Software Engineering II
Introduction and Organization

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Software Engineering II
WS 2017/18

Prof. Plattner, Dr. Uflacker
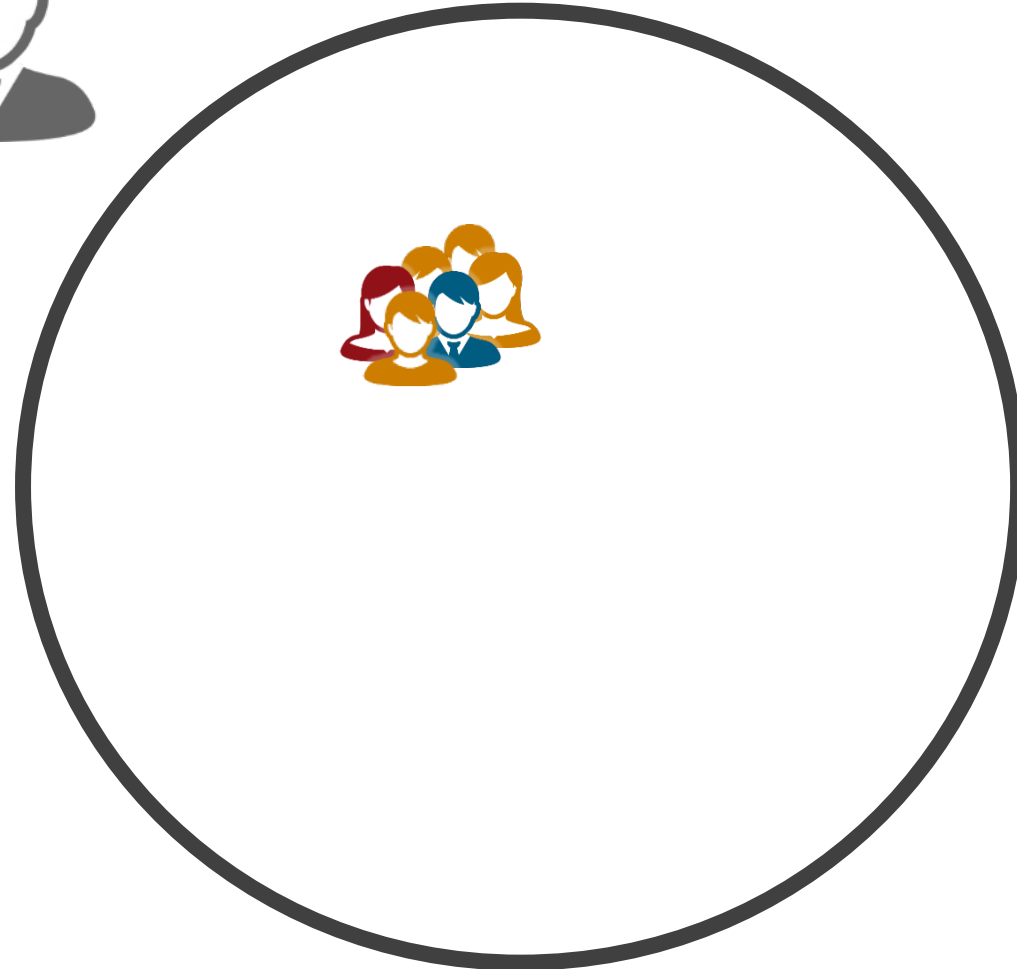Enterprise Platform and Integration Concepts Group

