SE Projects 2017

Saarland University
Software Engineering Chair

SE Projects 2017

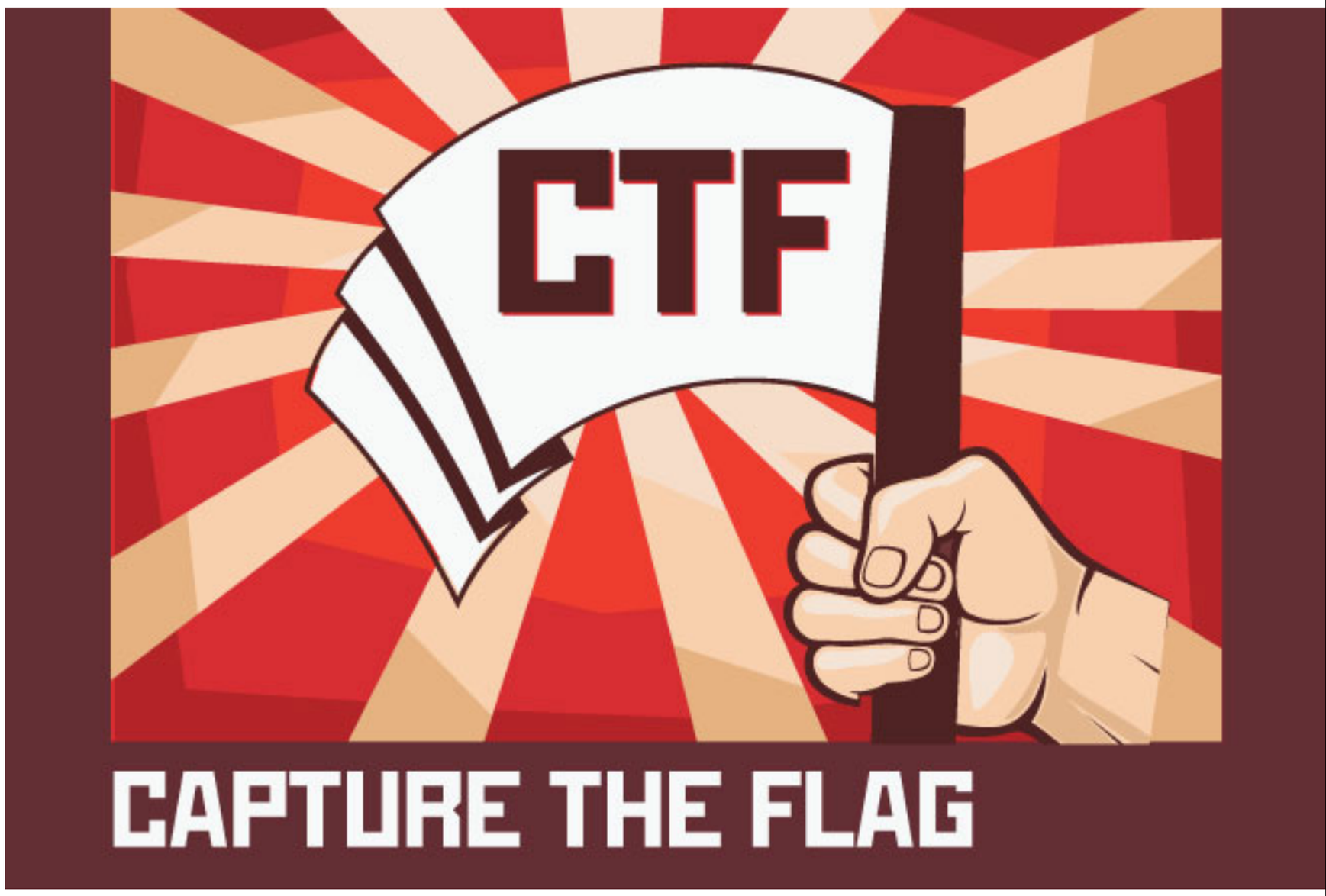
- Form a group of up to **five** students
- Choose your favorite projects
- Register choices today or tomorrow (closes **Thursday April 27, 12:00**)
- We will notify about projects on **April 28**.

42 Projects

P001: CTF Remote Orchestration Tool

Organizatio
n: CISPA

Contact:
Markus
Bauer



P001: CTF Remote Orchestration Tool

- Our local information security team "saarsec" occasionally plays CTFs - educational hacking competitions. During such a competition, every team gets a special machine and tries to defend it against other teams, while trying to hack other team's machines. In such a competition, we need to manage many different machines (from our and other teams) under time pressure. To help with this task, we need a very flexible and modular remote management tool that can be installed fast and used effectively. This project contains three parts: - A remote orchestration client that is installed on the controlled machines (C++ or something similar preferred) - A backend server, that handles connections to many clients (Python preferred) - A user interface for easy management (HTML/Web preferred)

P002: Multimedia/ Infostream/Kiosksvstem

Organization: CISPA

Contact: Curd Becke

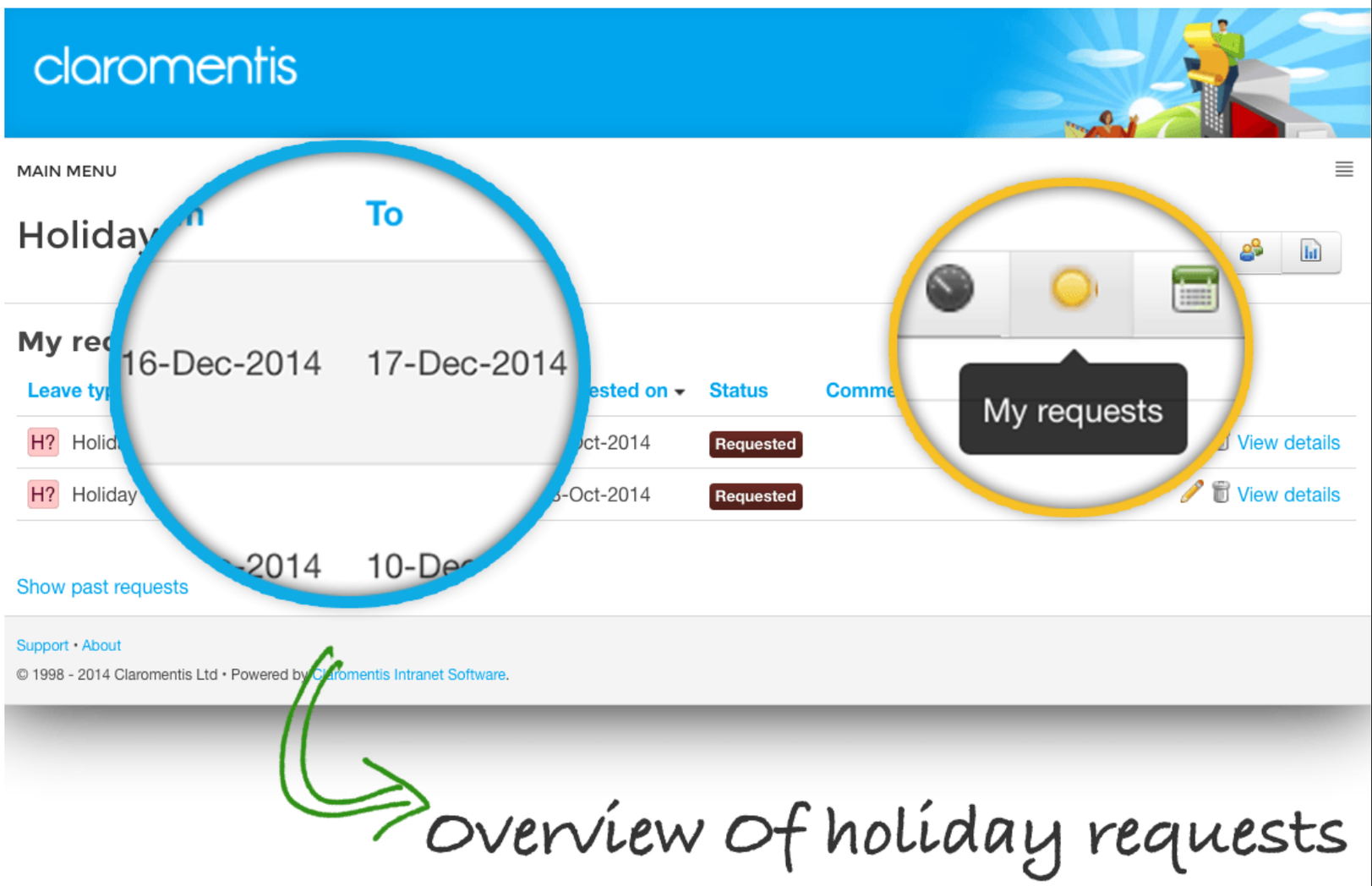
P002: Multimedia/ Infostream/

- Das CISPA-Gebäude ist mit einigen Monitoren ausgestattet, auf denen Forschungsarbeiten (Poster), aktuelle News, Veranstaltungen u.ä. angezeigt werden sollen. Derzeit nutzen wir mit Concerto ein System "von der Stange", mit dessen Komplexität wir allerdings nicht zufrieden sind. Ziel dieses Projektes ist die Entwicklung eines leichtgewichtigen Kiosk-Systems auf Web-Basis, das im Wesentlichen in der Lage ist, die Inhalte an verschiedenen Stellen im Haus anzuzeigen. Die Inhaltspflege soll davon losgelöst mit Standard-Tools möglich sein; Das zu entwerfende und entwickelnde System soll die Daten im RSS/Atom Format Erhalten.

