

Next Weeks' Schedule



Week 1 (Oct 12 – Oct 16)

- Introduction lectures

Week 2 (Oct 19 – Oct 23)

- Find teams, **enroll!**
- Code School exercise
- Lecture on Scrum
 - Exercise after lunch!

Week 3 (Oct 26 – Oct 30)

- POs: Customer meeting
- Ruby on Rails exercise
- Lecture on Git and testing

Week 4 (Nov 2 – Nov 6)

- Kick-off presentation
- Start of project



Your Project

Software Engineering II
WS 2015/16

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

Schedule



- Exercises
- Kick-Off presentation
- Sprint 1 (2 weeks)
- Sprint 2 (2 weeks)
- Intermediate presentation

- Sprint 3 (3 weeks)
- Sprint 4 (2 weeks)
- Kanban Week
- Final presentation
- Exam (date tba)

Oct	42	12	13	14	15	16	Lecture
	43	19	20	21	22	23	Lecture / Scrum Exercise
	44	26	27	28	29	30	Lecture
Nov	45	2	3	4	5	6	Kick-Off / Lecture
	46	9	10	11	12	13	
	47	16	17	18	19	20	
	48	23	24	25	26	27	
	49	30	1	2	3	4	Lecture
Dec	50	7	8	9	10	11	
	51	14	15	16	17	18	Interm. Presentation / Lecture
	2 weeks break						
Jan	1	4	5	6	7	8	
	2	11	12	13	14	15	Guest Lectures ...
	3	18	19	20	21	22	
	4	25	26	27	28	29	
Feb	5	1	2	3	4	5	Final Presentation / Summary

Schedule



- Exact dates should be **negotiated** with your tutor
 - Enter dates and rooms in public calendar
- Sprint reviews and plannings for next sprint can be merged
- PO should roughly know what the team has done **before the review!**
- **On demand:** User Research with Customer

Let's get started



- POs
 - Meet with the **customer**
 - Extract Requirements + create user stories (Github Tickets)
 - **Prepare** Sprint planning
- Teams
 - Prepare working environment
 - Clone repository, try to get application working, understand architecture, ideally: **play around**
 - Find a regular timeslot for your meetings
- Within the team + tutors
 - Enter into Google Calendar until Nov 3
 - 1st Sprint Planning → CW 46 (09. – 13.11.)



Project Infrastructure

Communication Infrastructure



- Email lists
 - Separate lists for each team (*lists.myhpi.de*)
 - Keep your teammates in the loop
 - Rules and filters help organizing your inbox
- <https://swt2-2015.slack.com>
- Wiki for lean and globally **accessible documentation**
- Ticket system for overview and feedback about current tasks and progress
- Telephone, ~~Skype, IRC, ...~~ and personal contact for direct communication
- ... be **creative!** (but let us know, we are interested in learning what might be useful in the future)

Time Management



Google Calendar

- Advantages:
 - Available Everywhere
 - Easy Integration with Outlook & iCal
- Overview of team appointments
- Access granted by our tutors

Application Lifecycle Management



The Swiss army knife of software development

- Integrating tools for most common activities in **one place**
- Wiki, Bug Tracking, Time Management, Project Analytics, Discussions, ...
- Examples:
 - MS Team Foundation Server
 - Codebeamer
 - Trac
 - Redmine, Plan.io (SaaS based on Redmine)
 - **Github**

Github Project



- <https://github.com/hpi-swt2/wimi-portal>

This repository Search Pull requests Issues Gist

hpi-swt2 / wimi-portal Unwatch 10 Star 0 Fork 0

Description Website

Short description of this repository Website for this repository (optional) Save or Cancel

19 commits 2 branches 0 releases 2 contributors

Branch: master wimi-portal / +

jaSunny fixing .travis.yml merge error Latest commit 408808d 6 days ago

app	adding newrelic, errbit supprt; improving views and validation	6 days ago
bin	adding rails 4.2.4 app	14 days ago
config	adding newrelic, errbit supprt; improving views and validation	6 days ago
db	adding has_and_belongs_to_many association and seed data	14 days ago
lib	adding rails 4.2.4 app	14 days ago
public	adding rails 4.2.4 app	14 days ago
spec	adding newrelic, errbit supprt; improving views and validation	6 days ago
test	adding rails 4.2.4 app	14 days ago
vendor/assets	adding rails 4.2.4 app	14 days ago
.gitignore	adding tests for controller and factories for auth user, expanding te...	9 days ago

Code Issues 0 Pull requests 0 Wiki Pulse Graphs Settings

HTTPS clone URL https://github.cc

You can clone with HTTPS, SSH, or Subversion.