Agenda

1. High-level Overview of SWT2
2. Organization
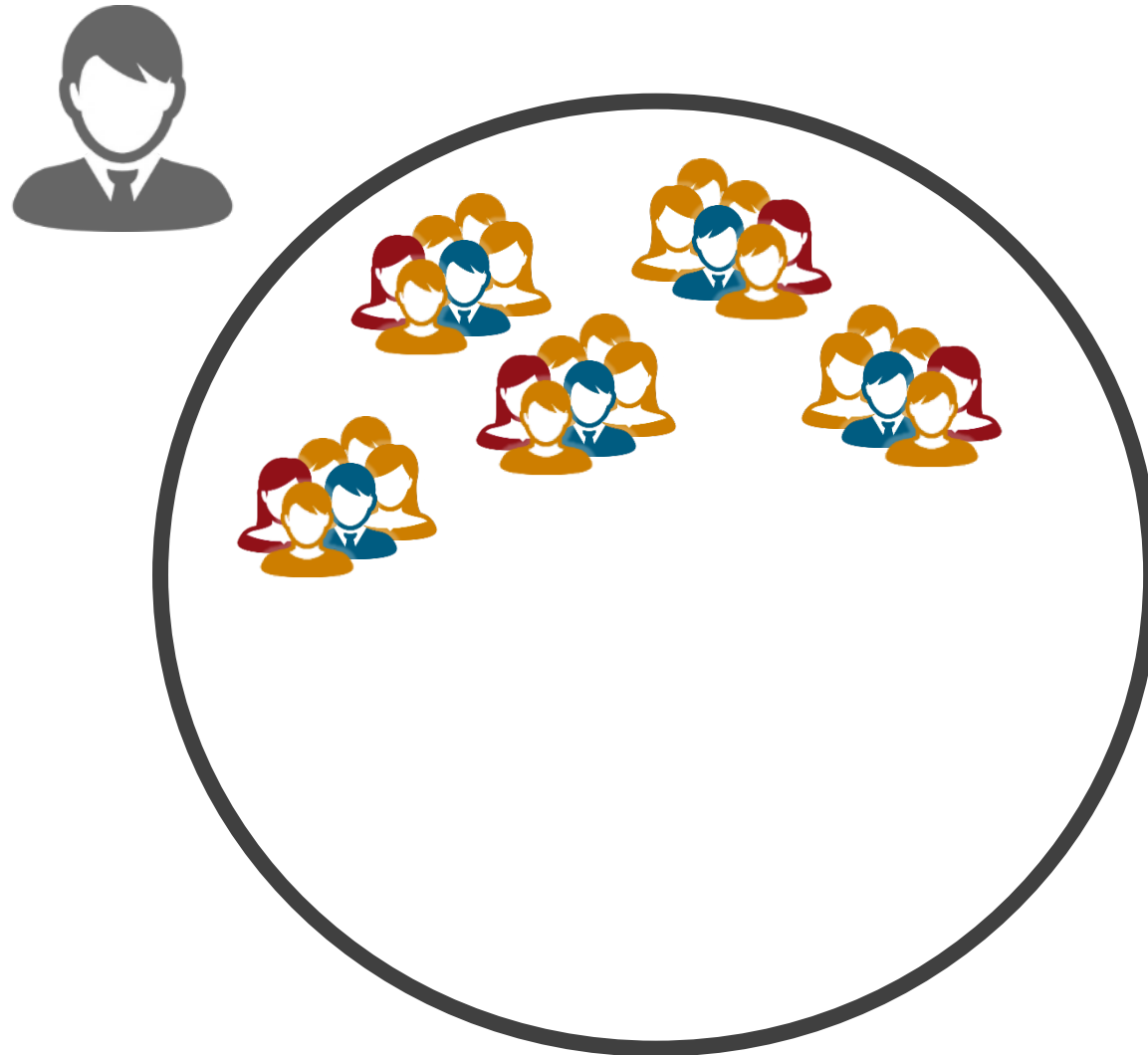3. Project
4. Basic IT Infrastructure
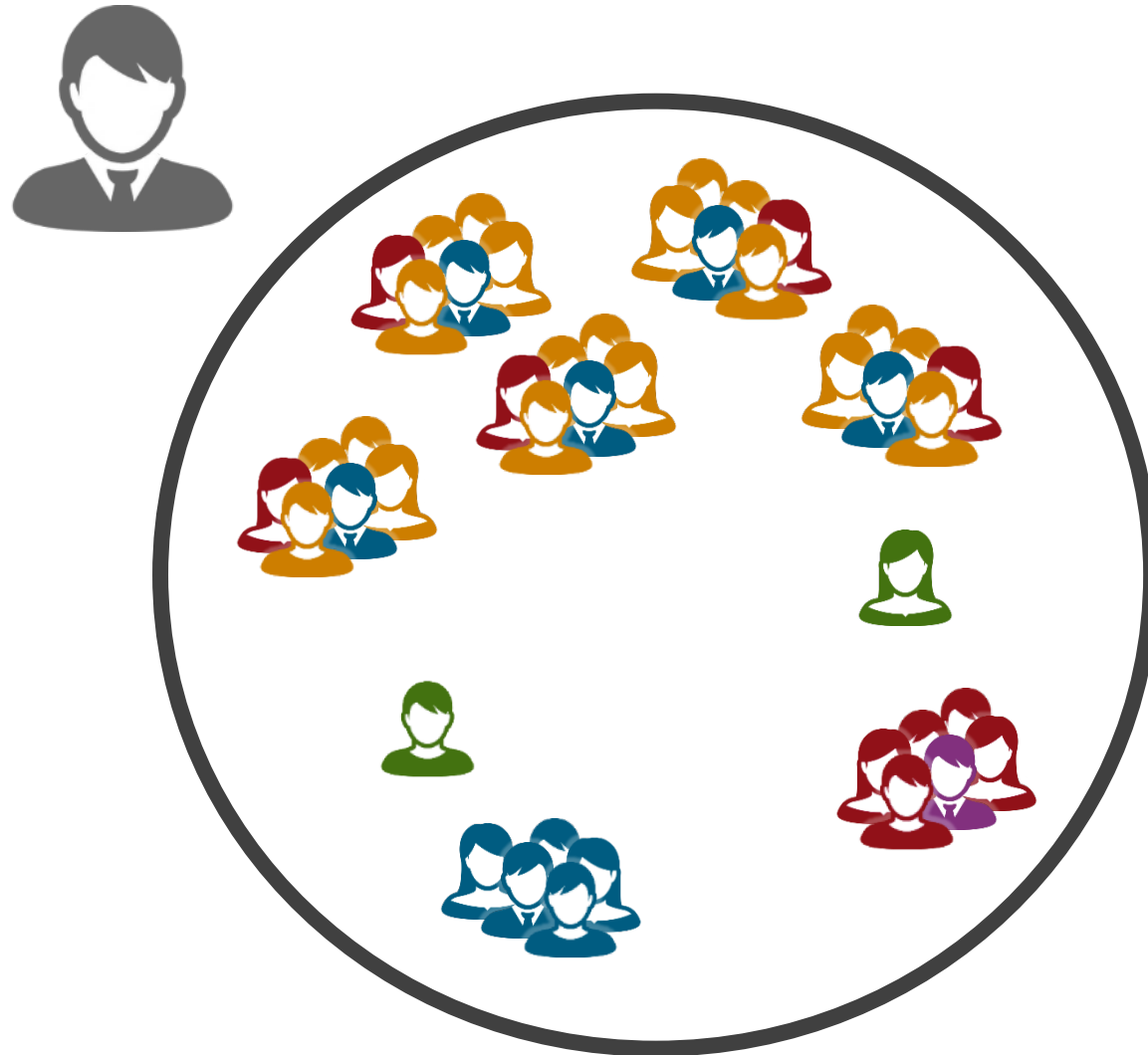5. Lectures
6. Literature

