



## Introduction to SWT 2



Arian Treffer

Enterprise Platform and Integration Concepts

# So, how was SWT 1?

- Overview of development processes
  - Agile
  - Waterfall
- Software projects
  - Experience with one process
  - <10 team members

# Software Engineering 2 – Agile Development in Large Teams

## Focus on one process: Scrum

- Scaling to large teams
  - Guest lectures
- Agile methodology
  - Requirements management
  - BDD/TDD
- Agile in enterprise settings
  - Version control
  - Continuous Integration
  - DevOps

## Software project

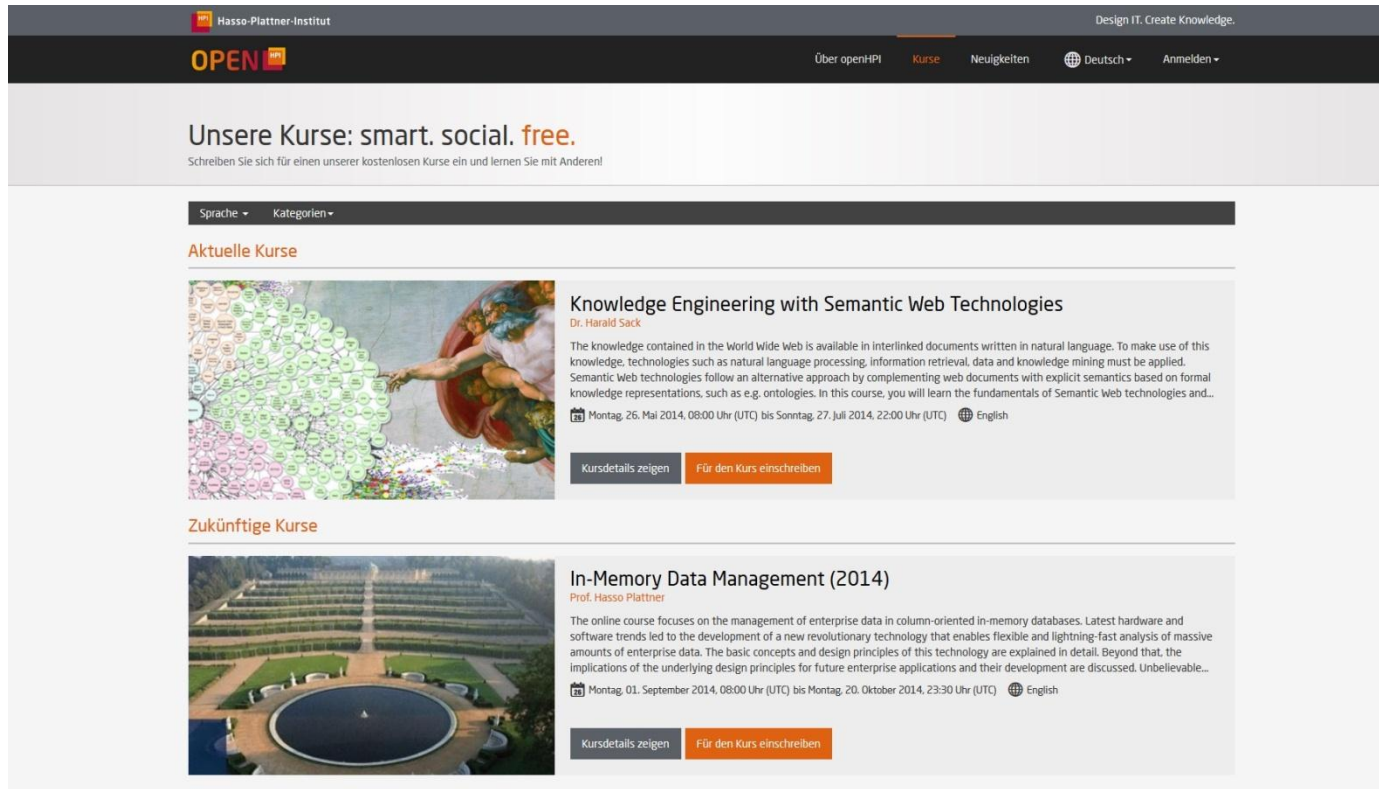
- One project for entire course
  - “Realistic” settings
- Tools
  - Issue tracking
  - Code Climate
- Open-source
  - Github
  - Heroku
  - ...