Clone in Desktop Download ZIP

Scrum in GitHub - waffle.io



- <https://waffle.io/hpi-swt2/wimi-portal>

A screenshot of a Waffle.io Kanban board for the project 'hpi-swt2/event-und-raumplanung'. The board is divided into four columns: Backlog (0 items), Ready (0 items), In Progress (1 item), and Done (3 items). The 'In Progress' column contains one card titled 'Applikationsrumpf anlegen' with a 'Preface' button and 8 comments. The 'Done' column contains three cards: 'Unnötig' (with 'pull-request-5' and 'review.ninja' tags and 1 comment), 'Infrastruktur zusammeklicken' (with 1 comment), and 'Example pull request for review.ninja' (with 4 comments). The interface includes a top navigation bar with 'Add Issue' and 'Filter Board' buttons, and a left sidebar with navigation icons.

Version Control System



Repository to store software configuration items

Features:

- Versioning
- Dealing with variants: **branches**
- Access control
 - Authentication, authorization
 - Locking
 - **Concurrent** development
- Reporting
 - How many versions, variants, changes, persons
 - History of changes

Continuous Integration

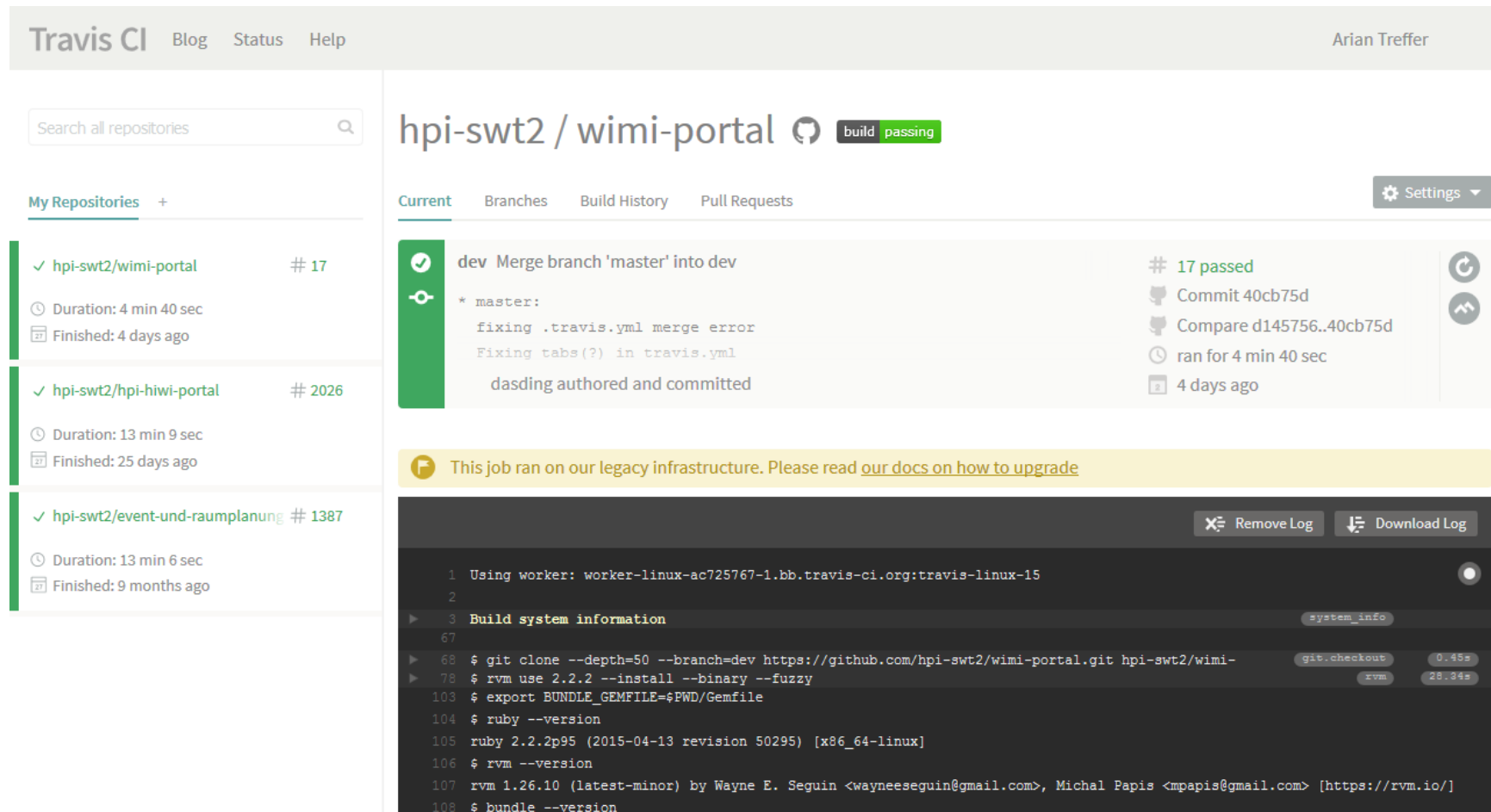


How to check **continuously** that your software works?

Continuous Integration!

- **Connected** to version control
- Customizable run scripts
- Ideally covering all development branches
- Examples:
 - CruiseControl
 - Anthill