High-level Overview of SWT II

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Organization

Prerequisite
- Undergraduate program
- Softwaretechnik I

Class
- 4 SWS (~8h work per week including lectures)
- 6 ECTS credit points (graded)

Modules
- Business Process & Enterprise Technologies
- Operating Systems & Information Systems Technology
- Software Architecture & Modeling Technology

Organization

Important dates

- Enrollment until October 27, 2017
- Preparation exercise starts today
- Project starts November 10, 2017

Lectures

- Friday, 11:00 – 12:30, HS3
- Friday, 13:30 – 15:00, HS3

Web

- https://hpi.de/plattner/teaching/winter-term-201718/softwaretechnik-ii.html

Organization

Responsible

- Dr. Matthias Uflacker (matthias.uflacker@hpi.de)

Teaching Team

- Arian Treffer (arian.treffer@hpi.de)
- Christoph Matthies (cristoph.matthies@hpi.de)
- Keven Richly (keven.richly@hpi.de)
- Ralf Teusner (ralf.teusner@hpi.de)

Tutor

- Tobias Dürschmid (tobias.duerschmid@student.hpi.de)

Grading

- Completion of the **introductory exercise** is mandatory

- 30%: **Oral exam** (written exam if #students >> 40)
- 45%: **Usage of presented methods and concepts**
  - Scrum and team work
  - Behavior- and Test-driven development
  - Usage of Source Code Management tools
- 25%: **Software development results (team mark)**

- For grading, POs are considered one team
- To pass the course, you have to pass **each** category.

Learning Targets

multi-team-setups

Git

Scrum

Deployment

BDD

time-management

Rails

TDD

requirements-prioritization

Working in Teams

Break down of people into teams of 7

Each team
- 1 Product Owner (PO)
- ½ – 1 Scrum Master (SM)
- Several team members

Questions
- Who is not in the 5th semester?
- Who is not an HPI student?

