Software Engineering II
Introduction and Organization

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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
High-level Overview of SWT II
High-level Overview of SWT II
High-level Overview of SWT II
Prerequisite
- Undergraduate program
- Softwaretechnik I

Class
- 4 SWS (≈8h work per week including lectures
  □ “canceled” lectures allow for more group work time – you will need it ;-) 
- 6 ECTS credit points (graded)

Modules
- Business Process & Enterprise Technologies
- Operating Systems & Information Systems Technology
- Software Architecture & Modeling Technology
Important dates
- Enrollment until October 26, 2018
- Preparation exercise (link see website)
  - Deadline Nov 9, 15:00 pm CET
- Project starts November 09, 2018

Lectures
- Friday, 09:15 – 10:45, HS3
- Friday, 11:00 – 12:30, HS3

Web
- [https://hpi.de/plattner/teaching/winter-term-201819/softwaretechnik-ii.html](https://hpi.de/plattner/teaching/winter-term-201819/softwaretechnik-ii.html)
Organization

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

Teaching Team
- Christoph Matthies (cristoph.matthies@hpi.de)
- Keven Richly (keven.richly@hpi.de)
- Ralf Teusner (ralf.teusner@hpi.de)

Tutors
- Arne Boockmeyer (arne.boockmeyer@student.hpi.de)
- Jascha Beste (jascha.beste@student.hpi.de)
Completion of the introductory Ruby on Rails exercise is mandatory
□ Product Owners are exempt

30%: Oral exam (written exam if #students >> 40)

45%: Usage of presented methods and concepts
□ Main focus of the course
□ Usage and application of Scrum and agile practices & tools
□ Effective team work and collaboration

25%: Software development results (team mark)

For grading, POs are considered one team
Learning Targets

- Git
- Scrum
- BDD
- Deployment
- time-management
- Rails
- TDD
- requirements-prioritization
- multi-team-setups
Participants form teams of 5-7 participants

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

Questions
- Who is not in the 5th semester?
- Who is not an HPI student?
■ Mail your team choice to swt2_18_orga@lists.myhpi.de
  □ Until **Sunday, October 28**
  □ Who will be PO and SM?
  □ Three suggestions for weekly meeting

■ POs: mail us suggestions for **first customer meeting**
  □ Between October 29 and November 2
Teaching Team Roles

The teaching team provides

- **Customer** (Keven Richly)
  - Represents the clients of the developed software
  - Has ideas and requirements that need to be fulfilled

- **Chief Product Owner** (Ralf Teusner)
  - Main contact point for team POs
  - Helps in dealing with customer requirements & process

- **Tutors** (Arne, Jascha) as Scrum consultants
  - Present during meetings
  - Open for questions, advice & ideas
  - Coordinate with them!
Content of the Project

Software engineering assignment

- Programming framework: *Ruby on Rails 5 (who has used that?)*
- Minimal core is provided (see the website)
- Results will be open source on GitHub (*who has used that?*)

Focus

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

So what’s the topic?
Project: VM Administration
IT Infrastructure – Open Source!

Infrastructure

HuBoard
GoogleCalendar

Github
Mailing-Lists

CodeClimate
CodeSchool
Travis-CI

Heroku
Gymnasium
Communication Channels

Mailing List
- swt2_18@lists.myhpi.de
- Sign-up!
- Important announcements

Calendar
- https://www.google.com/calendar/embed?src=hpiswt2%40gmail.com&ctz=Europe/Berlin&mode=AGENDA
- For all formal meetings

Slack
- https://swt2-2018.slack.com
- Sign-up!
- Team discussions
- Strongly recommended as a single point of communication

All links can be found on the web site.
Lecture supports project

- Rails Intro
- Project Intro
- Scrum and multi-team settings
- Project infrastructure in detail
- BDD & TDD (in Rails)
- Code Review, Process Improvement
- Deployment
- Guest Lectures (Industry)
To get started in Rails...

- 3 weeks for a tutorial exercise

Rails Exercise

rails-exercise-18-rteusner created by GitHub Classroom

- 18 commits
- 1 branch
- 0 releases
- 3 contributors
- MIT

Branch: master

Update README

Latest commit 83cc54e 3 hours ago
Preliminary Schedule

- **November 9: Project Kick-Off**
- Nov 12 – Nov 16: Begin of Sprint 1
- Nov 26 – Nov 30: Begin of Sprint 2
- Dec 10 – Dec 14: Begin of Sprint 3

No schedule survives contact with reality

- **This is a project course**
  - Actually writing a software is vital
  - Real-world scenario will bring real-world issues
- Schedule can adapt
  - Also according to your suggestions

- **December 14: Intermediate Presentation**
- Jan 14 – Jan 18: Begin of Sprint 4
- Jan 28 – Feb 1: Begin of Kanban Iteration
- **February 8: Final Presentation**
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

Schedule

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Christmas Break

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Intro / RoR
Scrum / Testing / Lego
Kick-Off / Git
Reviews / Deployment
Intermediate Presentation / Scrum Tips / Guest Lecture
Guest Lecture
Final Presentation
Literature

General literature

- 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
- Sommerville, I.: Software Engineering, 2004

Ebooks will be made available for selected books
Introduction and Organization

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Questions?

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