 - Jenkins/Hudson
 - **Travis-CI**

- <https://travis-ci.org/hpi-sw22/wimi-portal>



Travis CI Blog Status Help Arian Treffer

Search all repositories

My Repositories +

- ✓ hpi-sw22/wimi-portal # 17
Duration: 4 min 40 sec
Finished: 4 days ago
- ✓ hpi-sw22/hpi-hiwi-portal # 2026
Duration: 13 min 9 sec
Finished: 25 days ago
- ✓ hpi-sw22/event-und-raumplanung # 1387
Duration: 13 min 6 sec
Finished: 9 months ago

hpi-sw22 / wimi-portal build passing

Current Branches Build History Pull Requests Settings

✓ dev Merge branch 'master' into dev # 17 passed
* master:
fixing .travis.yml merge error
Fixing tabs(?) in travis.yml
dasding authored and committed
Commit 40cb75d
Compare d145756..40cb75d
ran for 4 min 40 sec
4 days ago

This job ran on our legacy infrastructure. Please read [our docs on how to upgrade](#)

```
1 Using worker: worker-linux-ac725767-1.bb.travis-ci.org:travis-linux-15
2
3 Build system information system_info
67
68 $ git clone --depth=50 --branch=dev https://github.com/hpi-sw22/wimi-portal.git hpi-sw22/wimi-
69 $ rvm use 2.2.2 --install --binary --fuzzy git_checkout 0.45s
70 $ export BUNDLE_GEMFILE=$PWD/Gemfile rvm 28.04s
103 $ ruby --version
104 ruby 2.2.2p95 (2015-04-13 revision 50295) [x86_64-linux]
105 $ rvm --version
106 rvm 1.26.10 (latest-minor) by Wayne E. Seguin <wayneesequin@gmail.com>, Michal Papis <mpapis@gmail.com> [https://rvm.io/]
107 $ bundle --version
108
```