Working in Teams

- Mail your team choice to swt_17_orga@lists.myhpi.de
  - Until Sunday, October 29
  - Who will be PO and SM?
  - Three suggestions for weekly meeting

- POs, mail us suggestions for first customer meeting
  - Between October 30 and November 3

Working in Teams

Soon: special teams for special meetings

- Scrum of Scrums (SoS)
- Planning of Planning (PoP)

Addition from the teaching team for each group

- Customer (Ralf, Keven)
- Chief product owner for tough decisions (Arian)
- Tutors as Scrum consultants

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Content of the Project

Software engineering assignment

- Programming framework: *Ruby on Rails 5* on *Ruby 2*
- Minimal core is provided
- Results will be open source

Focus

- Functionality
- Avoiding "patchwork" (UI, Workflows, Data)
- Maintainability of the Code Base (Tests, Quality, etc.)

So what's the topic?

Project: Sport Portal

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Build a portal that allows users to manage tournaments and leagues.

IT Infrastructure – Open Source!

Infrastructure

HuBoard

GoogleCalendar

Github

Mailing-Lists

Gemnasium

CodeSchool

Travis-CI

Heroku

CodeClimate

Communication Channels

Mailing List

- swt2_17@lists.myhpi.de
- Important announcements

Calendar

- https://www.google.com/calendar/embed?src=hpi.swt2%40gmail.com&ctz=Europe/Berlin&mode=AGENDA
- For all formal meetings

Slack

- https://swt2-2017.slack.com
- Team discussions
- Strongly recommended over Facebook, Skype, …

All links can be found on the web site. Please sign up until Oct 27!

SWT2 Lecture

Lecture supports project

- Rails Intro

- Project Intro

- Scrum and multi-team settings

- Project infrastructure in detail

- BDD & TDD (in Rails)

- Code Review, Tool presentations, Process Improvements

- Deployment

- Guest Lectures (Industry)

Rails Exercise

To get started in Rails...

- 3 weeks for a tutorial exercise

SWT2 Schedule

LECTURES

- October 20
- October 27
- November 10
- December 1
- December 15
- January 19
- February 9

PROJECT

- November 10: Kick-Off
- Nov 13 – Nov 17: Begin of Sprint 1
- Nov 27 – Dec 1: Begin of Sprint 2
- Dec 11 – Dec 15: Begin of Sprint 3
- December 15: Intermediate Presentation
- Jan 15 – Jan 19: Begin of Sprint 4
- Jan 29 – Feb 2: Begin of Kanban Week
- February 9: Final Presentation

SWT2 Schedule

Exercise

Kick-Off

Sprint 1 (2 weeks)

Sprint 2 (2 weeks)

Intermediate Presentation

Sprint 3 (3 weeks)

Sprint 4 (2 weeks)

Kanban Week

Final Presentation

Oct	42	16	17	18	19	20	Intro / RoR
	43	23	24	25	26	27	Scrum / Testing / Lego
	44	30	31	1	2	3	
Nov	45	6	7	8	9	10	Kick-Off / Git
	46	13	14	15	16	17	
	47	20	21	22	23	24	
Dec	48	27	28	29	30	1	Reviews / Deployment
	49	4	5	6	7	8	
	50	11	12	13	14	15	Interm. Presentation / Scrum Tips / Guest Lecture

Christmas Break

Jan	1		2	3	4	5	
	2	8	9	10	11	12	
	3	15	16	17	18	19	Guest Lecture
	4	22	23	24	25	26	
Feb	5	29	30	31	1	2	
	6	5	6	7	8	9	

Literature

General literature

- Ruby, S.; Thomas, D.; Hansson D. H.: Agile Web Development with Rails 4, 2013 (ebook)
- Swicegood, T.: Pragmatic Guide to Git (P3.0), 2012 (ebook)
- Rappin, N.: Rails Test Prescriptions, 2012
- Rasmusson, J.: The Agile Samurai (P4.0), 2012 (ebook)
- Pichler, R.: Agile Product Management with Scrum, 2010
- Cohn, M.: Succeeding with Agile, 2012
- Larman, C.; Vodde, B.: Scaling Lean & Agile Development, 2009
- Ludewig, J.; Lichter, H.: Software Engineering, 2006
- Sommerville, I.: Software Engineering, 2004

Ebooks will be made available for chosen books

Introduction and Organization

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Questions?

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