

BP2018G1 Kickoff Meeting

“Ask your repository!”

Prof. Dr. Holger Giese

Christian Adriano

Christian Zöllner

Agenda

- **Introduction**
- **Project Perspective**
 - Project Charter
 - Scope
- **Teaching Perspective**
 - Expectations
 - Grading
 - Bachelor Thesis
- **Meetings + Schedule**
- **Tools + Infrastructure**
- **Next Steps**

Introduction + Roles

- Professor Holger Giese: **Supervisor** (budget, general objectives, grading)
- Christian Adriano: **Product Owner** (scope, risks, tasks)
- Christian Zöllner: **Teaching Assistant** (environment) [initially also: **Project Manager** (time, cost, risk)]
- **Project Team** (no fixed roles yet)
 - Luise Benkert
 - Jascha Beste
 - Leonhard Hennicke
 - Adrian Steppat
 - Arne Zerndt
 - Erik Ziegler
- **External Stakeholders**
 - Dr. Claudia Nicolai (HPI D-School): Sponsor
 - HPI PR Department: Bachelorpodium

[Excepts from...]

Project Charter

Christian Adriano

Christian Zöllner

*A Project Charter states the scope, objectives, and participants in a project. It provides a preliminary delineation of roles and responsibilities, outlines the project objectives, identifies the main stakeholders, and defines the authority of the project manager.
(Wikipedia)*

[The complete Project Charter will be provided in the bachelor project share.]

Project Charter: Inputs

Reason for undertaking the project (“*business problem*”)

- Designers and engineers have difficulty reusing modeling and design knowledge from previous work

Objectives and constraints of the project (“*business constraints*”)

- Solution for the problem is a running software
- Software should be deployed early for experimentation
- Focus on the software engineering knowledge
 - But: Must be generalizable to design thinking knowledge
- Results must be substantial enough for bachelor theses
 - Optional: Data and results could also be publishes as scientific paper(s)
- Software should be usable for future research projects

Directions concerning the solution (“*vision*”)

- An *extensible* and *modular* architecture that enables artifacts to be retrieved in a unobtrusive way.
- See components of the solution in: [BA-Projekt HG1 18-19 Ask Your Repository.pdf](#)

Project Charter: Scope

In-scope

- Create prototypical database of both software engineering and design thinking artifacts
- Create training and testing and validating datasets
- Train Machine Learning models
- Setup and run classification tasks with a crowd
- Evaluate digital assistant technologies
- Integrate digital assistant, database, and the visualization front-end

Out-of-scope

- Create production database of design thinking artifacts
- Create extensive GUI to navigate through the retrieved artifacts
- Deploy solution at design school

Teaching: Official Requirements

Components / Modules:

- HPI-SP: Softwareprojekt (30LP, inkl. 6LP “*Schlüsselkompetenzen*”)
 - Software project, teamwork (min. 4 participants), presentation of results, ...
- Bachelorarbeit (12 LP)
 - Individual scientific work

Time Requirements:

- 1 LP = 30h
- 30LP+12LP = 42LP = 1,260h
- In practice:
 - Oct-Feb: “part-time” (20h/week)
 - Mar-Jul: “full-time” (40h/week)

References: [Studienordnung ITSE \(2016\)](#), [Erläuterungen zu den Bachelorprojekten](#)

Teaching: Principles

- The Bachelor Project is a **group project!**
 - All kinds of contributions / roles are equally important.
 - Project is graded as a whole, with possible (minor) personal distinctions.
- The project team should **manage itself**.
 - No fixed roles and tasks.
 - No fixed subgroup distribution.
 - Students should be involved in all management tasks, supervisors act as “control authority”.
- Bachelor theses are **personal work** integrated into the project.
 - Each student explores one part / feature of the project for her / his thesis.
 - Thesis (scientific writeup) must be 100% individual work, the discussed feature must *not*.

Teaching: Project Grading

- Primary grade: Group grade for (intermediate and final) project result(s)

- Focus on quality and documentation (i.e. usability for future work).
- Grade includes project management results and official presentations.

Ideal case: Results are awesome, everyone contributed evenly. Project receives a good mark and no further distinction is needed.

- Possibility for personal distinction (up to -2 to +2 grading steps per category)

1. Presentations (initial seminar, intermediate presentations)
2. Participation and presence in meetings
3. Personal accountabilities

Personal distinction is needed if... some members are lazy and have the team work for them.
Or if... project results are bad, but some individuals performed outstandingly nevertheless.

- Accountabilities

- Students each assume accountability for some aspect(s) of project (being accountability = person must ensure that the team does it, not do it her-/himself)
- Possible accountabilities: important features, cross-cutting concerns (quality, documentation, ...), development infrastructure, organizational aspects (project plan, meetings, communication, ...), public relations (in second semester), ...
- Accountabilities should be balanced and reflect project demand, they can be changed at any time
- Supervised by: **Christian Zöllner**.