Application Deployment

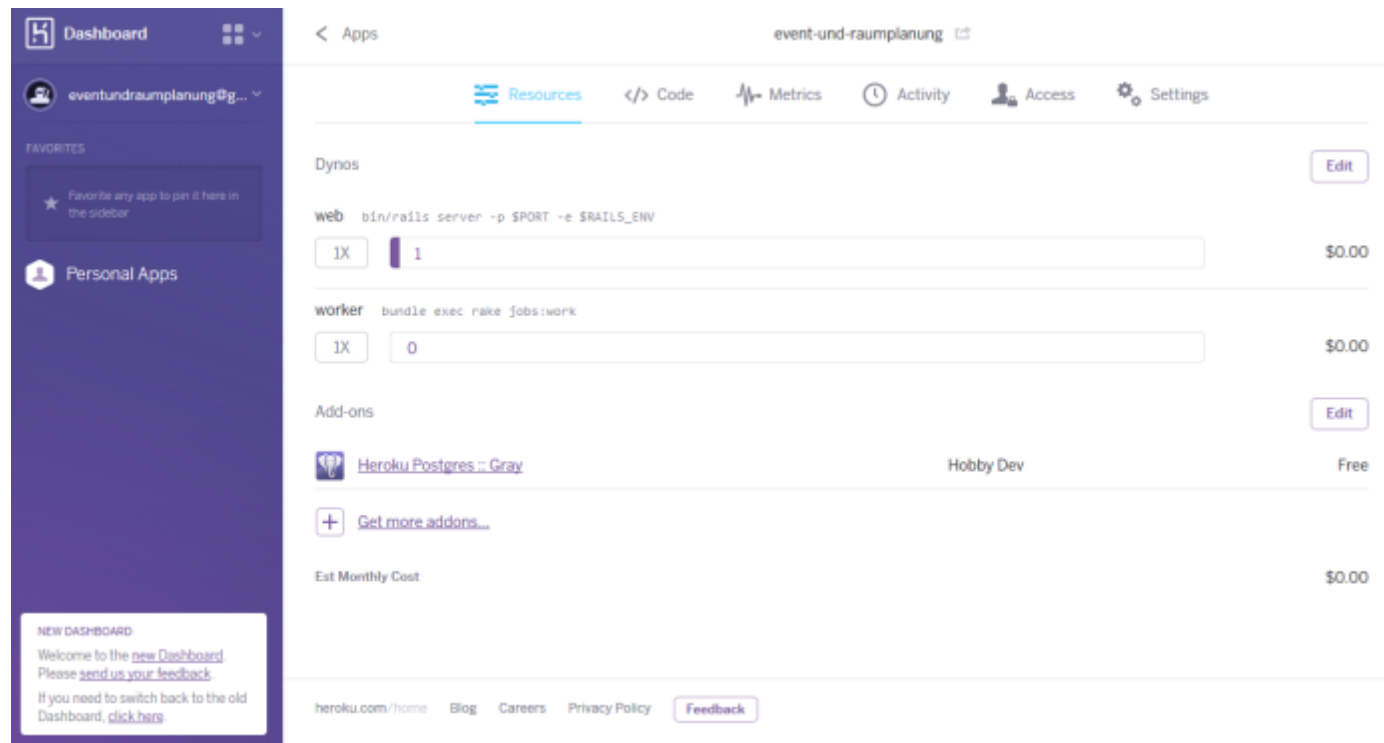


How to have a **running version** available at all times?

Deploy your app!

- Simple solution: local deployment
- Dedicated Servers, Infrastructure-as-a-Service, Platform-as-a-Service
 - more about that in a separate lecture
- We use **Heroku** (PaaS)
- Deployment is **automatically** triggered by successful Travis-CI build

- <http://heroku.com/>
- <http://wimi-portal.herokuapp.com/>



The screenshot shows the Heroku dashboard for an application named "event-und-raumplanung". The interface includes a sidebar with "Dashboard" and "Personal Apps" sections. The main content area displays the application's configuration, including Dynos (1X web, 1 worker), Add-ons (Heroku Postgres :: Gray), and an estimated monthly cost of \$0.00. A "NEW DASHBOARD" notification is visible in the bottom left corner of the dashboard area.

Dynos	Configuration	Cost
1X	web bin/rails server -p \$PORT -e \$RAILS_ENV	\$0.00
1X	worker bundle exec rake jobs:work	\$0.00