P003:Intranet

Organization:
CISPA

Contact:
CurdBecker



P003:Intranet

- Ziel dieses Projektes ist die Bereitstellung eines webbasierten Intranet-Portals, in dem sich Mitarbeiter (authentifiziert gegen LDAP) einloggen und die eigenen LDAP Daten einsehen und teilweise ändern können. Ebenfalls sichtbar sollen die noch verfügbaren Urlaubstage sein, die von unserer Verwaltung eingetragen und gepflegt werden. Die in diesem System datenschutzrechtlich hoch relevante Inhalte gepflegt werden sollen, sind Sicherheits- und Datenschutz-Aspekte strikt zu beachten.

P004: System zur Verwaltung von

Organization: Saarland University • Contact: Markus Bläser

P004: System zur Verwaltung von

- Es soll ein System entwickelt werden, um das Abwickeln vom Schwimmmehrkämpfe (bestehend aus Kunstsprung, Tauchen und Schwimmen) zu erleichtern (Anmeldung und Auswertung). Schwimmmehrkämpfe ist eine Nischensportart, es gibt keine kommerziellen Systeme hierfür. Einsprechpartner ist Petra Fischer vom TV Fechigen, lokal vor Ort kann ich als Ansprechpartner dienen. Es wäre gut, wenn die Bearbeiter Deutsch sprechen würden.

P005: Find the expert!

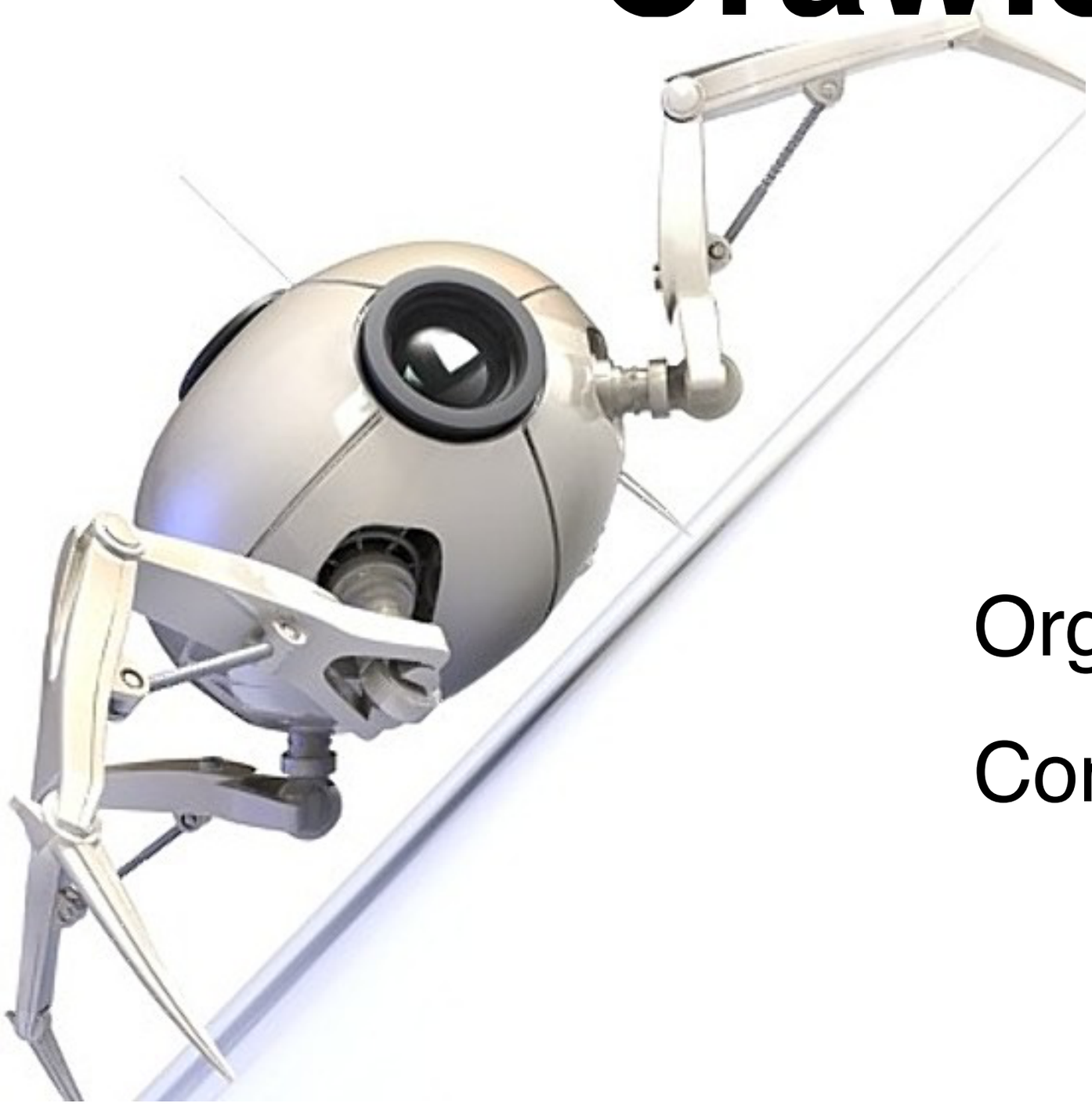
Organization: Cluster of Excellence MMCI

Contact: Gordon Bolduan

P005: Find the expert!

- Journalists have often the following: They have a a computer science related topic but do not know who to ask about. Regarding the Saarland Informatics Campus the problem is increased as there are so many potential experts. Hence, we need an interactive web system supporting journalists finding the best expert suited for their interview questions.

P006:GitHub Crawler



Organization: CISPA

Contact: Nataniel Borges

P006:GitHub Crawler

- The task is to develop a tool to automatically crawl large amounts of information from GitHub based on predefined constraints.

P007:Policy Enforcement Pluain

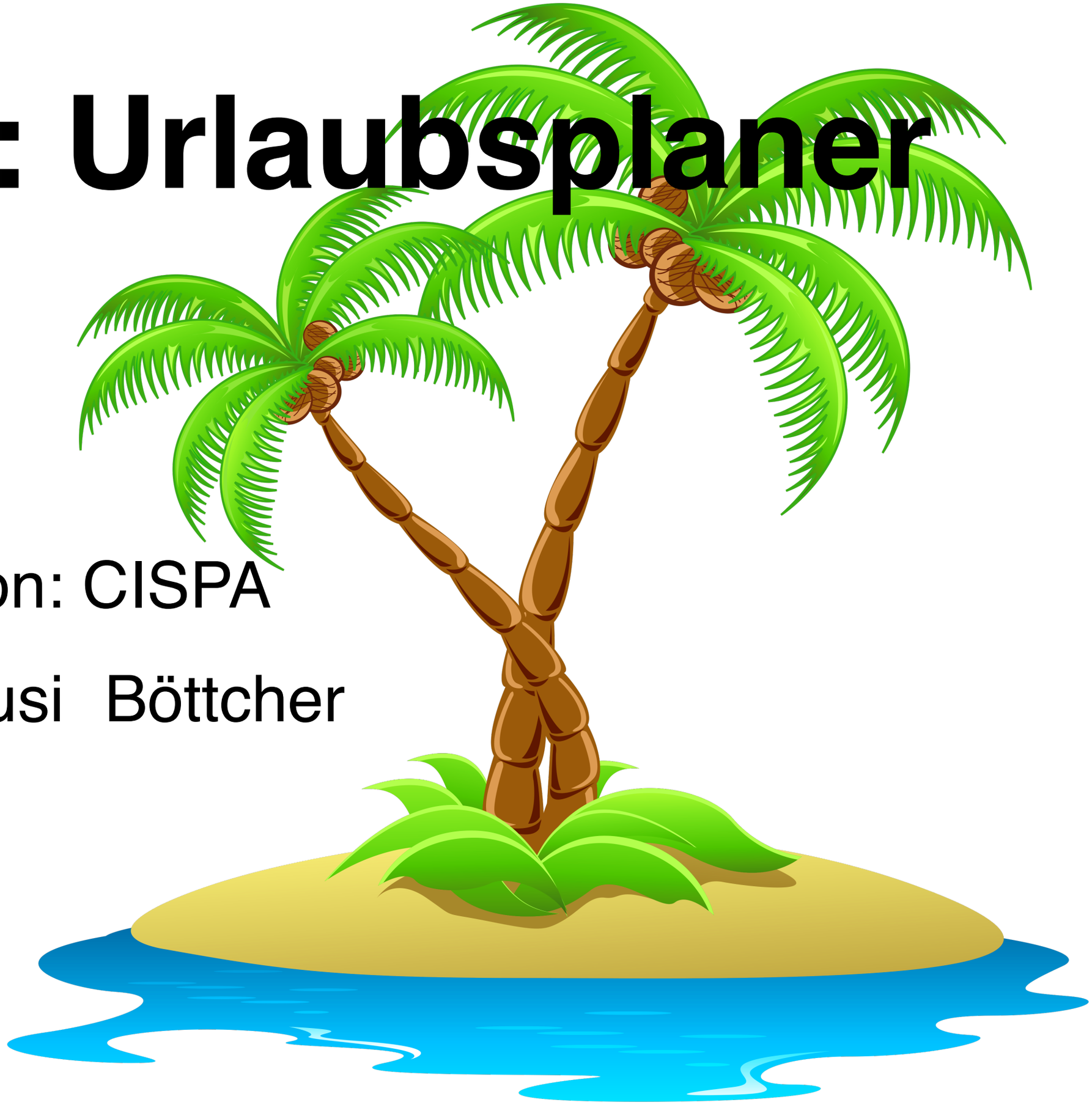
Organization: CISPA

Contact: Nataniel Borges

P007:Policy Enforcement Pluain

- The task is to enhance the BoxMate Android permission checker with data mocking functionality

