Introduction and Organization

Arian Treffer
arian.treffer@hpi.de
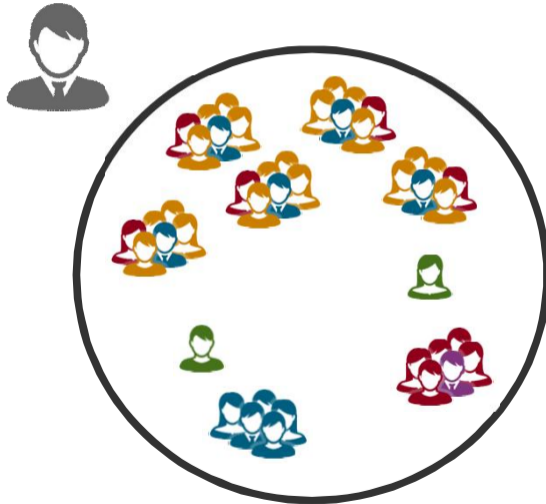
Software Engineering II
WS 2016/17

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

Introduction and Organization

HPI

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

High-level Overview of SWT II

Organization

HPI

Prerequisite to SWT2
- Undergraduate program
- Softwaretechnik 1

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

Organization

Important dates
- Enrollment until October 29, 2016
- Preparation exercise starts today
- Project starts November 14, 2016

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

Web
- https://hpi.de/plattner/teaching/winter-term-201617/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)

Tutors
- Alexander Ernst (alexander.ernst@student.hpi.de)
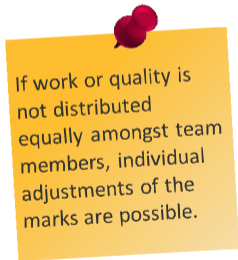
Grading

"Prüfungsnebenleistung"
- Introductory excercises (mandatory)

Grading
- 30%: Oral exam (written exam if #students >> 40)
- 45%: Usage of presented methods and concepts (team mark)
  - 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.

If work or quality is not distributed equally amongst team members, individual adjustments of the marks are possible.

Questions?

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Learning Targets

multi-team-setups

Git

Scrum

BDD

Deployment

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

Break down of people into teams of 7

Each team

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

è Mail your team choice to swt2016_orga@lists.myhpi.de
  - □ Until So, October 30
  - □ Who will be PO and SM?
  - □ Three suggestions for weekly meeting

è POs, mail us suggestions for first customer meeting
  - □ Between October 31 and November 4

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

Content of the Project

Software engineering assignment
- Programming framework: *Ruby on Rails 4* on *Ruby 2*
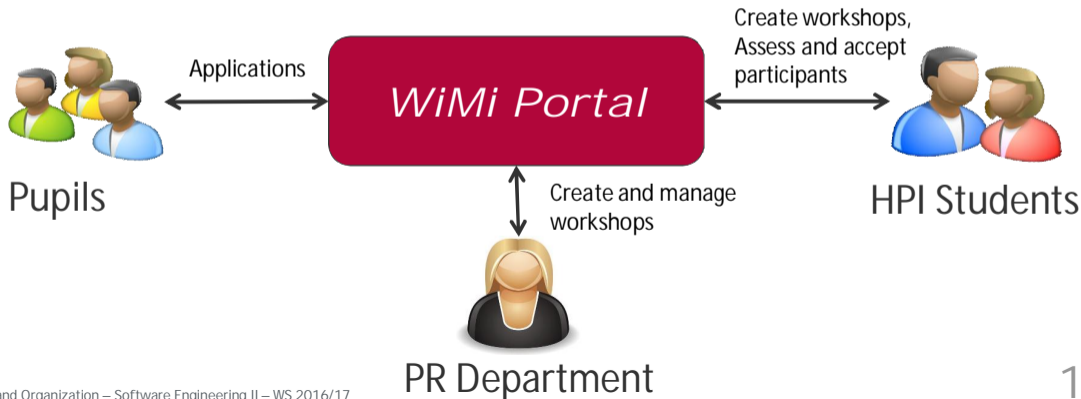- Minimal core is provided
- Results will be open source

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

So what's the topic?

HPI Workshop Management

Build a portal that allows HPI students and employees to manage participants for workshops at HPI.

Pupils ←— Applications —→ *WiMi Portal* ←— Create workshops, Assess and accept participants —→ HPI Students

WiMi Portal ↕ Create and manage workshops → PR Department

IT Infrastructure - Open Source!

Infrastructure

HuBoard

GoogleCalendar

CodeSchool
Travis-CI
Heroku
CodeClimate
Github
Mailing-Lists
Gemnasium

Communication Channels

Mailing List
- swt2-2016@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://swt2-2016.slack.com
- Team discussions
- Strongly recommended over Facebook, Skype, ...

All links can be found on the web site.
Please sign up until Oct 30!

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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 21
- October 28
- November 11
- December 2
- December 16
- February 10

- Guest lectures tba

PROJECT
- November 11: Kick-Off
- Nov 14 – Nov 18: Begin of Sprint 1
- Nov 28 – Dec 2: Begin of Sprint 2
- Dec 12 – Dec 16: Begin of Sprint 3
- December 16: Intermediate Presentation
- Dec 19 – Jan 1: Christmas Break
- Jan 16 – Jan 29: Begin of Sprint 4
- Jan 30 – Feb 3: Begin of Kanban Week
- February 10: Final Presentation

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

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