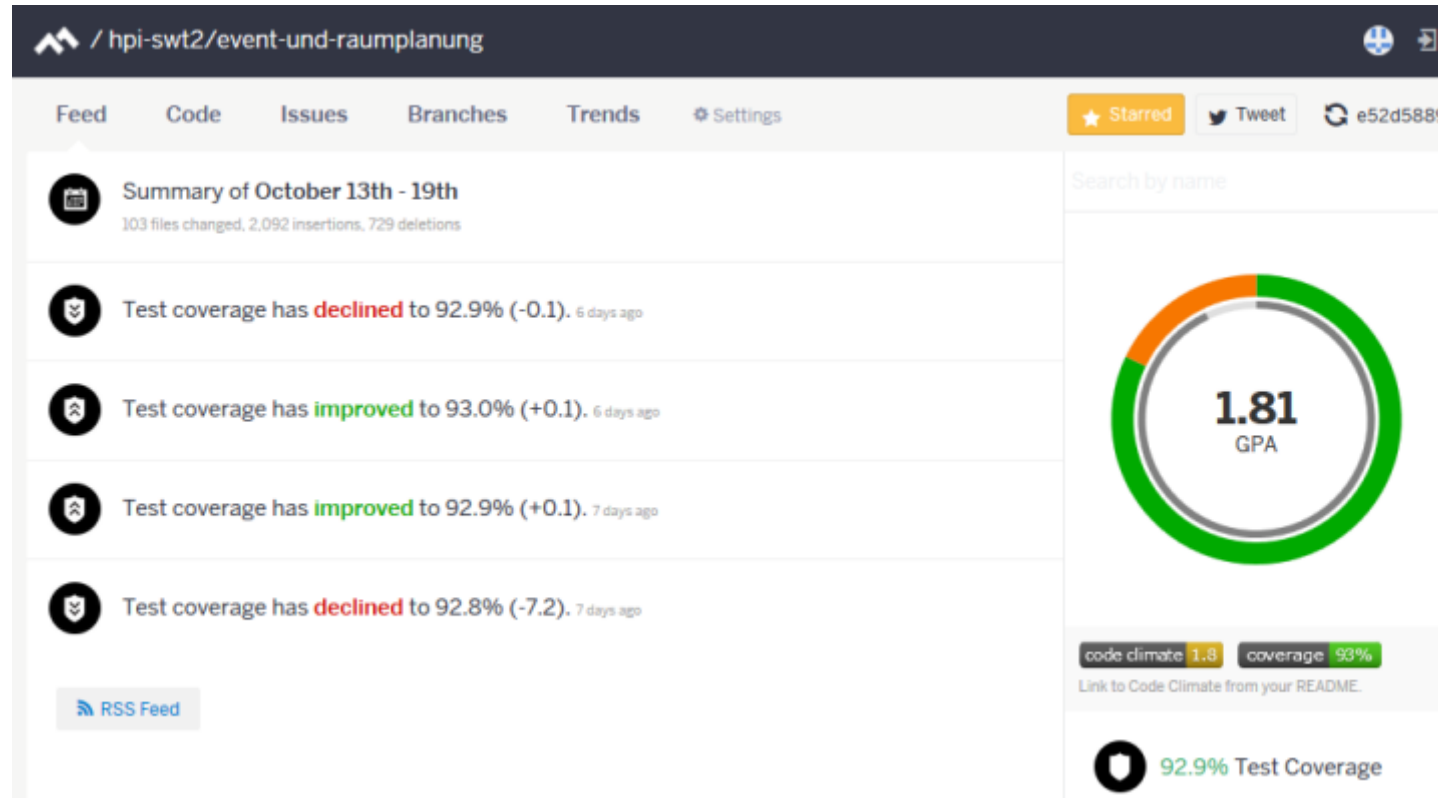
Add-ons	Configuration	Cost
Heroku Postgres :: Gray	Hobby Dev	Free

Est Monthly Cost: \$0.00

How to ensure that your software adheres to certain **quality standards** (complexity, test coverage, etc.)?

- Self-control
- Code Reviews (future lecture)
- **Automatic** checking
 - CodeClimate
 - SimpleCov
 - runs automatically during each test run
 - coverage/index.html in your application folder

- <https://codeclimate.com/github/hpi-swt2/wimi-portal>



All Files (100.0%) Controllers (100.0%) Models (100.0%) Mailers (100.0%) Helpers (100.0%) Libraries (100.0%) Plugins (100.0%)

All Files (100.0% covered at 1.35 hits/line)

6 files in total. 41 relevant lines. 41 lines covered and 0 lines missed

Search:

File	% covered	Lines	Relevant Lines	Lines covered
🔍 app/controllers/application_controller.rb	100.0 %	5	2	2
🔍 app/controllers/job_offers_controller.rb	100.0 %	77	34	34
🔍 app/helpers/application_helper.rb	100.0 %	2	1	1
🔍 app/helpers/job_offers_helper.rb	100.0 %	2	1	1
🔍 app/models/job_offer.rb	100.0 %	2	1	1
🔍 app/models/user.rb	100.0 %	7	2	2

Showing 1 to 6 of 6 entries

Your Project



1. Schedule
2. Calendar
3. Slack
4. Github
5. Travis CI
6. Heroku
7. CodeClimate

Image Credits



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- "Scrum process" by Lakeworks - Own work. Licensed under Creative Commons Attribution-Share Alike 3.0-2.5-2.0-1.0 via Wikimedia Commons - http://commons.wikimedia.org/wiki/File:Scrum_process.svg#mediaviewer/File:Scrum_process.svg
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