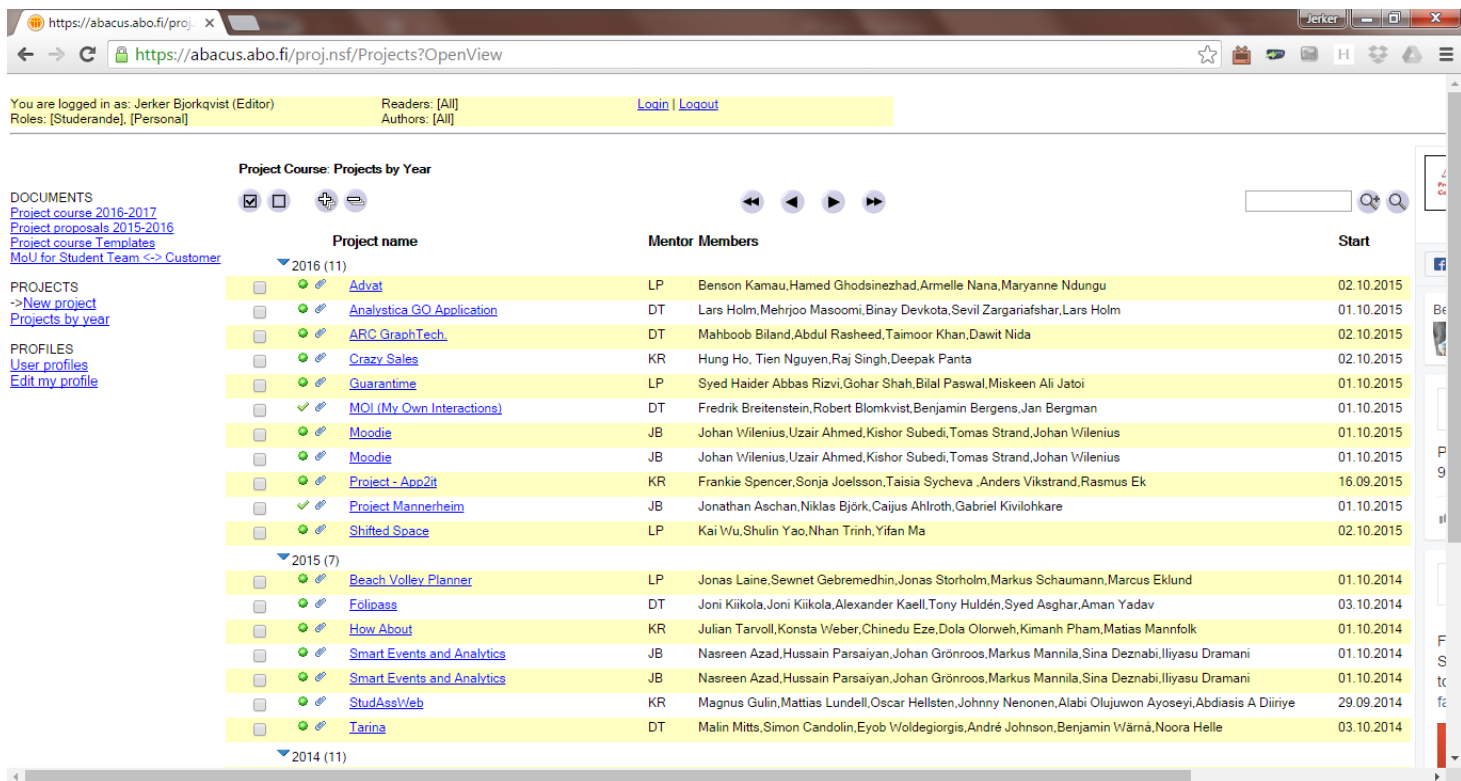
- **Interact with a customer** and learn how to communicate requirements and design decisions.
- **Plan and follow up a software development project.** Review the plan during the execution of the project and reflect over your initial expectations and estimations.
- **Work in a team.** Team coordination, meetings, planning and internal communication. Use basic collaboration tools in software development such as an issue tracking system and a software repository and version control system.
- **Carry out a development project from beginning to end:** Create and document a design. Implement the design. Test the implementation.
- **Presentations and documentation.** Present your project, product, plans and documents to your colleagues, stakeholders and the general public. Produce documentation that is usable and understandable.



Web page

- Course web page

<https://abacus.abo.fi/proj.nsf>



The screenshot shows a web browser displaying the course web page. The page is titled "Project Course: Projects by Year" and shows a list of projects organized by year. The user is logged in as Jerker Bjorkqvist (Editor).