P008: Urlaubsplaner



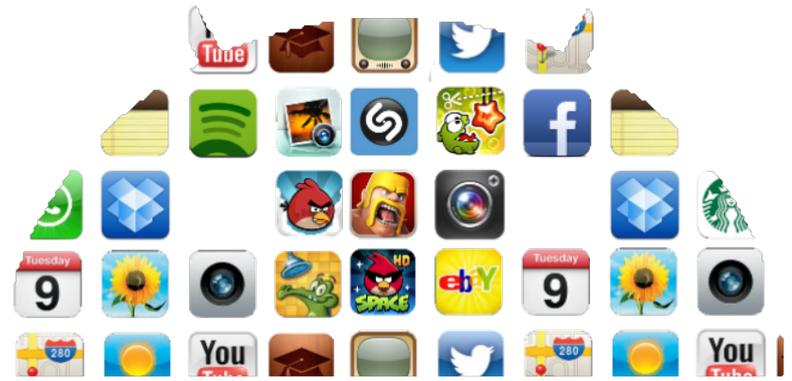
Organization: CISPA

Contact: Susi Böttcher

P008: Urlaubsplaner

- Ziel ist die Entwicklung eines Systems zum Koordinieren und Optimieren der Urlaubsplanung in einem Team von Mitarbeitern. Es soll die Möglichkeit für die Leitung geben, Contraints zu definieren, also aus welcher Gruppe von Mitarbeitern immer jemand da sein muss. Die Mitarbeiter sollen Urlaubswünsche eintragen können und das System soll in der Lage sein, die beste Lösung gemäss obiger Constraints zu ermitteln. Das System soll Webbasiert und

P009: Android app analvsis research



Organization: CISPA

Contact: Sven Bugiel

P009: Android app analvsis research

- App analysis is an integral part of security testing and analysis for mobile ecosystems. In the past, research groups at CISPA/UdS have developed various analysis tools or applied analysis with different goals on different pools of collected Android apps. We would like to unify and streamline this process. Therefore, we would like to have collaborative, managed app repository for our research with a crawler of app stores, data management layer, a surrounding framework to deploy and schedule analysis tasks, as well as an eye candy web UI (e.g., elastic search based) to present our constantly updated analysis

P010: Turn-based Game for Gamification of

Organization: CISPA • Contact: Sven Bugiel

P010: Turn-based Game for Gamification of

- Continuing the idea to introduce gamification into our lectures (and social events associated with those), we would like to have a turn-based games developed, in particular an online strategy game (in the spirit of Sid Meier's Civilization), which we integrate with the teaching process. Although the game should have a lot in common with the classical strategy games (e.g., resources, tech trees, factions), it has some particular requirements that the student team has to consider: For instance, assignment of resources should be configurable by a teaching assistant (e.g., amount of resources gained depends on results of exercise sheets), rounds should be kept in sync with the teaching schedule (e.g., certain number of rounds between

P011: SOSML

Organization: Reactive Systems Group

Contact: Bernd Finkbeiner

```
fun factorial n =
        if n = 0 then 1 else n * factorial (n-1)
```

P011: SOSML

- Our proposed project is a web based interpreter for the functional programming language SML; to be used in the basic lecture Programming 1. It supports complete type inference, syntax trees and step by step execution to give students new to programming a graphical understanding of their programs. It also lowers the technological barrier for new students as a web browser is the only thing needed.

P012: Social Smuggling

SE Chair - Saahand Ghi - Alessio Gambi

P012: Social Smuggling

- People travel the World, but only friends bring back unique souvenirs to us. So unless you as American have a friend traveling to Germany, there's no easy way to get your hands on a Kinder Egg; likewise, as an European you cannot easily get Australia's World famous TimTam's chocolate or Japanese Sake flavored KitKat. The vision of this project is to put in contact "residents" with "travelers" through a platform and an App which makes them "friend" and enables them to setup the exchange of small goods, like chocolate

P013: COLEMASS

SE Chair - Saarland Uni • Alessio Gambi

P013: COLEMASS

- Living in shared, common spaces, such as shared apartment or offices, might come with a large set of problems. This is especially true, if people that live in the common space do not behave according to the agreed rules as well as to common sense. For example, people do no clean after themselves (Dirty dishes in the sink) or people forget food in the fridge... forever The vision of this project is to put an end to these (and other) problems by developing a set of solutions that leverage current home automation technologies (IoT) to enforce a set of

P014: Creating Virtual Worlds for Testing Self-

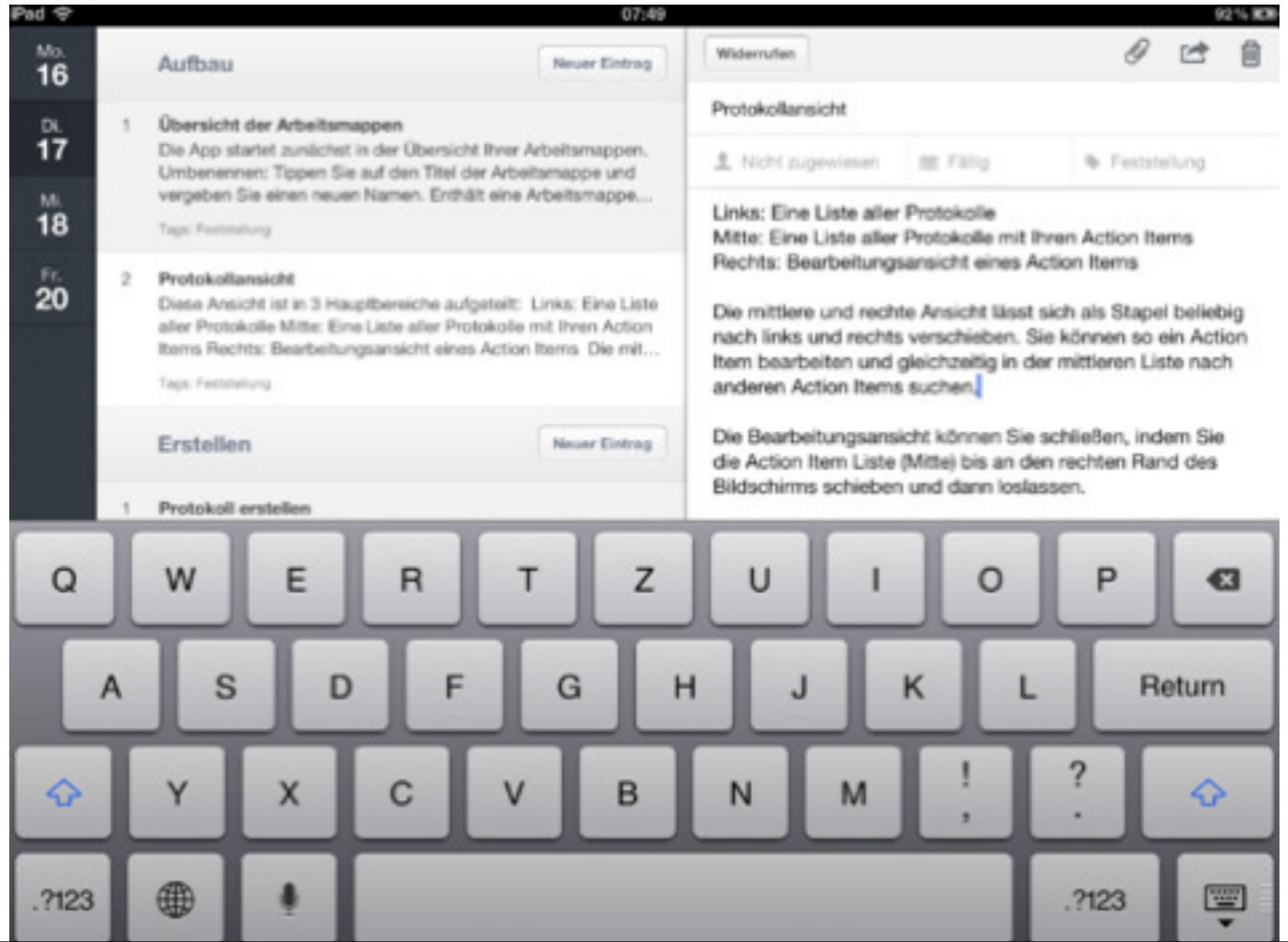
SE Chair - Saarland Uni • Alessio Gambi

P014: Creating Virtual Worlds for Testing Self-

- The idea of the project is to combine the power of state of art rendering engines (like Unreal Engine) and Fuzzers to automatically create interactive virtual/digital Worlds for testing self-driving cars.

P015: Minute-Taker

CS Student Council • Jannis Froese



P015: Minute-Taker

CS Student Union • Jannis Froese

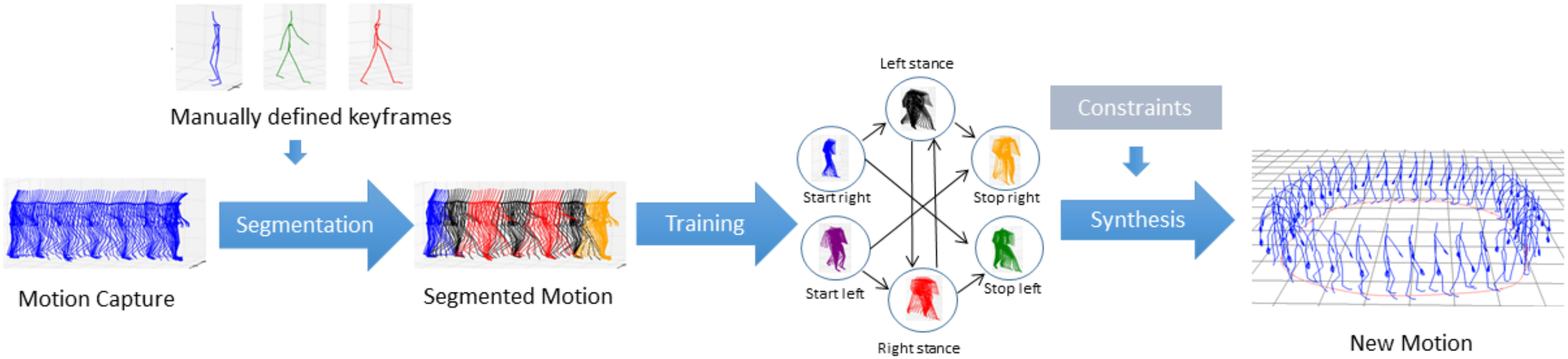
Our project is a web-application for writing meeting minutes/ proceedings for our council meetings. Features would include the logging of metadata like attendees, as well as the topics (both private and public portions), but also the possibility to do secret votes via smartphone (mobile app?), statistics (attendance rate, which topics take the most time?), as well as automatic online publishing of the results both in human readable and maschine readable formats (as well as a search function etc).