# Previous Projects

- 2008
  - EPC Information System
- 2009
  - "Autobahn ERP"
- 2010/2011
  - Customer Relationship Management

**BORING**

# 2012 – Massive Open Online Course System

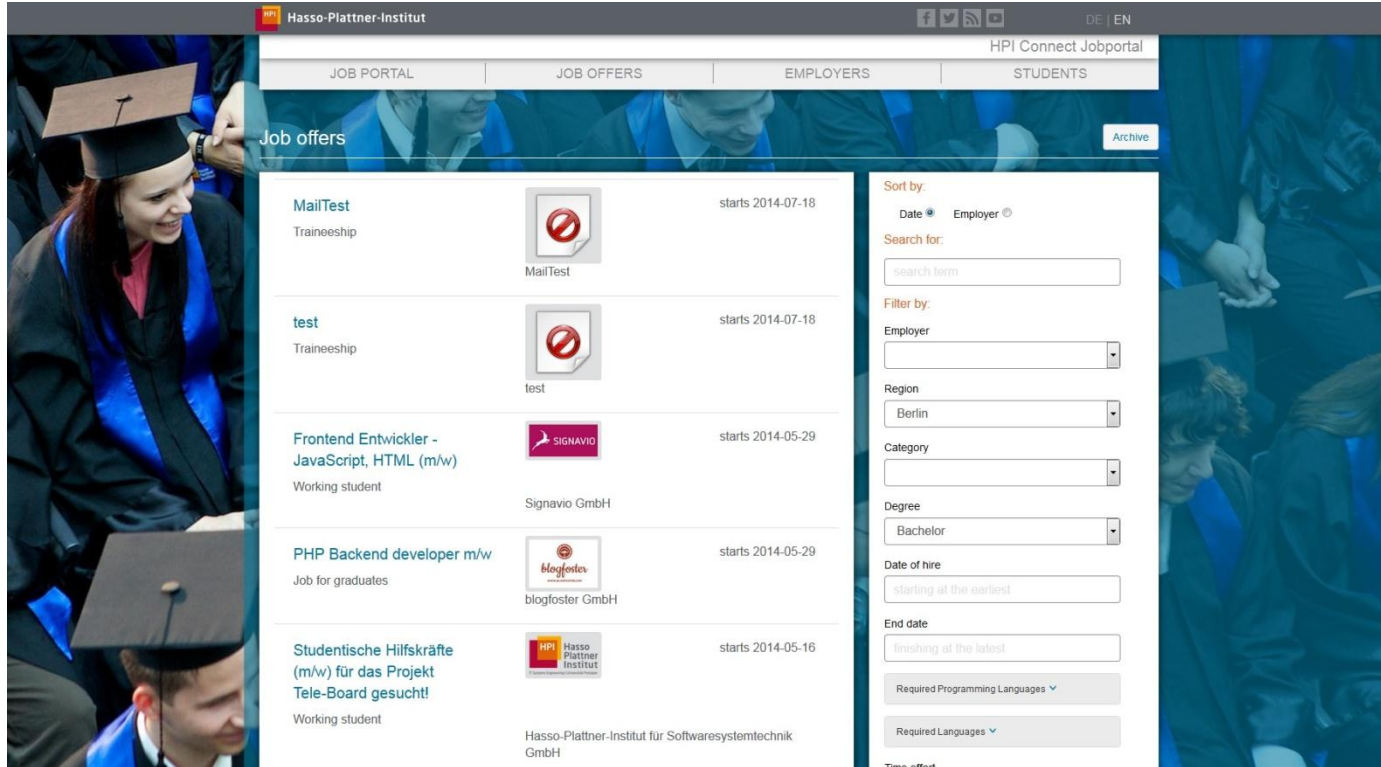


The screenshot shows the HPI Massive Open Online Course System website. At the top, there is a navigation bar with the HPI logo, the text "Hasso-Plattner-Institut", and the tagline "Design IT. Create Knowledge.". Below this is a dark navigation bar with the word "OPEN" in large letters, and links for "Über openHPI", "Kurse", "Neuigkeiten", "Deutsch", and "Anmelden". The main content area features the headline "Unsere Kurse: smart. social. free." and a sub-headline "Schreiben Sie sich für einen unserer kostenlosen Kurse ein und lernen Sie mit Anderen!". Below this is a section for "Aktuelle Kurse" with a dropdown menu for "Sprache" and "Kategorien". The first course listed is "Knowledge Engineering with Semantic Web Technologies" by Dr. Harald Sack. The course description states: "The knowledge contained in the World Wide Web is available in interlinked documents written in natural language. To make use of this knowledge, technologies such as natural language processing, information retrieval, data and knowledge mining must be applied. Semantic Web technologies follow an alternative approach by complementing web documents with explicit semantics based on formal knowledge representations, such as e.g. ontologies. In this course, you will learn the fundamentals of Semantic Web technologies and...". The course dates are "Montag, 26. Mai 2014, 08:00 Uhr (UTC) bis Sonntag, 27. Juli 2014, 22:00 Uhr (UTC)" and the language is "English". There are two buttons: "Kursdetails zeigen" and "Für den Kurs einschreiben". The second section is "Zukünftige Kurse" with a dropdown menu. The first course listed is "In-Memory Data Management (2014)" by Prof. Hasso Plattner. The course description states: "The online course focuses on the management of enterprise data in column-oriented in-memory databases. Latest hardware and software trends led to the development of a new revolutionary technology that enables flexible and lightning-fast analysis of massive amounts of enterprise data. The basic concepts and design principles of this technology are explained in detail. Beyond that, the implications of the underlying design principles for future enterprise applications and their development are discussed. Unbelievable...". The course dates are "Montag, 01. September 2014, 08:00 Uhr (UTC) bis Montag, 20. Oktober 2014, 23:30 Uhr (UTC)" and the language is "English". There are two buttons: "Kursdetails zeigen" and "Für den Kurs einschreiben".