Project Course: Projects by Year

DOCUMENTS
[Project course 2016-2017](#)
[Project proposals 2015-2016](#)
[Project course Templates](#)
[MoU for Student Team <-> Customer](#)

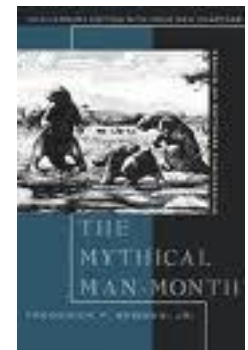
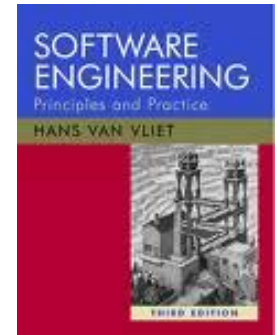
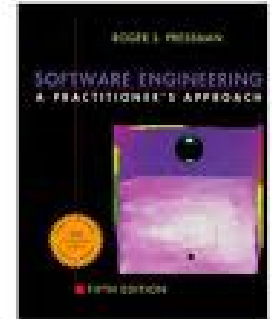
PROJECTS
[->New project](#)
[Projects by year](#)

PROFILES
[User profiles](#)
[Edit my profile](#)

Project name	Mentor Members	Start
2016 (11)		
Advat	LP Benson Kamau,Hamed Ghodsinezhad,Armelle Nana,Maryanne Ndungu	02.10.2015
Analytica GO Application	DT Lars Holm,Mehrjoo Masoomi,Binay Devkota,Sevil Zarganiashar,Lars Holm	01.10.2015
ARC GraphTech	DT Mahboob Biland,Abdul Rasheed,Taimoor Khan,Dawit Nida	02.10.2015
Crazy Sales	KR Hung Ho, Tien Nguyen,Raj Singh,Deepak Panta	02.10.2015
Guarantime	LP Syed Haider Abbas Rizvi,Gohar Shah,Bilal Paswal,Miskeen Ali Jatoi	01.10.2015
MOI (My Own Interactions)	DT Fredrik Breitenstein,Robert Blomkvist,Benjamin Bergens,Jan Bergman	01.10.2015
Moodie	JB Johan Wilenius,Uzair Ahmed,Kishor Subedi,Tomas Strand,Johan Wilenius	01.10.2015
Moodie	JB Johan Wilenius,Uzair Ahmed,Kishor Subedi,Tomas Strand,Johan Wilenius	01.10.2015
Project - App2it	KR Frankie Spencer,Sonja Joelsson,Taisia Sycheva ,Anders Vikstrand,Rasmus Ek	16.09.2015
Project.Mannerheim	JB Jonathan Aschan,Niklas Björk,Cajus Ahlroth,Gabriel Kivilohkare	01.10.2015
Shifted Space	LP Kai Wu,Shulin Yao,Nhan Trinh,Yifan Ma	02.10.2015
2015 (7)		
Reach Volley Planner	LP Jonas Laine,Sewnet Gebremedhin,Jonas Storholm,Markus Schaumann,Marcus Eklund	01.10.2014
Folipass	DT Joni Kikola,Joni Kikola,Alexander Kaell,Tony Huldén,Syed Asghar,Aman Yadav	03.10.2014
How About	KR Julian Tarvoll,Konsta Weber,Chinedu Eze,Dola Olorweh,Kimanh Pham,Matias Mannfolk	01.10.2014
Smart Events and Analytics	JB Nasreen Azad,Hussain Parsaiyan,Johan Grönroos,Markus Mannila,Sina Deznabi,Ilyasu Dramani	01.10.2014
Smart Events and Analytics	JB Nasreen Azad,Hussain Parsaiyan,Johan Grönroos,Markus Mannila,Sina Deznabi,Ilyasu Dramani	01.10.2014
StudAsslWeb	KR Magnus Gulin,Matias Lundell,Oscar Hellsten,Johnny Nenonen,Alabi Olujuwon Ayoseyi,Abdiasis A Diriye	29.09.2014
Tarina	DT Malin Mitts,Simon Candolin,Eyob Woldegiorgis,André Johnson,Benjamin Wärnå,Noora Helle	03.10.2014
2014 (11)		

Litterature

- No specific book, but the following can be useful
 - Roger S Pressman, *Software Engineering: A Practitioner's Approach*, 2004.
 - Hans Van Vliet, *Software Engineering: Principles and Practice*, 2008.
 - Frederick P. Brooks, *The Mythical Man-Month: Essays on Software Engineering*, 1995 .
- Material on business plans
 - <http://www.businessmodelgeneration.com/>



Project customer

- Each team has a project customer, from outside the project team
 - Company
 - University lecturer
 - Other
- With the external customer, you learn how to
 - Communicate project requirements
 - Report project progress

