Your Project

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Enterprise Platform and Integration Concepts group
SWT2 Schedule

PROJECT

- November 10: Kick-Off
- Nov 13 – Nov 17: Begin of Sprint 1

- Exact dates for meetings 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**
  - Extract Requirements + create user stories (Github Tickets)
  - Prepare Sprint planning

- **Teams**
  - Prepare working environment
  - Clone repository, try to get application working, understand architecture
  - Play around
  - Find a regular timeslot for your meetings

- There will be a *tutorium in this space after the second lecture (15:00+)*
  - Ask any (Ruby) question
  - Setup project and development environment together
Project Infrastructure
Communication Infrastructure

- Email lists
  - If you want: separate lists for each team (*lists.myhpi.de*)
  - Keep your teammates in the loop, add teaching team
  - Rules and filters help organizing your inbox
- Ticket system for overview and feedback about current tasks and progress
- Wiki for lean and globally accessible documentation
- Telephone 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
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


**sport-portal**

A Ruby on Rails app to manage sport matches

When all tests succeed on Travis CI, the application is deployed to Heroku. Click the badges for detailed info. Errors that occur while using the deployed master branch on Heroku are logged to the Heroku error server; you can sign in with your GitHub account.

**Local Setup**

- Clone this repository
- Use `rake db:create` to create the database
- Use `rake db:migrate` to migrate the database
- If the database is not empty, you may need to drop it first using `rake db:drop`
- `bundle install` to install the project's dependencies
- `rails server` to start the development server

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Your Project – Software Engineering II – WS 2017/18
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
Travis CI

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
- Errors that occur in production sent to a central system: Errbit
http://heroku.com/
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
CodeClimate

SimpleCov

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

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

<table>
<thead>
<tr>
<th>File</th>
<th>% covered</th>
<th>Lines</th>
<th>Relevant Lines</th>
<th>Lines covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>app/controllers/application_controller.rb</td>
<td>100.0 %</td>
<td>5</td>
<td>2</td>
<td>2</td>
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<tr>
<td>app/controllers/job_offers_controller.rb</td>
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<td>1</td>
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<tr>
<td>app/helpers/job_offers_helper.rb</td>
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<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>app/models/job_offer.rb</td>
<td>100.0 %</td>
<td>2</td>
<td>1</td>
<td>1</td>
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<tr>
<td>app/models/user.rb</td>
<td>100.0 %</td>
<td>7</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Showing 1 to 6 of 6 entries
1. Schedule
2. Calendar
3. Slack
4. Github
5. Travis CI
6. Heroku
7. CodeClimate
8. Errbit
Next Week

Week 5 (Nov 13 – Nov 17)
- PO presents team vision
- Estimation
- Begin 1st sprint
- Planning
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