Meetings

- Start: Seminar meeting (research phase results)
- Every Week: Standup Meeting
 - Setting: Christian² visit team in their office.
 - Content: Show progress, discuss problems/questions, define team goal(s) for next week/sprint.
 - Duration: Max. 30 Minutes.
 - Before meeting: Send discussion topics + proposal for next week's goals to Christian².
- Every 4 to 6 weeks: Intermediate presentations
 - Audience: Prof. Giese, sometimes also Dr. Nicolai (D-School)
 - Content: Demo of current prototype. Give big picture summary of progress and upcoming goals.
 - Duration: Max. 30 Minutes presentation + QA.
 - Presenter: 2-3 students each time. Number of participations in presentations per students should be equal.
- End: Final (internal) presentation

Meetings

	Mo				Di			Mi				Do			Fr			
9:00																		
10:00	Übung Mod I A 1.1 A 2.1 H 2.58	POIS (Prozess-orientierte Informat.-Systeme) Pufahl HS 2		Probability Theory Friedrich, Göbel A-1.2	Modellierung I Weske HS 1	Betriebs-systeme I Polze HS 3	Digitale Bildverarbeitung Trapp, Semmo, Pasevaldt, Richter A 2.1	Modellierung I Weske HS 1	9.00 Uhr: Internet Security – Weaknesses and Targets Meinel Gawron, Pelchen HS 2		Übung Theoret. Informatik I A-1.1 A-1.2	Übung Mod I A-2.1	Software-architektur Hirschfeld HS 2	Übung Software-technik II (Raum nach Absprache)	Übung Internet Security - Weaknesses and Targets A 2.2	Building Interactive Devices Baudisch H 2.57	Software-technik II Uflacker HS 3	
11:00	Übung Mathematik I A-1.2 A-1.1	Übung Mod I A-2.2	Datenbank-systeme II Naumann HS 2	Webentwicklung und Web-Frameworks Meinel/Bauer/ Malchow H-E.51	Mathematik I – Diskrete Strukturen und Logik Meinel/Tietz/ Bethge HS 1 <i>Bitte HPI-Website beachten</i>	Software-architektur Hirschfeld HS 2	Einführung in Software-Analyse Döllner A 1.2	Mathematik I – Diskrete Strukturen und Logik Meinel/Tietz/ Bethge HS 1 <i>Bitte HPI-Website beachten</i>	Datenbank-systeme II Naumann HS 3	HCI Project Seminar Personal Fabrication, Virtual reality, and Haptics Baudisch H-2.57	Einführung in Software-Analyse Döllner HS 2	Einführung in die Programmier-technik I Hirschfeld HS 1	Betriebs-systeme I Polze HS 3	Programmierung von Benutzerschnittstellen Trapp, Limberger, H E.51	Wirtschaftliche Grundlagen Hölze HS 1	Übung Internet Security - Weaknesses and Targets A 2.2	Building Interactive Devices Baudisch H 2.57	Software-technik II Uflacker HS 3
12:00																		
13:00	D-School Advanced Track				D-School Basic Track							D-School Advanced Track				D-School Basic Track		
14:00	Grundlagen digitaler Systeme Wollovski HS 1	3D-Computer-grafik I Döllner HS 2	Big Data Security Analytics Cheng , Najafi H 2.57		Einführung in die Programmier-technik I Hirschfeld HS 1	Übung Theoret. Informatik I A-1.1 A-1.2	Übung DBS II H 2.57	3D-Computer-grafik I Döllner HS 2	Grundlagen digitaler Systeme Wollovski HS 1	Theoretische Informatik I Kötzing HS 2	Programmierung von Benutzerschnittstellen Trapp, Limberger, H 2.57	Big Data Security Analytics Cheng , Najafi H E.51	Freiwillige Übung Grundlagen digitaler Systeme Wollovski HS 1	POIS (Prozess-orientierte Informat.-Systeme) Pufahl H E 51	Algorithmic Problem Solving Friedrich, Kötzing, Lenzner HS 3	Recht für Ingenieure I Habbe HS 1		
15:00																		
16:00	Übung Mathe I A-1.2 A-1.1	Übung Mod I A-2.2 H E.52	Recht für Ingenieure II Krohn HS 1 15.10/22.10/29.10./05.11./19.11	Übung DBS II F E.06	Übung Theor. Inf. I A-2.2, A-1.1	Übung Mod H E.52	Probability Theory Friedrich, Göbel A-1.2	Übung Mod I A-2.1	Fachspez. Englisch Level 1 Meier A-1.2	Übung Theor. Inf. I A 1.1	HPI - Kolloquium HS 1		Studentischer Programmier-workshop H E 11/ 12/13	Sondertermine Recht für Ing. II Krohn HS 2				
17:00	Soft-Skills-Kolloquium Krohn HS 1				Studienbegleitendes Seminar A 2.1 Blau A 1.1 Gelb H E.51 Lila H E.52 Grün	Übung Mod A 2.2	Übung Internet Security - Weaknesses and Targets H 2.57	Übung Theor Inf I A-1.2	Studienbegleitendes Seminar A 2.1 Orange A 2.2 Rot A 1.1Schwarz	Übung Mod I H 2.58	Übung Internet Security - Weaknesses and Targets H E.51	Fachspez. Englisch Level 2 Meier A-1.2		01.11.2018 15.11.2018 22.11.2018 29.11.2018 20.12.2018				
18:00																		