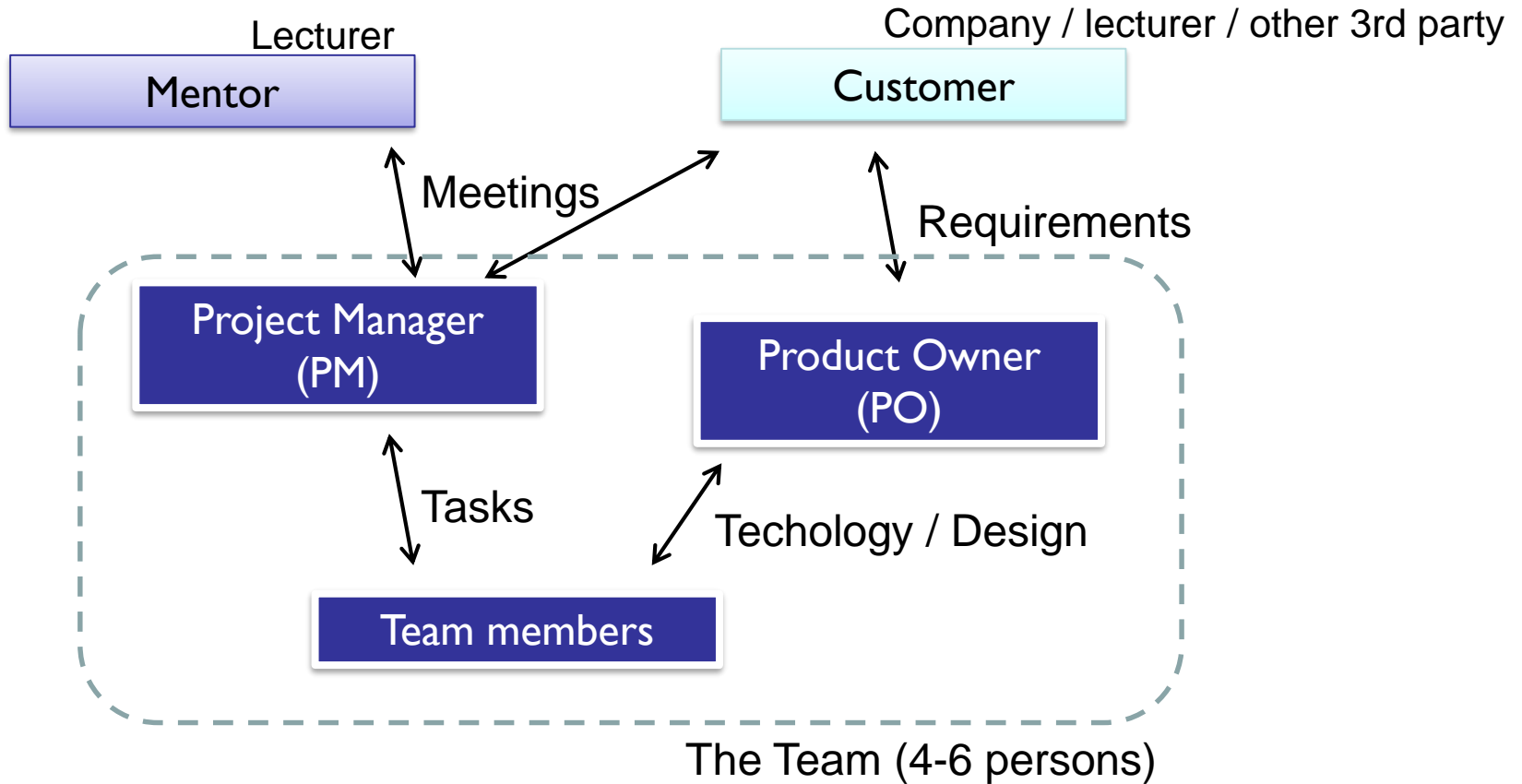


The Team

- A team of 4-6 persons
 - You can form your own teams
 - Think about the mix of the team
 - Your best friends might not form the best team
 - Skills, personalities, cultures, languages
 - The lecturers have the final word when it comes to team formation
- Each team shall have the best mix of major subjects possible



Stakeholders overview



Mentors

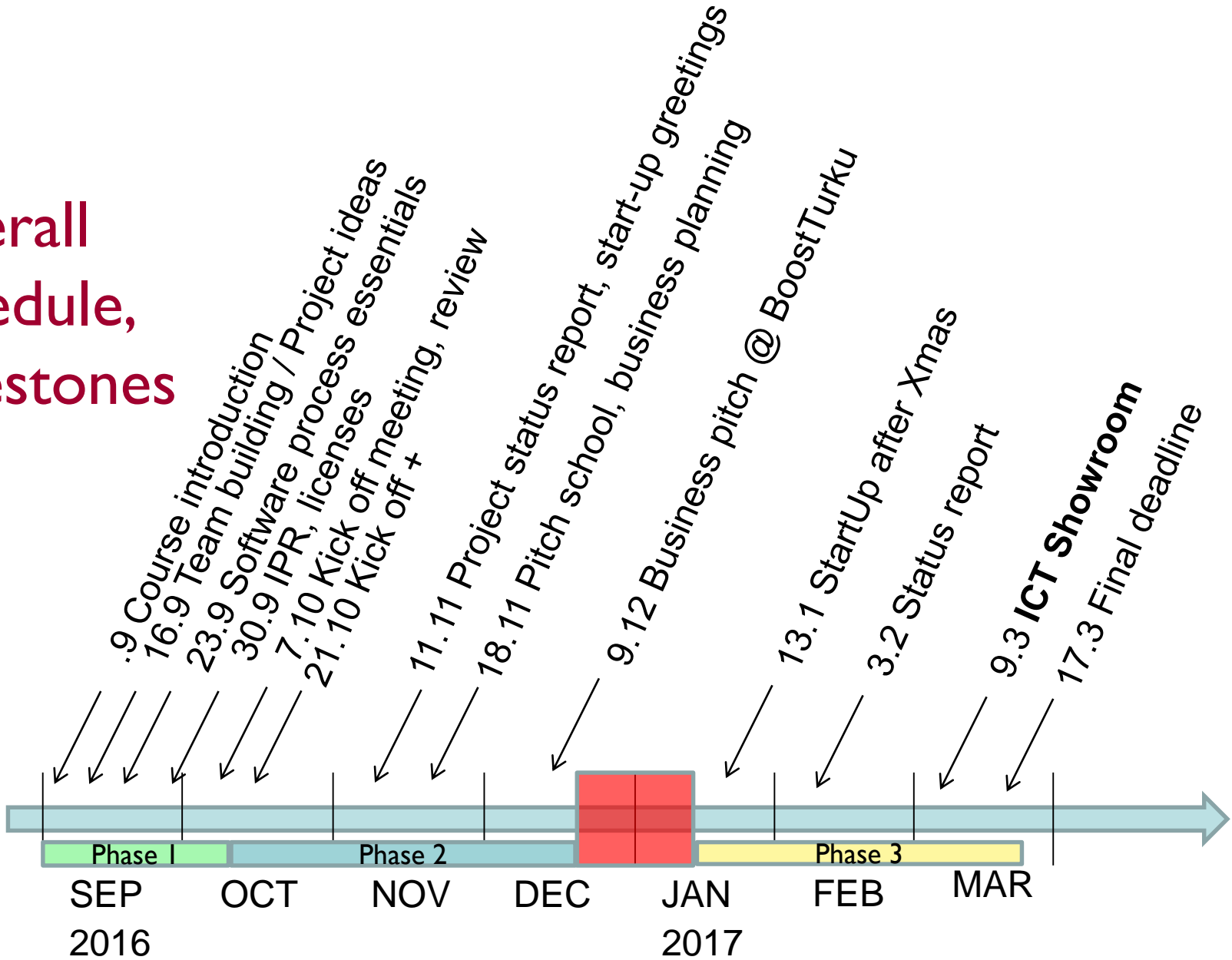
- Each Team will be assigned a Mentor
 - One of the lecturers
 - 2-4 meetings with the Mentor
 - The Mentor deals with management, team issues and motivation – not with technical issues (even if this of course also can be discussed)