So far we use a rudimentary self-built tool to compile minutes, but all but the most simple features (logging attendees and topics) are missing (and extending the existing codebase isn't viable architecturally).

P016: A Graphical Tool for Motion

Organization: DFKI GmbH • Erik Herrmann

Statistical motion synthesis based on [Min12]:



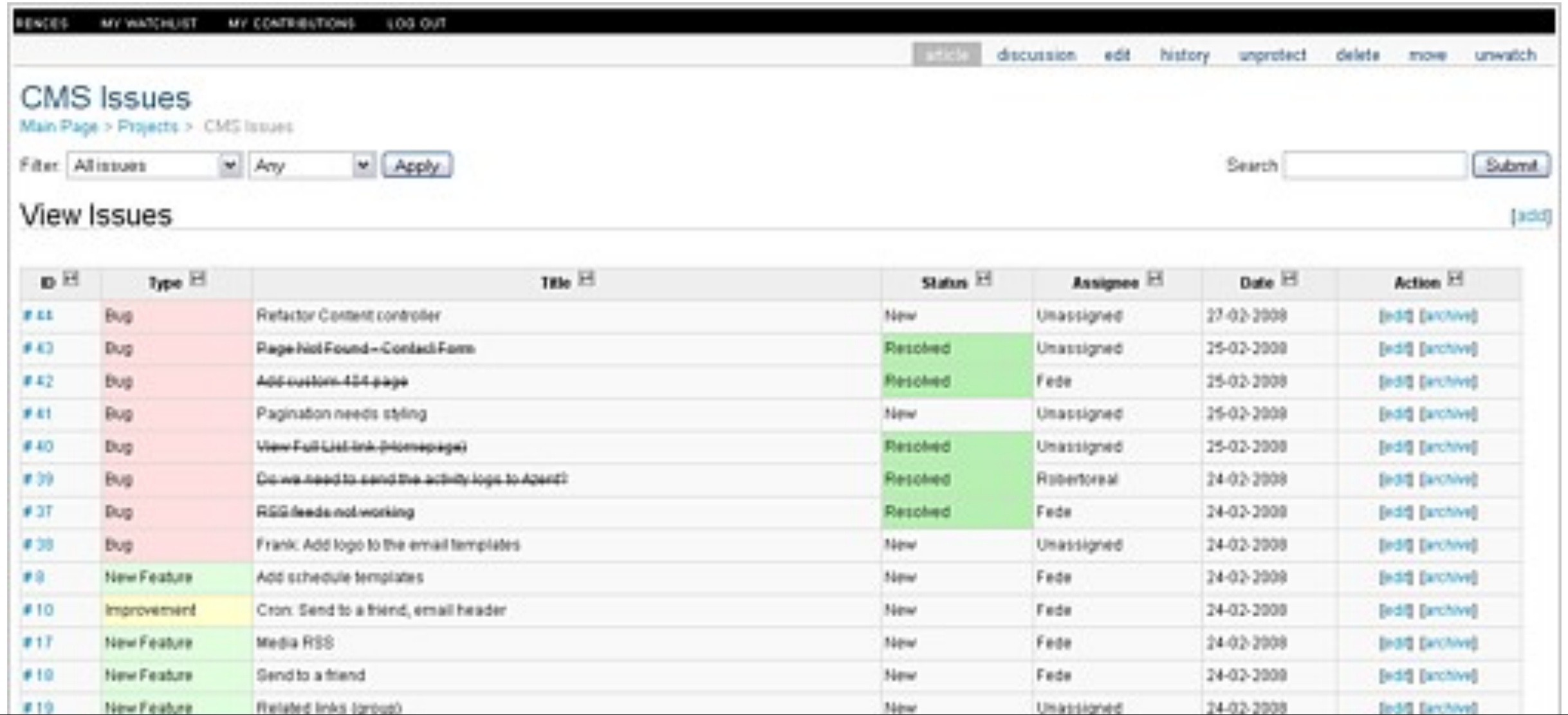
[Min12] Min, J. and Chai, J (2012): Motion Graphs++: a Compact Generative Model for Semantic Motion Analysis and Synthesis. In: ACM SIGGRAPH Asia 2012.

P016: A Graphical Tool for Motion

- Our group has developed a human motion synthesis method based on statistical modeling. The modeling pipeline requires the extraction of training data from motion capture data based on manually defined keyframes. We would like to have a tool with a graphical user interface for streamlining this process. The tool should allow the user to define the start and end keyframes of motion primitives from examples and to validate the resulting statistical motion models visually. Optionally the tool could be enhanced with retargeting and motion editing functionality based on inverse kinematics. The training algorithm and a basic visualization tool have already been implemented in Python. The goal of the project would be to either integrate the existing code or develop a new solution from scratch.

P017:Cross Domain Issue

Elias Heydrich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article discussion edit history unprotect delete move unwatch

CMS Issues

Main Page > Projects > CMS Issues

Filter: All issues Any Apply Search Submit

View Issues [add]

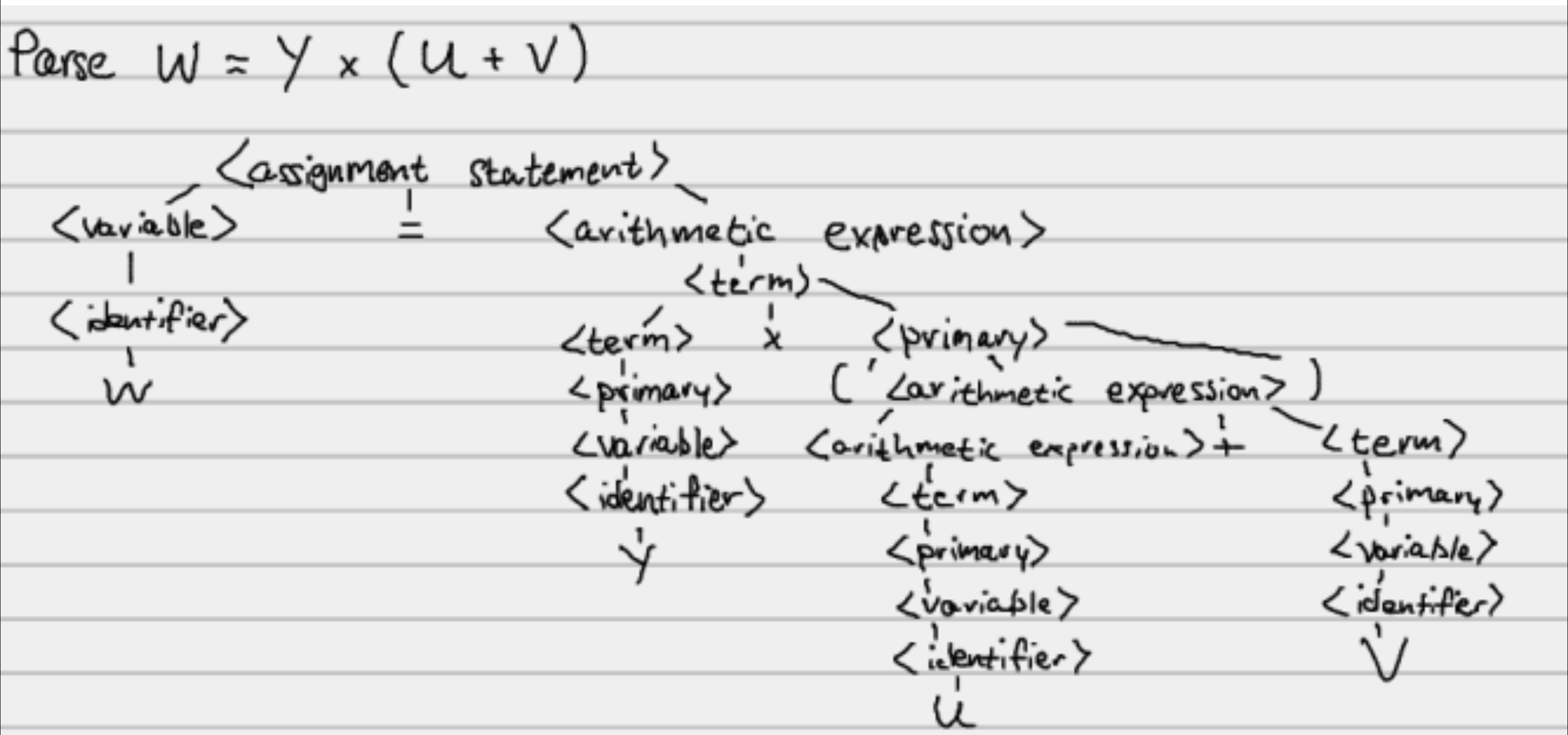
ID	Type	Title	Status	Assignee	Date	Action
# 44	Bug	Refactor Content controller	New	Unassigned	27-02-2009	[edit] [archive]
# 43	Bug	~~Page Not Found - Contact Form~~	Resolved	Unassigned	25-02-2009	[edit] [archive]
# 42	Bug	~~Add custom 404 page~~	Resolved	Fede	25-02-2009	[edit] [archive]
# 41	Bug	Pagination needs styling	New	Unassigned	25-02-2009	[edit] [archive]
# 40	Bug	~~View Full List link (Homepage)~~	Resolved	Unassigned	25-02-2009	[edit] [archive]
# 39	Bug	~~Do we need to send the activity logs to Apandi~~	Resolved	Robertoreal	24-02-2009	[edit] [archive]
# 37	Bug	~~RSS feeds not working~~	Resolved	Fede	24-02-2009	[edit] [archive]
# 38	Bug	Frank: Add logo to the email templates	New	Unassigned	24-02-2009	[edit] [archive]
# 9	New Feature	Add schedule templates	New	Fede	24-02-2009	[edit] [archive]
# 10	Improvement	Cron: Send to a friend, email header	New	Fede	24-02-2009	[edit] [archive]
# 17	New Feature	Media RSS	New	Fede	24-02-2009	[edit] [archive]
# 18	New Feature	Send to a friend	New	Fede	24-02-2009	[edit] [archive]
# 19	New Feature	Related links (group)	New	Unassigned	24-02-2009	[edit] [archive]

P017: Cross Domain Issue

- Application that manages Tickets on a User-defined, tagged Graph. Should be "Server <-> Browser", involves a DB, a (Java?) Backend and some modern WebFramework.