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# 2013 – HPI Job Portal



The screenshot displays the HPI Job Portal interface. At the top, there is a navigation bar with the HPI logo and the text "Hasso-Plattner-Institut". To the right of the logo are social media icons for Facebook, Twitter, and LinkedIn, and a language selector "DE | EN". Below the navigation bar are tabs for "JOB PORTAL", "JOB OFFERS", "EMPLOYERS", and "STUDENTS". The main content area is titled "Job offers" and includes an "Archive" button. The job offers are listed in a table-like format:

Job Title	Employer	Start Date
MailTest Traineeship	MailTest	starts 2014-07-18
test Traineeship	test	starts 2014-07-18
Frontend Entwickler - JavaScript, HTML (m/w)	Signavio GmbH	starts 2014-05-29
PHP Backend developer m/w Job for graduates	blogfoster GmbH	starts 2014-05-29
Studentische Hilfskräfte (m/w) für das Projekt Tele-Board gesucht!	Hasso-Plattner-Institut für Software-Systemtechnik GmbH	starts 2014-05-16

On the right side of the job offers, there is a sidebar with search and filter options:

- Sort by:** Date (selected), Employer
- Search for:** search term
- Filter by:** Employer, Region (Berlin), Category, Degree (Bachelor), Date of hire (starting at the earliest), End date (finishing at the latest), Required Programming Languages, Required Languages

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2014



But...

- Only works with enough participants



EvaP				
My courses Results ▾				
Course	Type	Lecturer	Average Grade	Median Grade
<a href="#">Software Technology II</a>	Vorlesung	Dr. Matthias Uflacker	1.3	1.0

**WE WANT YOU!**



# FAQ: Too much work?

- One fifth of week
- Overtime discouraged

I think the expenditure of time for the project was appropriate.



# FAQ: Conflicts with other lectures?

- Some will enroll in dSchool...
- Lecture attendance recommended, but not required
- Find your own time slots for project

## ■ Testimonials

- “The only way to get this kind of practical experience” – Frank Blechschmidt
- “You learn all the important tools you’ll later need” – Malte Mues
- “Best lecture in curriculum” – Anonymous

## ■ Learning targets

- Agile methodology practiced
- First-hand experience with “large” software projects
  - Your own “war stories”
- Grow as a person

→ <http://epic.hpi.uni-potsdam.de>