Evaluation

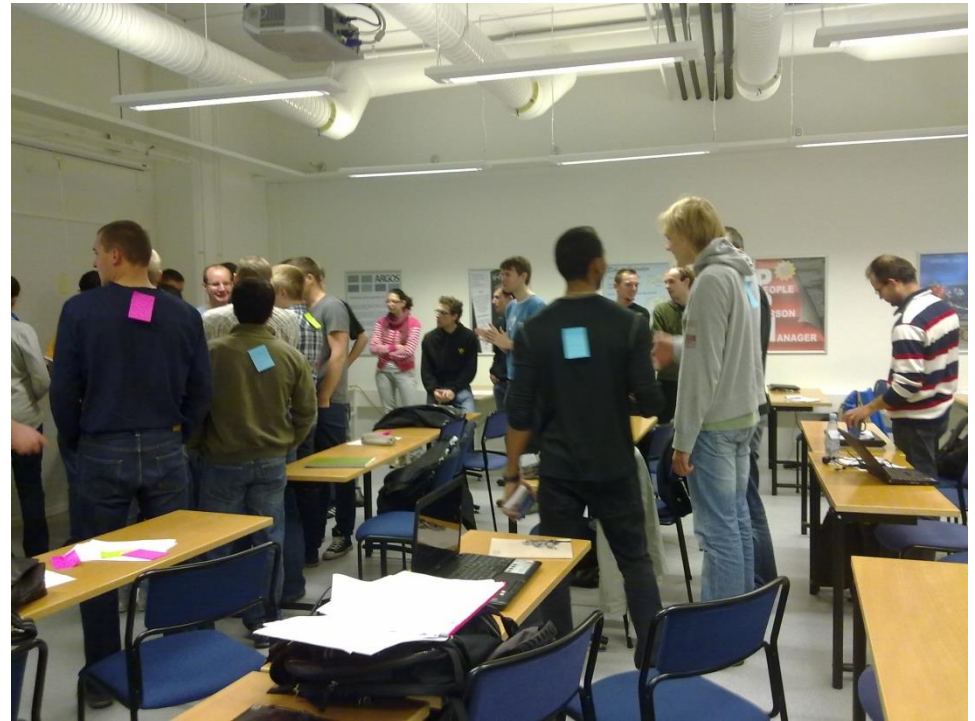
- Personal grading from 1-5
- The evaluation is subjective – but based on the opinions from the (4) lecturers and external experts
- The course include 3 evaluations
 - 1st evaluation – Phase 1 - 10%
 - 2nd evaluation – Phase 2 - 30%
 - 3rd evaluation at the end of the course 60%
- In the evaluations, the following will be regarded:
 - Project idea, team setup, actual system, project plan (project description, schedule, risk analysis, quality), technical documentation (requirements, design structure, clarity), user guide (clarity, usefulness), business/exploitation plan, and presentations made.
- Note: Common meeting attendance



Overall schedule, milestones



First meeting 2011



Pitch @ BoostTurku 2013



Deliverables / schedule fall 2016

ent, students need to prepare beforehand; blue = ICT Showroom deadline; yellow = holiday

