

Technische Dokumentation

Fachbereich Informatik

Telekooperation

Prof. Dr. Max Mühlhäuser

***Telekooperation Internet Praktikum – Technische Dokumentation***

Duc, Johannes, Thomas

Betreuer: Dr. Christian Meurisch

Darmstadt, Abgabedatum

Inhalt

[1. Introduction 3](#_Toc460826760)

[1.1 Stack 3](#_Toc460826761)

[1.2 Development Process 3](#_Toc460826762)

[2. General technical setting 4](#_Toc460826763)

[2.1 Client/app 4](#_Toc460826764)

[2.1.1 Account 4](#_Toc460826765)

[2.1.2 admin 4](#_Toc460826766)

[2.1.3 charts 4](#_Toc460826767)

[2.1.4 main 4](#_Toc460826768)

[2.1.5 reviews 4](#_Toc460826769)

[2.1.6 submissions 4](#_Toc460826770)

[2.2 Miscellaneous features 4](#_Toc460826771)

[3. Specific functionalities of ‚Team Uniform’-Platform 5](#_Toc460826772)

[3.1 General functionalities 5](#_Toc460826773)

[3.1.1 Registration 5](#_Toc460826774)

[3.1.2 Log-in 5](#_Toc460826775)

[3.2 Author 5](#_Toc460826776)

[3.2.1 Create submission 5](#_Toc460826777)

[3.2.2 Access submission 5](#_Toc460826778)

[3.2.3 Submission manipulation – CRUD 5](#_Toc460826779)

[3.3 Reviewer 5](#_Toc460826780)

[3.3.1 Access assigned submissions 5](#_Toc460826781)

[3.3.2 Make a review 5](#_Toc460826782)

[3.4 Chair 5](#_Toc460826783)

[3.4.1 Access all submissions 5](#_Toc460826784)

[3.4.2 Information retrieval: Authors, reviewers, reviews 5](#_Toc460826785)

[3.4.3 Submission to reviewer assignment 5](#_Toc460826786)

[3.4.4 Schedule Management 5](#_Toc460826787)

[3.4.5 Analytics 5](#_Toc460826788)

# Introduction

The „Team Uniform“-project is an implementation of a conference platform. In order to plan the contributions of a conference,”Team Uniform” provides several functionalities to submit, review and assess research papers.

It is based on yeoman, a scaffolding tool that utilizes modern technical web-technologies like angularJS or nodeJS. Requirements and functionalities were implemented according to the specifications of the TK3 department from the Technical University Darmstadt.

## Stack

Our team used the yeoman generator to initially set up an environment and having a starting point for development. At the first step the team worked on the backend using Node.js as primary technology. As database we used the latest version of postgresql, an open source object-relational database system that is very popular and works well among different operating systems (quelle: postgresql.org).

The frontend is served by Angula.js which allows dynamic views on our platform.

Finally, we used bootstrap as CSS framework.

## Development Process

In an initial meeting the team decided on following five process steps for the development and implementation of “Team Uniform”

1. Setting up the technical stack with Yeoman, developing a relational data-scheme and determination of API-specifications.
2. Setting up a rights-management-logic based on binary variables and creating CRUD-functionalities for review- and submission-objects,
3. Creating views to enable CRUD-functionalities on frontend for reviews and submissions
4. Developing features on frontend- and backend-side for role chair.
5. Finalization of the project and realization of several bonus-features.



# General technical setting

The general folder-structure of “Team Uniform” looks like this:

├─── Team Uniform

│ └─── client

│ └─── e2e

│ └─── server

│ └─── node\_modules

│ └─ app.sh

│ └─ package.json

│ └─ README.md

│ └─ ...

## Client/app

Located in the client-folder is the app-directory, which contains frontend functionalities mainly utilizing Angular.js.

├─── client/

│ └─ app/

│ └─── account/

│ └─── admin/

│ └─── charts/

│ └─── main/

│ └─── reviews/

│ └─── submissions/

We have ordered and named the subdirectories after their respective functionality necessary to provide a functional platform in order to manage conference papers and their reviews.