P018 : Grammar IDE

CISPA • Matthias Höschele



P018 : Grammar IDE

- We are looking for a grammar development tool that helps with writing context free grammars in the format of our grammar based fuzzer Tribble. This would include a UI for writing grammars, visualizing derivation trees, a debugger for backtracking parsers with potential extensions for ambiguity detection.

P019: Android - Universal Test App

Organization: CISPA

Contact: Jenny Hotzkow

P019: Android - Universal Test App

- The task is to develop an Android app with a corresponding test-suite, utilizing various permissions and features (e.g. camera, location ...) and with plenty of input fields. The test-suite shall contain integration tests for all available features and all existing input fields.

P020: Nitrate-Proiect

Organization: Chemistry Dept.

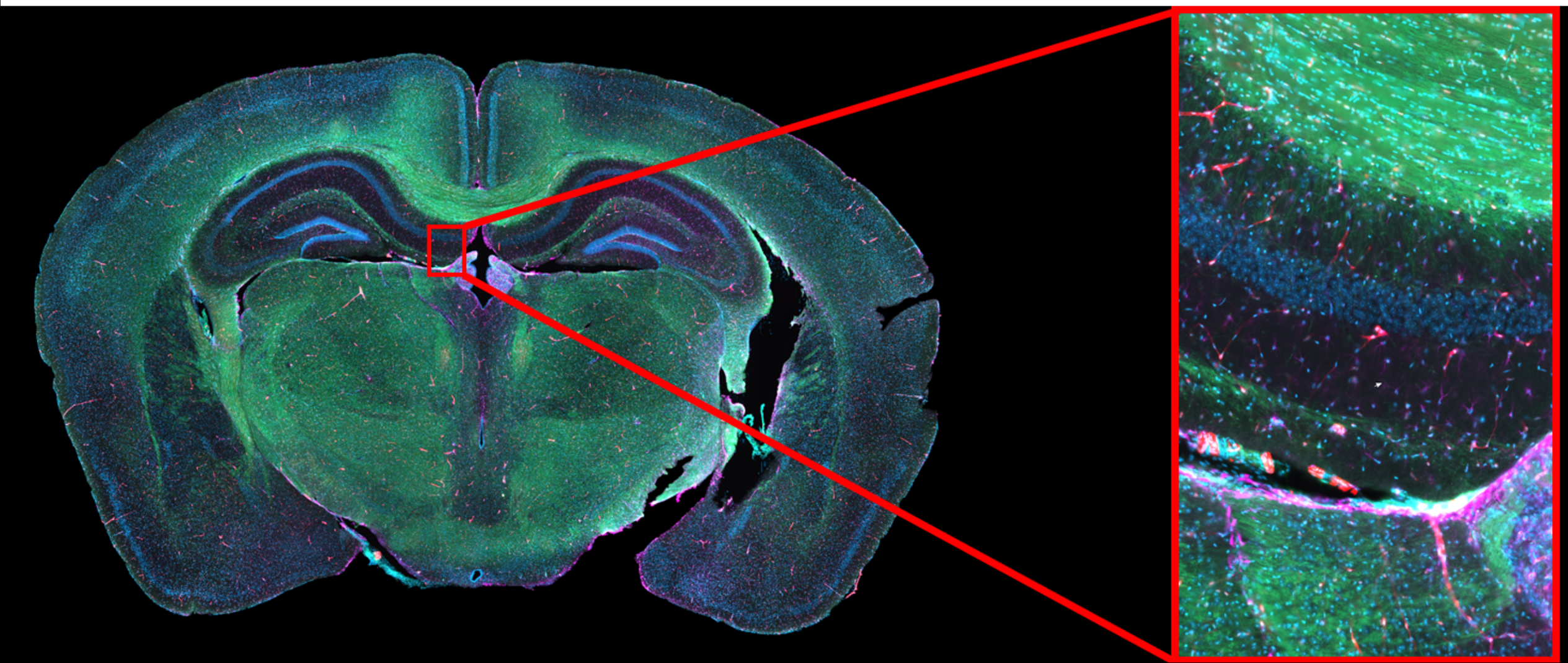
Contact: Johannes Huwer

P020: Nitrate-Proiect

- In the context of Transformative Chemistry Education and the associated learning over and with digital media, the study is not carried out using "experimental boxes", but rather by using tablet computers and suitable nitrate-specific measuring sensors (Sjöström, Rauch & Eilks, 2015). The objective of this sub-project is to develop an application for the data backup and interactive participation of the students. Although data backup can be supported by an interactive map with various features, the interactive participation of the students should be a priority. It is important that each student participating in the project manage their own results on their own device

P021 : Google Earth for the mouse brain

Molecular Physiology, CIPMM • Frank Kirchhoff



P021: Google Earth for the mouse brain

- “How does the brain work?” is among the top 10 of global questions. We are working on the cellular and molecular mechanisms of neuron-glia interaction in the central nervous system. In order to gain deeper insight into the structure of a brain, we are planning to create a digital 3D model of an entire mouse brain at a cellular resolution. Using different cell-staining techniques, we are able to specifically visualize certain cell types in tissue samples. These tissue samples covering major parts of the brain are then scanned, using a fully-automated, digital microscope. After vectorization all images from a part of brain (or even the total brain) have to be merged to give a 3D dataset. A single image can easily have 120 Megapixels.

P022 : The Romance Languages in an app –

Organization:
Romance Studies (Romanistik)

Contact:
Fabienne Klos

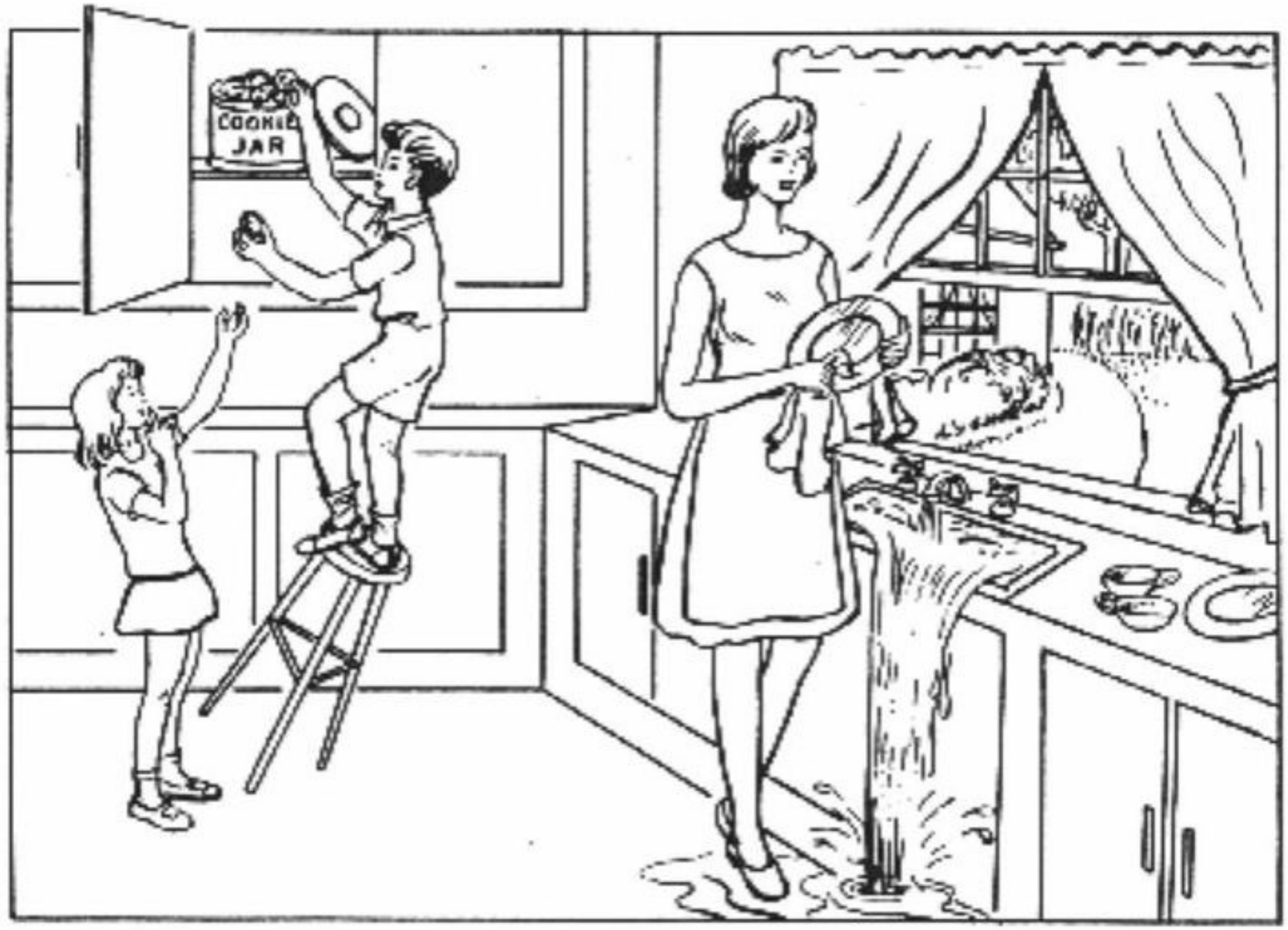
P022 : The Romance Languages in an app –