Phase	Week	Date		Agenda	Who talks	Presentation	Deliverables
Phase 1	36	9.9.2016	L1	Introduction	Lecturers		
	37	16.9.2016	L2	Team building and project ideas	Lecturers Students		
	38	23.9.2016	L3	Software Process essentials Team building and project ideas	Lecturers Students		
	39	30.9.2016	L4	Lessons Learned Team building and project ideas	Previous Teams Lecturers Students		List of Teams
	40	7.10.2016	L5	Kick-Off Mentor/feedback-meetings	Teams	<ul style="list-style-type: none"> Project vision Product requirements Project plan (including resources, general schedule) → 10 min/team	<ul style="list-style-type: none"> Initial project plan Tech Doc v. 1 - Product requirements
	41	7.10.2016		<i>1st Evaluation Round</i>	<i>lecturers only</i>		
	42	21.10.2016	L6	Technical Kick-Off (First evaluation)	Teams		<ul style="list-style-type: none"> Detailed proj. plan
Phase 2	43						
	44						
	45	11.11.2016	L7	Project Status Report	Teams	<ul style="list-style-type: none"> Project Status report Design, Requirements → 10 min/team	<ul style="list-style-type: none"> Tech Doc v. 2 - Product requirements - Design
	46						
	47	18.11.2016	L8	Pitching School and Business Aspects	External speakers Lecturers		
	48						
	49						
	50	9.12.2016	L9	Business Pitch and Demo @ Boost Turku	Teams	<ul style="list-style-type: none"> Exploitation/ Business idea Demo → 4 slides, 4 minutes	<ul style="list-style-type: none"> Pitch Prototype
	51	16.12.2016		<i>2nd Evaluation Round</i>	<i>lecturers only</i>		
	52			Merry Xmas!			
	1			Happy New Year!			

Deliverables / schedule spring 2017

Phase 3	2	13.1.2017	L10	After Christmas Wake Up	External speakers		
	3						
	4	31.1.2017		ICT Showroom registration deadline			
	5	3.2.2017	L11	Project Status report	Teams	<ul style="list-style-type: none"> • Project Status report • Product release plan → 10 min/team	<ul style="list-style-type: none"> • Tech Doc v. 3 - Product requirements - Design - Implementation
	6						
	7						
	8						
	9						
	10	9.3.2017		ICT Showroom	Teams		Poster Product Demonstration
	11	17.3.2017	L12	Retro meeting	Teams	<ul style="list-style-type: none"> • Final presentation → 10 min/team	<ul style="list-style-type: none"> • Final product • Final Tech Doc • Business Plan • User guide
	12	24.3.2016		Final Evaluation Round	lecturers only		

Resources

- Working facilities: AGORA
 - Room 110A&B reserved EVERY Friday; you can use that for working
 - Rooms for meetings at 3rd floor by request
- IT resources
 - We can provide some, but best to use
 - Free online tools (google / MS etc.)
 - Cloud resources from vendors
- Special equipment
 - By request from via the team's Mentor



ICT Showroom



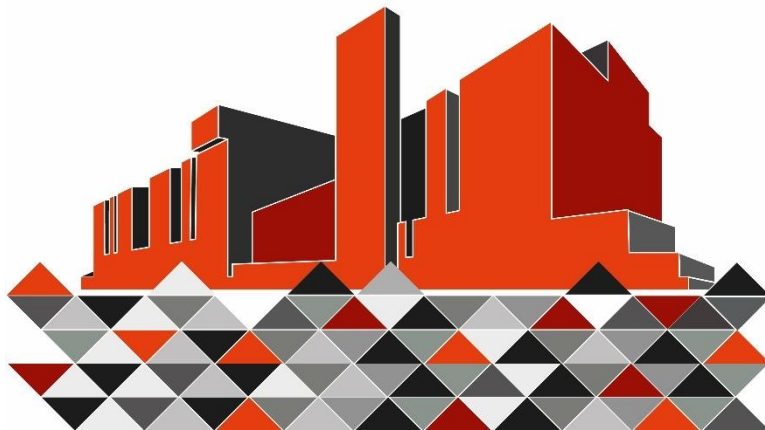
student project exhibition and competition

ICT SHOWROOM
2015

March 5th
 10:00 - 14:00
 ICT City

registration
 deadline
Jan 31st

www.facebook.com/ictshowroom



TimeLapse



ICT SHOWROOM
2015

student project exhibition and competition

ICT ShowRoom is an exhibition and a competition where students of the ICT City present their project work done during the past year.

Schedule

- DEC / 15 / 2014 Registration opens
www.facebook.com/ictshowroom
- JAN / 31 / 2015 Registration deadline
- **MAR / 5 / 2015** ICT ShowRoom / ICT City / 10:00 - 14:00

Exhibition

Each project gets a stand:

- Space for poster
- Table for project demo

Competition

The projects are evaluated by a jury of industrial experts for:

- Commercial potential
- Technical feasibility
- Poster and demo

The jury will announce the winner the same day. The winning team will receive a prize. In addition, special awards will be given to teams with unique ideas or presentations (for example artistic experience, adventurous technical solutions, eye-catching look and feel).

Projects can either take part only in the exhibition, or the exhibition and the competition. Only projects made as part of course work can take part in the competition.