### Account

├─── account/

│ └─ login/

│ └─ settings/

│ └─ signup/

The directory account controls the process of registration and authentication. There is also an implementation to allow users to change their password. We created three controllers and views for these processes. The login-process consists of the controller login.controller.js and the view login.html. Signing up is realized by signup.controller.js and settings.html. Furthermore /settings provides functions to allow users to change their settings, e.g. change the password. This is achieved with settings.controller.js and settings.html. Finally, account.js provides the routing logic.

### Admin

├─── admin/

│ └─ admin.controller.js

│ └─ admin.html

│ └─ admin.scss

│ └─ admin.router.js

│ └─ admin.module.js

In the admin directory we have implemented the functionalities of the chair-role. He is allowed to see all registered users on the platform. Also deletion of users in that list is possible.

Functionalities are provided by admin.controller.js. Please be aware that some parts of this view are changed by admin.scss, e.g. the trash-icon or the font-style.

### Charts

├─── charts/

│ └─ charts.controller.js

│ └─ charts.index.html

│ └─ charts.module.js

│ └─ charts.router.js

We used zingchart, a javascript library, to provide the possibility of displaying general statistics of the platform. The controller is utilized via charts.controller.js whereas the view is displayed by charts.index.html.

### Main

├─── main/

│ └─ main.controller.js

│ └─ main.html

│ └─ main.js

│ └─ main.scss

The main directory contains the controller and view when opening the index-page. Controllers are utilized by main.controller.js, the view is managed by main.html. Also some parts of the design are modified by main.scss.

### Reviews

├─── reviews/

│ └─ reviews.controller.js

│ └─ reviews.index.html

│ └─ reviews.form.html

│ └─ reviews.show.html

│ └─ reviews.router.js

│ └─ reviews.module.js

Reviews are important objects of the conference-platform and directly linked to submissions. Functionalities included are creating, deleting and updating a review as well as displaying submissions that were assigned to users to be reviewed by them.

### Submissions

├─── submissions/

│ └─ submissions.controller.js

│ └─ submissions.index.html

│ └─ submissions.create.html

│ └─ submissions.show.html

│ └─ submissions.update.html

│ └─ submissions.file.html

│ └─ submissions.assign.html

│ └─ submissions.router.js

│ └─ submissions.module.js

Submissions are besides reviews the most important objects on the conference-platform. Users create a submission by giving it a title, adding keywords and providing an abstract. Then the user is asked to upload it in an appropriate file-format such as pdf. After completing this steps a new submission is created. Until a submission is reviewed the user is able to change the title, keywords and abstract of his submission. He is also allowed to change the file he has uploaded.

# Specific functionalities of ‚Team Uniform’-Platform

## General functionalities

### Registration

### Log-in

## Author

### Create submission

### Access submission

### Submission manipulation – CRUD

## Reviewer

### Access assigned submissions

### Make a review

## Chair

### Access all submissions

### Information retrieval: Authors, reviewers, reviews

### Submission to reviewer assignment

### Schedule Management

### Analytics

Literatur

[1] Tim Berners-Lee, Larry Masinter, Mark P. McCahill [Hrsg.]: Uniform Resource Locators (URL). Request for Comments 1738, Network Working Group <http://rfc.net/rfc1738.txt>, Dezember 1994. Zugriff am 29. November 2007.

[2] Robert Braden [Hrsg.]: Requirements for Internet Hosts -- Communication Layers. Internet Standard 3, Network Working Group <http://rfc.net/std3.html>, Oktober 1989. Zugriff am 29. November 2007.

[3] Robert Hinden, Stephen Deering: IP Version 6 Addressing Architecture. Request for Comments 2373, Network Working Group <http://rfc.net/rfc2373.txt>, Juli 1998. Zugriff am 29. November 2007.

[4] Bruno Buchberger: Thinking, Speaking, Writing. Basic Working Techniques for Students of Mathematics and Computer Science. Begleitmaterial zu seiner Vorlesung „Praktische Beweistechnik und wissenschaftliches Arbeiten im Bereich des Symbolic Computation“, Universität Linz, 1992.

[5] Plain English Campaign. <http://www.plainenglish.co.uk/>. Zugriff am 29. November 2007.