Project Planning

- Rough schedule:
 - Oct: Research
 - Nov. + Dec.: Feature prototypes
 - Jan. + Feb.: Prototype integration
 - Mar. - Jun.: Special features (incl. bachelor theses, public relations, ...)
 - Jul.: Finishing
- Project team should define weekly sprint goals.
- Project team should define (internal) intermediate milestones and goals.
- Planning documents are to be created as needed, may be defined as sprint deliverables.

Schedule

Month	Week	Term	Events + Deadlines	Phase
September	39		Fr. 29.09: Kickoff Meeting	
	40			(0) Research / experimentation
	41			
October	42	Term 2018/19		
	43		Seminar session + Teambuilding Event	❖ Individual research assignments. ❖ Seminar session at the end.
	44			(1) Feature prototypes
November	45			
	46			
	47		Presentation Session (?)	❖ Explore individual features. ❖ Weekly team goals (proposal + check). ❖ Planning steps are included as needed. ❖ 50% working time expected.
December	48			❖ Weekly standup with supervisors.
	49			❖ Regular presentations with Prof. Giese + D-School.
	50			
	51		Presentation Session (?)	
	52	Christmas Holidays		
	1	Winter		(2) Early Prototype Integration
January	2			
	3			
	4			
	5			
	6		Presentation Session (?)	
February	7			❖ Weekly team goals (proposal + check). ❖ Planning steps are included as needed. ❖ 50% working time expected.
	8			❖ Weekly standup with supervisors.
	9		Internal Deadline: Integrated basic prototype!	❖ Regular presentations with Prof. Giese + D-School.

Schedule

Holidays:
2-3 weeks, self-coordinated

March	10	Presentation Session (?)	(3) Feature Focus (incl. theses + PR) ❖ Each participant selects a personal research question for bachelor thesis. ❖ Weekly team goals (little oversight). ❖ Focus on... a) Features required for theses. b) Features required for public presentation. c) Features requested by supervisors + sponsors. ❖ 100% working time expected. ❖ Weekly standup with supervisors. ❖ Regular presentations with Prof. Giese + D-School.
	11		
	12		
	13	Deadline: Bachelor thesis topics!	
April	14		
	15	Presentation Session (?)	
	16		
	17		
May	18		
	19	Presentation Session (?)	
	20		
	21		
	22		
June	23		
	24		
	25		
	26	Deadline: Bachelor thesis handin + pre-grades!	
	27		
July	28	Bachelorpodium (?)	(4) Finalization ❖ Finishing (quality, docu, features, ...) ❖ Internal final presentation.
	29		
	30	Final presentation (?)	
	31	Deadline: Finish grading!	

Tools & Infrastructure

- Basic idea: Team can choose, but should coordinate with supervisors.
- Timing: As soon as you need it.
- Repository
 - code.hpi (GIT, SVN), HPI GitLab, Redmine (GIT, SVN), ...
 - Start with multiple repositories or have one for everything?
 - Possible integration of build and deployment tools?
- Documentation
 - Wiki, MD or RST files in Repository, Word & Excel files in HPI Share, ...
- Task Management
 - Redmine, Trello, Whiteboard + Post-Its, ...
- Hardware
 - Provided: 1 workstation per team member in office
 - If needed: VMs for tool hosting, experiment servers

Next steps / Frist Sprint

- Set up tools & infrastructure

Discuss!

- Research Topics

- Supervision by: Christian Adriano
- Meetings as needed
- Deliverables:
 - Short Demo (implementation)
 - Handout (“cheat sheet”, max. 2 pages)

Choose today!

- Seminar meeting in late October

- Each student: Presentation (max. 30 min)
- Also: Teambuilding event.

Upcoming doodle.

- Set up office.

Wait for e-mail.