Contact

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Evaluation

29.8.2014



Project Course Evaluation Form

Team: _____

Overall checks

Attendance	Attendance required, checked person by person**	P1	P2	P3
Presentations and deliverables uploaded on time to course web site		□	□	□
Mentorship meetings held, team members present		□	□	□

Grading (scale 1-5)

Phase 1 (10%)

Kick-off presentation	□
Project plan (inc. project vision)	□
Technical document v1 (requirements)	□
Team setup	□
First evaluation grade	□

Phase 2 (30%)

Prototype	□
Technical document v2 (refined requirements and design)	□
Project plan (reflecting any changes needed in project work)	□
Pitch	□
Team coherence (roles, communication, distribution of work)	□
Status report presentations	□
Second evaluation grade	□

Phase 3 (60%)

Final product	□
Technical document and source code (reflecting final product)	□
Business plan	□
User documentation	□
Overall team work	□
Third evaluation grade	□

Team's final grade * □

* Individual grades depend on contribution to team work, evaluation done in lecturers common evaluation meeting at end of course
 ** 2 times absence (for good reason) accepted, further absence will lower grade by 1 for each 2 NoShow



Projects last year

FÖLIPASS

The one and only Android routing app for the Turku transit system



- Lightweight app for checking timetables on the go
- Possibility to plan complete routes even without knowing the destination address (pick location from map)
- Modern and user friendly UI
- Automatic determination of current location through GPS
- Shows route including walks on the map
- Plan route in accordance with departure or arrival time
- Works on all Android phones version 3 and up



Available on Google Play

Want to count fish in the SEA*?

*Smart Events & Analytics!

An Event Management System consisting of a Web App & People Counter that allows you to:

- Book & Schedule events
- Send out invitations to participants
- Get analytics based on movement of participants
- Data available both in real time and as compiled statistics after the event
- Send out feedback forms
- Automatically compile the analytics and feedback into a report!



Nasreen Azad, Ilyyasu Dramani, Hussain Parsaiyan, Johan Grönroos, Sina Doznabi, Markus Mannila



TARINA

AN ONLINE EXPERIENCE

An Online Experience Tarina II

Project from last year

HowAbout App
brings people together!



Lunch, Coffee or Beer together?
Create opportunities!
Random user matching

Take no commitment
Suggest places
Make new friends
easily

Available on the
Google play

Available on the
App Store

www.facebook.com/HowAboutApp
Contact us: project@howabout@gmail.com

Developed and powered by Django

Beach Volley Game Planner

"Simple planning, focused on the fun!"



Simple scheduling
Essential ranking system
Mobile friendly

www.beachvolleygameplanner.com



A TOOL ANYONE CAN USE

 <p>CUSTOMIZABLE PLATFORM</p> <ul style="list-style-type: none"> * tailored for student associations * plug and play module system 	 <p>USER-FRIENDLY</p> <ul style="list-style-type: none"> * fast setup * no technical skills required * ready to use 	 <p>ON DEMAND MAINTENANCE</p> <ul style="list-style-type: none"> * quick fixing of bugs * well documented * additional features by request
--	--	---

CREATE A WEBSITE IN MINUTES

with customizable looks and functionality

Alabi Olujuwon Aduyeji / Abdiasis Abdullahi Diirye / Magnus Guln
Oscar Hellsten / Mattias Lundell / Johnny Menonen



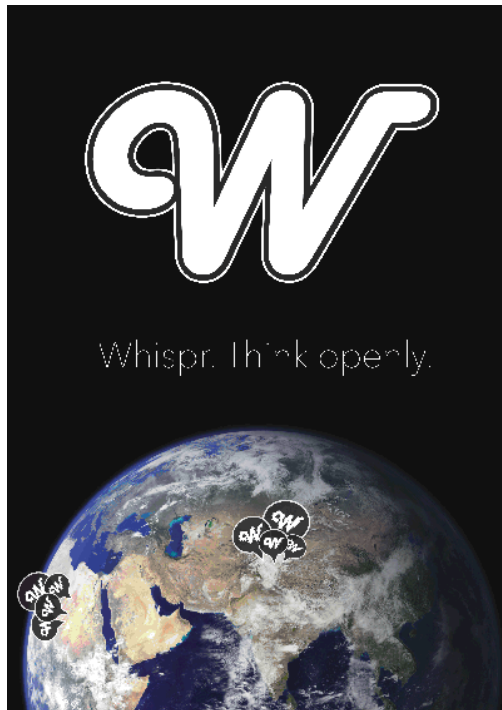
django

B



Projects from earlier years

Winners 2014



Winners 2015



Winners 2016



Projects from earlier years

Winners 2013

(((RAS Remote Alert System

A simple plug & play sensor system to monitor and alert you.