- The objective of this project is the development of an app for iOS (and Android) about the didactic linguistic approach EuroComRom. EuroComRom is a concept developed by Horst G. Klein and Tilbert Stegmann (2000), which aims at obtaining a receptive language competence in all Romance languages such as Spanish, French, Italian, etc. EuroComRom is managed and further developed by Prof. Dr. Polzin-Haumann's Chair of Romance Linguistics at Saarland University. Besides the theoretical basics about this concept, the app may also include little games or quizzes to test and improve one's own language competence and language awareness.

P023: Recording App for Cognitive

Organization:
DFKI GmbH

Contact:
Nicklas Linz



P023: Recording App for Cognitive

- Students are asked to design an app to facilitate and record cognitive tests, that are used in the diagnosis of dementia.

P024:
Dienstreiseanträge

CISPA • Sabine Nermerich

P024: Dienstreiseanträge

- Zur Beantragung von Dienstreisen gehört neben der reinen Erfassung der Eckdaten der Reis auch die Begründung der wissenschaftlichen Notwendigkeit im Sinne der Projektfinanzierung, die sich z.B. daraus ergibt, dass ein Author sein Papier auf einer Konferenz präsentiert. Wichtig dabei ist allerdings, dass ein Mitarbeiter weiss, woraus er bezahlt wird, welche Acknowledgements er entsprechend auf seinen Papieren haben muss, und was die Anforderungen des jeweiligen Geldgebers an Dienstreisen sind. Ziel dieses Projektes ist die Bereitstellung eines webbasierten Systems, in dem Mitarbeiter (authentifiziert gegen LDAP) jederzeit in der Lage sind, zu sehen, woraus sie bezahlt werden, welche Acknowledgements sie platzieren müssen, und welche Reisen sie wie problemlos antreten Können.

P025:
Tante Emma Laden

Organization: CISPA

Contact: Sabine Nermerich

P025:
Tante Emma Laden

- Ziel dieses Projektes ist die Entwicklung eines Verwaltungssystems für Kaffee und Süssigkeiten im Institut. Derzeit benutzen wir einfache analoge Kaffeekarten, die es mit einer komfortableren Lösung zu ersetzen gilt. Angedacht ist ein Online-System, in dem man sein aktuelles Guthaben einsehen kann, sowie eine mobile App, mit der man "Bezüge" buchen

P026:
Auskunftsanspruch

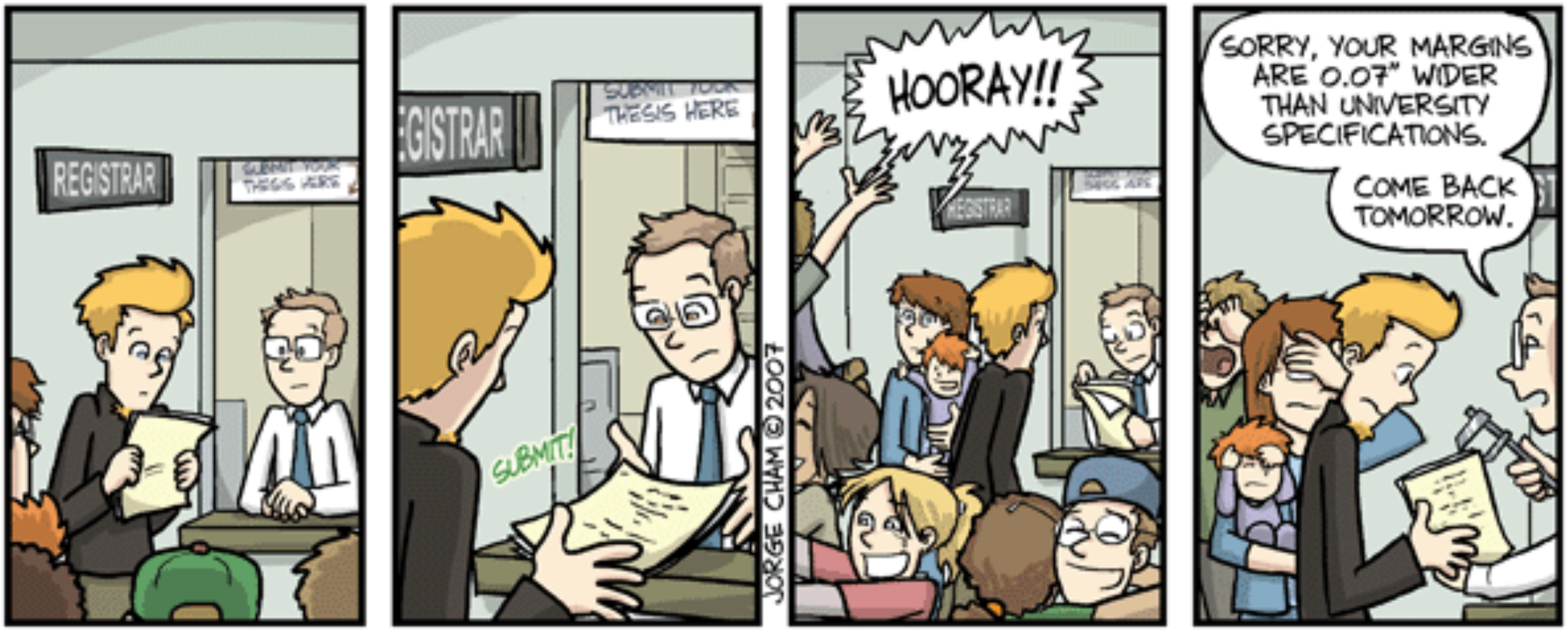
Prof. Dr. Stephan Ory

P026: Auskunftsanspruch

- Nach dem neuen Urhebervertragsrecht soll ein Kreativer einmal im Jahr ohne besondere Voraussetzungen Auskunft über die Nutzung seiner Werke (Audio, Text, Bild, Video ...) verlangen können. Vielfach fehlt es an Dateninfrastrukturen dazu. Idee: ähnlich wie mit einem "Pixel" bei der Zählung von Aufrufen für die Werbung verfahren: - Das Medium (z.B. Webseitenanbieter) hat Stammdaten - Der (z.B.) hat Stammdaten - Der Text des Autors A auf der Website X erhält ein Pixel, das beim Aufruf verschlüsselt IDs von A und X übergibt - A müsste die Abrufe seiner Texte (generell: Werke) bei Websites X, Y und Z (...) jederzeit unter seinem Account einsehen können - X müsste die Abrufe der jeweiligen Texte (Werke) aller Autoren einsehen können - Verschlüsselung der Daten auf dem Server <!— - Brief an den Autor: Melden Sie sich im System an - 1x für alle teilnehmenden Medien. Damit ist man die Pflege der Bestandsdaten los - Adressänderungen, Erben und so. - Man müsste dann wie gewohnt einen Pixel einbauen mit der ID des Autors und der ID des Mediums (eigentlich ein zusammengesetzter aus Content und Medium) - das ginge für eine Textseite und allen verlinkten Content (wie Metis von VG WORT aber über PDF hinaus). Auskunft: Der Autor kann selbst Tag und Nacht in die Datenbank und bei allen beteiligten Medien seine Abrufe einsehen. Das Medium könnte ggf. auch einen Ausdruck aus seiner Sicht (mit dem nur von ihm publizieren Content) machen. Bleibt der Teil mit der Rechnungslegung, da wird man auf Rspr. warten müssen. Aber den tatsächlichen Teil hätte man und hätte den Kreativen mit im Boot. —> Eine der Herausforderungen besteht darin, das so zu bauen, dass die CMS damit umgehen können, ohne viel Aufwand beim Erstellen etwa einer redaktionellen Website im

P027: Thesis Manager Project

SE Chair • Andreas Rau



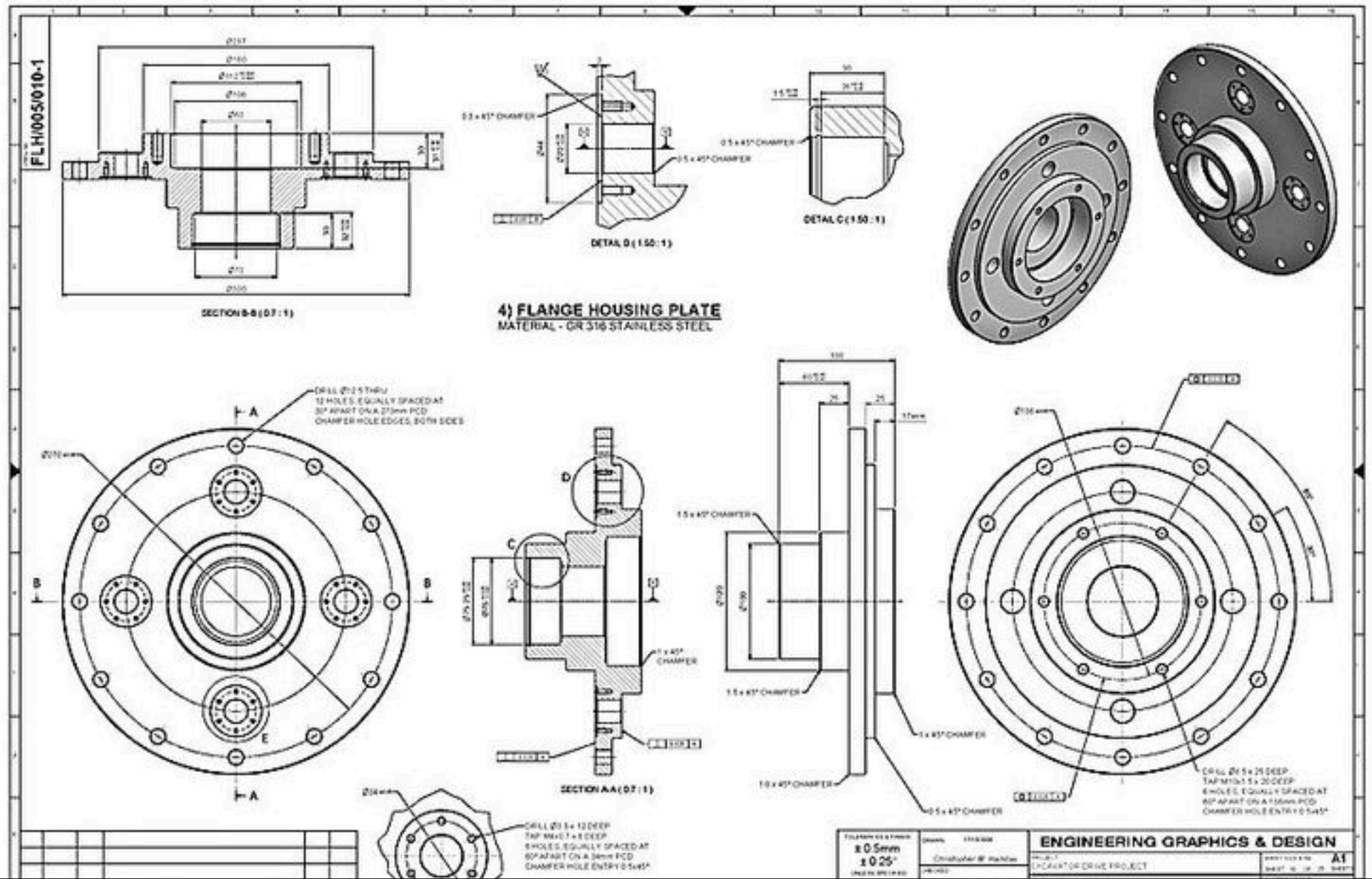
WWW.PHDCOMICS.COM

P027:Thesis Manager Project

- Applying for a Bachelor/Master Thesis, providing the necessary background information and deciding on a topic is the first step of many to get your final degree. We are interested in a management service (web service) to ease this process and also as a simple way for thesis advisor and student to monitor the respective progress. The application should include: - a (secure) web application with an account management - a role model (student, advisor, supervisor) - the possibility of integrating a calendar - communication interface - meeting scheduling interface - progress monitoring

P028: Learning app for applied

Chair of Applied Mechanics • Michael Roland



P028: Learning app for applied

- We are interested in a learning application for our basis courses for bachelor students. The project should combine different learning programs, e.g. a calculator for frameworks or internal force variables and a database for learning aids. Therefore we need a front end as well as back end with an easy usability. The app should be

P029: Code Plagiarism

WE WANT YOUR CODE, STUDENTS.
BUT WE DISLIKE PLAGIARISM!

```
#!/usr/bin/env python
kmh = int(raw_input("Enter km/h: "))
mph = 0.6214 * kmh * 1.0
print "Speed:", kmh, "KM/H = ", mph, "MPH"
```

```
#!/usr/bin/python
kmh = int(roh_eingabe("Enter km/h! "))
mph = km_h * 0.6214 + 0.0
print „Speed:", km_h, "KM/H = ", mph, "MPH"
```

YOUR PROJECT: FIND INCIDENTS OF POTENTIAL CODE PLAGIARISM AMONG STUDENT CODE SUBMISSIONS

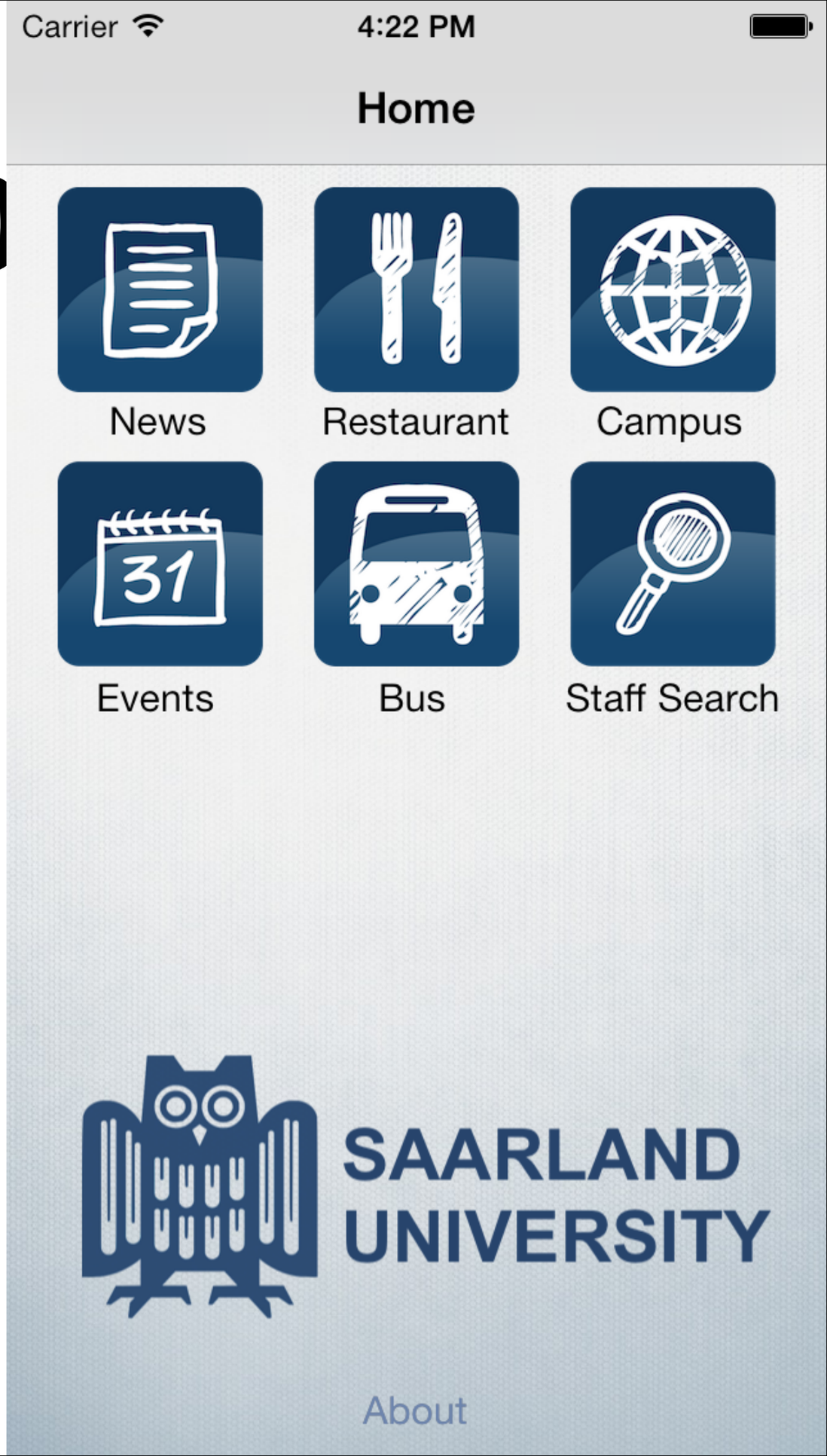
CONTACT: ROSSOW AT CISPA DOT SAARLAND

P029: Code Plagiarism

- Our idea is to create a tool that integrates to CakeCMS and that can detect (potential!) incidents of code plagiarism among student submissions. Our primary use case is comparing Python code, but support for other languages (C, C++, assembly, ...) would be nice.