Three easy steps:

1. Get the device
2. Place it anywhere
3. Get an alert on your mobile whenever the device is moved





Technologies:

- WaspMote
- GSM/GPRS
- iOS
- HTML5
- Django + Apache

Future additions:

- Webcam integration
- More intelligent alerts
- More sensors to come

Ekaterina Kondareva Ileana Montoya Minna Simola
Sudeep K Chandrashekar Tanwir Ahmad

Powered by: **ERICSSON**  



Projects from earlier years

Winners 2012



CHILLY
Rapid game development

Real-time Multiplayer Engine

Dynamic Content Streaming

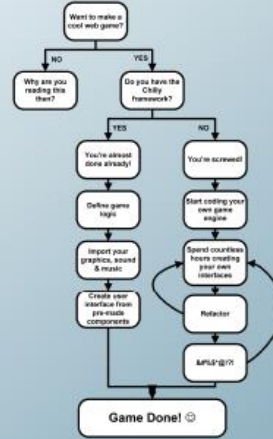
Map editor and generator

Intelligent Pathfinding

Completely Customizable

Advanced HTML5 Components

Open Source




```


graph TD
    Q1{Want to make a cool web game?} -- NO --> Q2{Why are you reading this then?}
    Q1 -- YES --> Q3{Do you have the Chilly framework?}
    Q3 -- YES --> B1[You're almost done already!]
    Q3 -- NO --> B2[You're screwed!]
    B1 --> S1[Define game logic]
    S1 --> S2[Import your graphics, sound & music]
    S2 --> S3[Create your interface from pre-made components]
    S3 --> S4[Refactor]
    S4 --> S5[AMP/JS]
    B2 --> S6[Start coding your own game engine]
    S6 --> S7[Spend countless hours creating your own interface]
    S7 --> S4
    S4 --> E1[Game Done! 🎮]
    S5 --> E1
    
```

Chilly Framework is a platform for HTML5 game development. We provide the developers with a ready-made multiplayer server and game engine written in Python and a set of components built on top of CraftyJS framework that make game development easier and faster. Seamlessly integrated to provide all the features one needs for developing a browser game.

Check our demo tank game to see the awesome stuff!



Taj Pelc
Jari Pirinen
Andres Ledesma
Bidhya Sagar Ghimire
Frenk Ten Sedmak Nahtigal



Winners 2011

GREEN FUS

GET STARTED WITH SAVING THE WORLD!



•Sören Andersson•Kenneth Eklund•Jessica Laukkanen•Hans Lindén•Anne Valo

Combine your alternative energy power station with a **follow-up system** and learn how much energy you have produced, consumed and stored.

SEE THE DIFFERENCE YOU ARE MAKING!

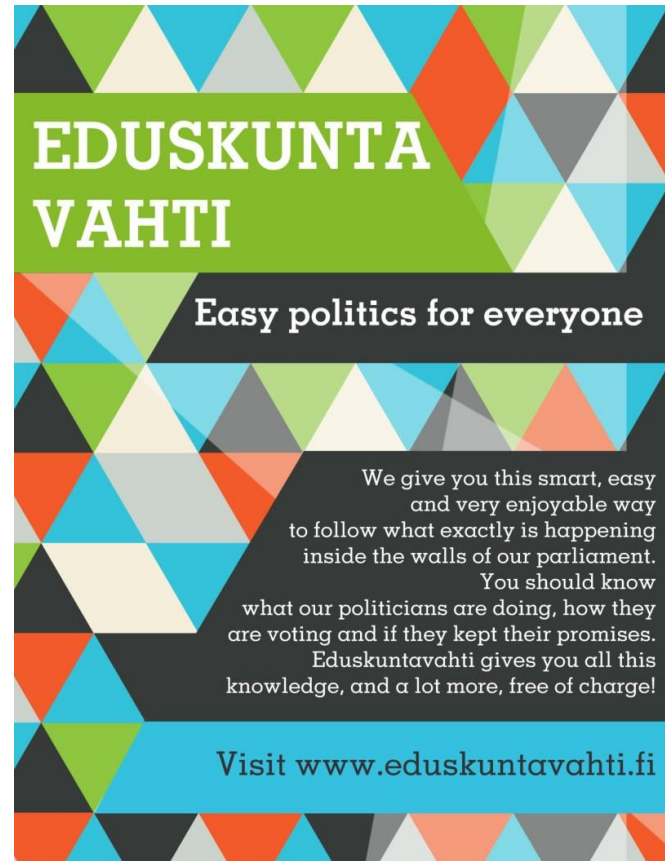


Projects that went a little bit further



The screenshot shows a Mozilla Firefox browser window displaying the Pidro Online website. The address bar shows the URL <http://albin.abo.fi/~mhastbac/pidro/>. The website has a dark header with the 'Pidro Online' logo and title. A left sidebar contains navigation links under categories like 'Start sida', 'Spela', and 'Community'. The main content area features several sections: 'Sommartider' with a paragraph about the tradition, 'Vad är Pidro Online?' with a description and an 'installationsguide' link, and 'Senaste Nyheterna' with a list of recent news items. A 'Jubileums Pidroträff' banner for Saturday 3.7.2010 is also present. A small image of a Pidro game board is shown in the bottom right. The browser's status bar at the bottom indicates 'Done'.

Mannerheim – aka eduskuntavahti



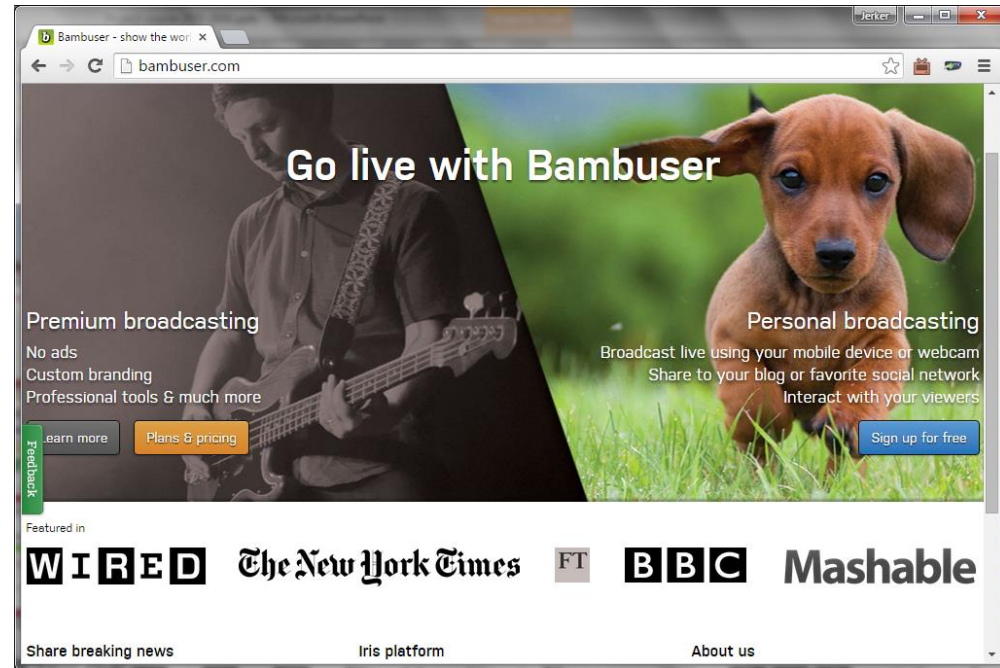
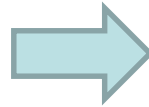
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Visit www.eduskuntavahti.fi

Movino → Bambuser



<http://www.youtube.com/watch?v=1K4lpBu0Yig>

September 2013:
Bambuser partners with Sony to bring live
video broadcasting to Xperia™ Z1



-  **ONE LIVE FEED**
-  **80+ NETWORKS**
-  **600+ TIMES AIRED**
-  **100,000,000+ VIEWERS**



JUNE 11TH 2012
BAMBUSER USER HOMSLIVE ON
CNN, BBC, SKY, ALJAZEERA & MORE



Wip → Mobio → Walkbase

Wireless Information Point

Revolutionizing the way we look for information inside buildings.



Wireless Information Point

Floor plan navigation Customizable content User specific information Custom features Real-time information

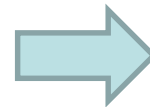
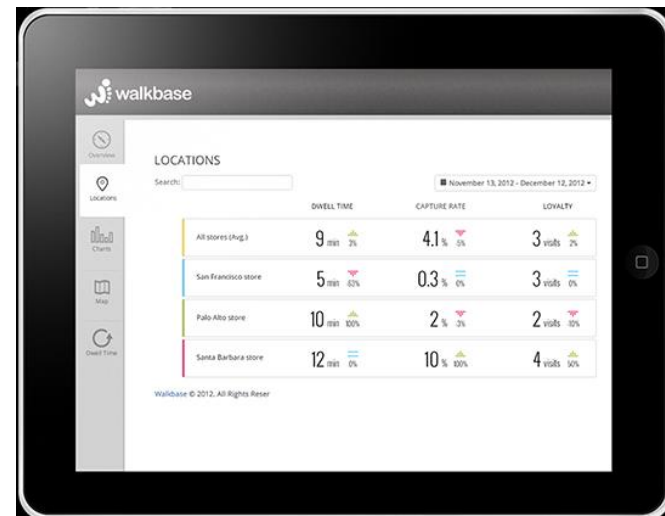


Android iPhone Maemo™

PHP JAVA Objective-C SQL QT AJAX

www.wirelessinformationpoint.com

Petra Hjortman Björn Sjölund Niclas Jern Gabriel Nyman Andreas Johansson

walkbase

LOCATIONS

Search:

November 13, 2012 - December 12, 2012

	DWELL TIME	CAPTURE RATE	LOYALTY
All stores (avg)	9 min 2%	4.1% 5%	3 visits 2%
San Francisco store	5 min 52%	0.3% 6%	3 visits 0%
Palo Alto store	10 min 100%	2% 3%	2 visits 10%
Santa Barbara store	12 min 0%	10% 100%	4 visits 50%

Walkbase © 2012. All Rights Reserved

Project proposals / platforms / ideas

- RoboDog / Quad helicopter
- Raspberry Pi
- IoT
 - Enviromental monitoring
 - Weather, traffic, noise, chemicals, etc.
- Project Marketplace

[Rolls Royce](#)

Next meeting → Friday 16.9.2016

- Starting forming of Teams
- Guest presentations
 - Stories
 - Ideas
- Homework: Preparations
 - Do I have an idea for a project/product?
 - Prepare to shortly present it (oral presentation, 3 min)
 - Do I have a customer ?
- Do your profile in the project course home page