P030: Uni App 2.0

CISPA • Andreas



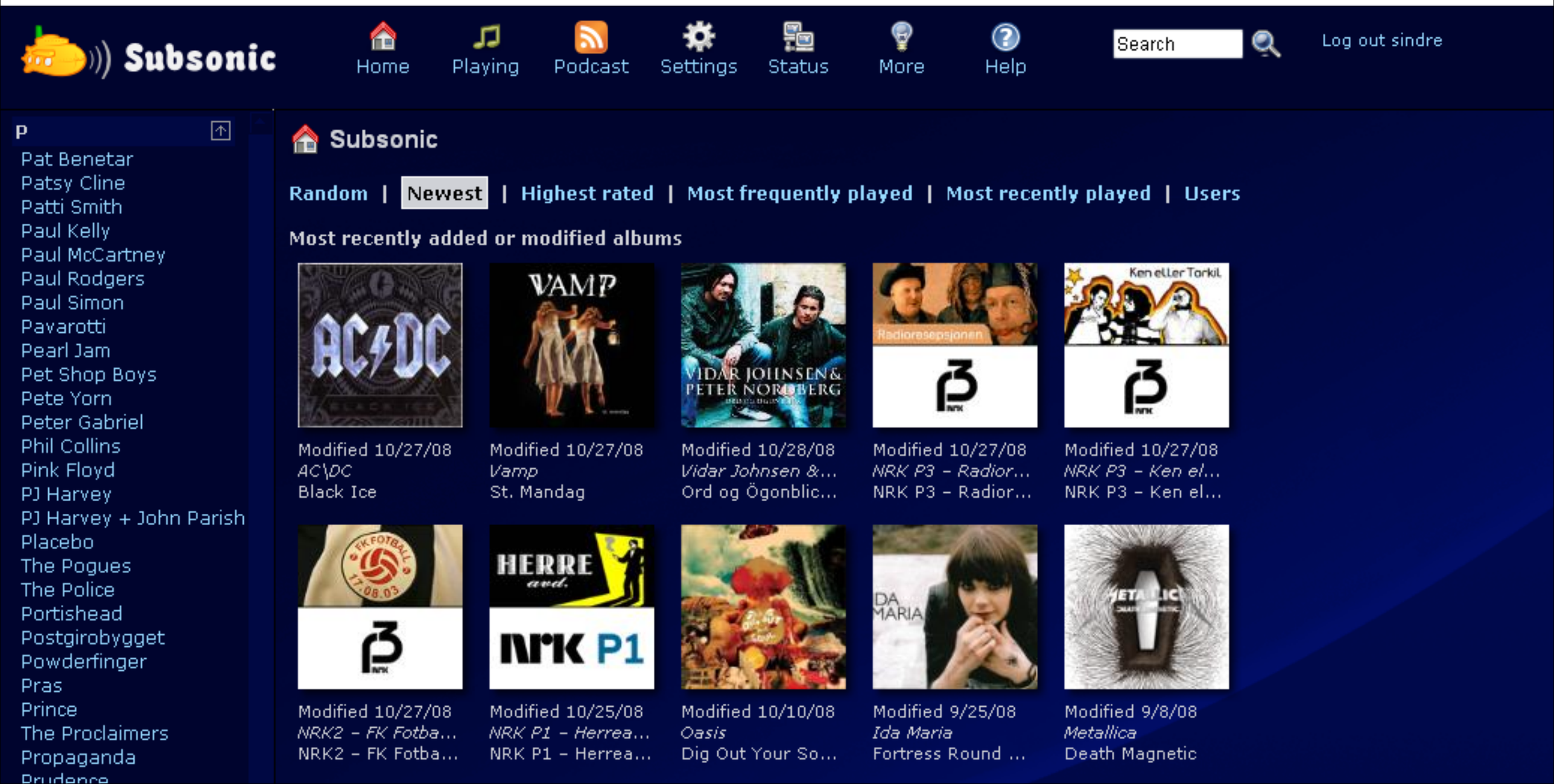
P030: Uni App 2.0

CISPA • Andreas

Rewrite the Uni App in Swift.
Feel free to restructure and/or redesign as you like.
Pay extra effort to testing.

P031: Syncsonic

Testfabrik AG + SE Chair • Alex Schlosser



P031: Syncsonic

- A cross-platform mobile app to sync media files between your phone and a Subsonic media server. Built upon Apache Cordova, an open-source framework for cross-platform development.

P032: HR Tool Interne

Interne Positionsvermittlung • Laura Schumm

P032: HR Tool Interne

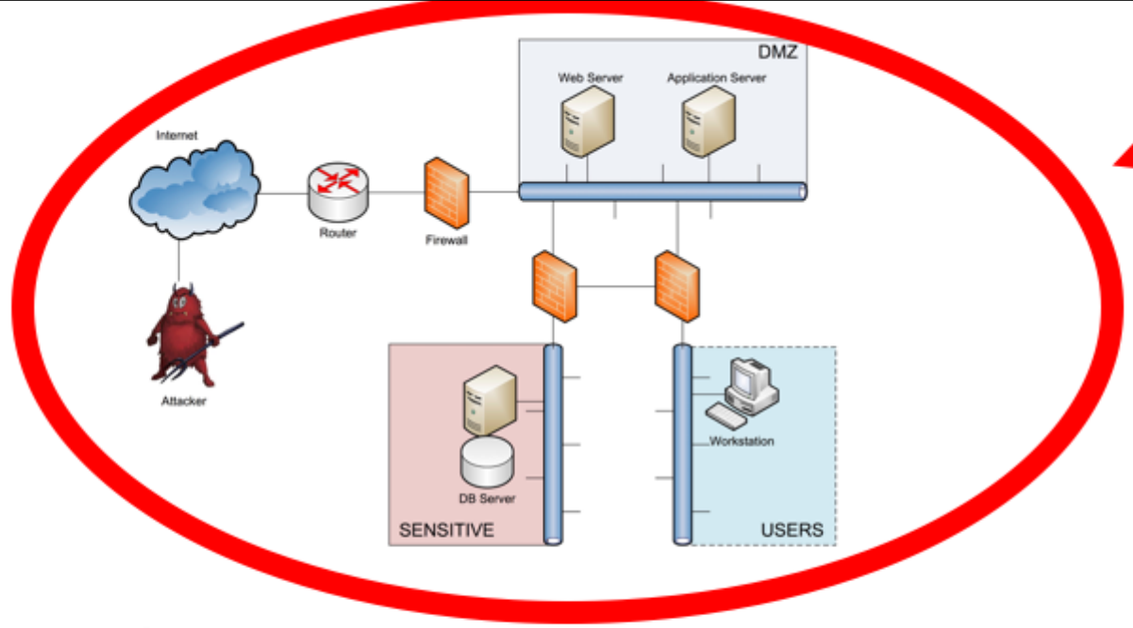
- Vorbehaltlich der Zustimmung der Verwaltungsleitung möchten wir ein Portal einrichten, welches Mitarbeitern ermöglicht sich universitätsintern umsetzen zu lassen. Die Idee ist, dass sich Mitarbeiter online in einer Art internen Stellenbörse anmelden sowie einen Lebenslauf und ein Motivationsschreiben hochladen können. Im zweiten Schritt sollen Führungskräfte in diesem Portal nach geeigneten Kandidaten für eine freie Stelle suchen können. Der Zugang zum Portal soll jedoch beschränkt sein und für einzelne Personen nur durch uns freigegeben werden. Idealerweise soll das Portal auf unserer Webseite (Typo3) eingebunden werden. (English

P033 : LawVis

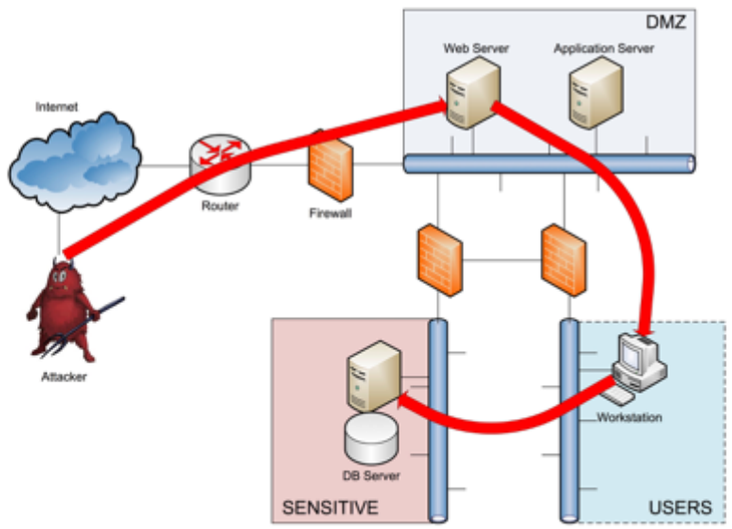
CISPA
Christoph Sorge

P033 : LawVis

- Laws are specified in text form, but they contain relations that can be interpreted as edges in a graph. Task: To find and to visualize such relations in a graph that is easy to navigate, allows quick access to the respective text, and looks cool. Complications: * Support different levels of aggregation (e.g., nodes can represent individual sections or the whole statute) * Support different kinds of relations. Obvious: Relations are explicitly stated (though complications may also arise). Less obvious: Other relations, e.g. by co-citations - both laws are cited in the same document. In case of a large team, the project can be split up in a basic visualization part and an analysis part that discovers additional relations. One German-speaking team



P034: Network Topology and Credential Scanning for Vulnerability



Organization: CISPA

Contact: Patrick Speicher

P034: Network Topology and Credential Scanning for Vulnerabilitv Assessment

- The InfSec and FAI groups are working on a tool that uses planning (a) to simulate attacks on a network, and (b) to provide a cost-efficient combination of mitigation techniques such as firewalls, patches and local workarounds which lowers the attacker's success. This two-fold planning tool is implemented and runs. However, the models we currently derive are very coarse and require more user input than necessary. The project we propose is an independent extension of the existing OpenVAS security scanner and the OVAL reference implementation Ovaldi in order to obtain this data in a centralised, extensible and machine-readable fashion. Ovaldi interprets a semantic description of software, vulnerabilities and available fixes and performs a local scan to figure out the software installed, known vulnerabilities and patches ready to apply. To improve our models, we need in addition: (1) information about the network topology, e.g., whether host A can address host B on port 80 via TCP, (2) information about the credentials installed, .e.g., if host A stores the password for user U of the SVN service on host B, (3) information about the user hierarchy of services, e.g., the system users and their privileges. Points (2) and (3) require extending the OVAL spec and implementing a search at known positions (for 2) and an interface for parsers (for 3) in ovaldi. We would appreciate if the code was clean enough so it has a chance to be included upstream. As (3) requires parsing all kinds of formats, we would be satisfied with a clean and extensible interface. OpenVAS implements a protocol which collects these information from numerous hosts and collects them centrally. It provides Ovaldi integration. It seems to make sense to solve (1) within OpenVAS, however, weighing the pros and cons of such an integration seems to be design decision that should be made during the project.

P035: Inventarisierungssyste

CISPA

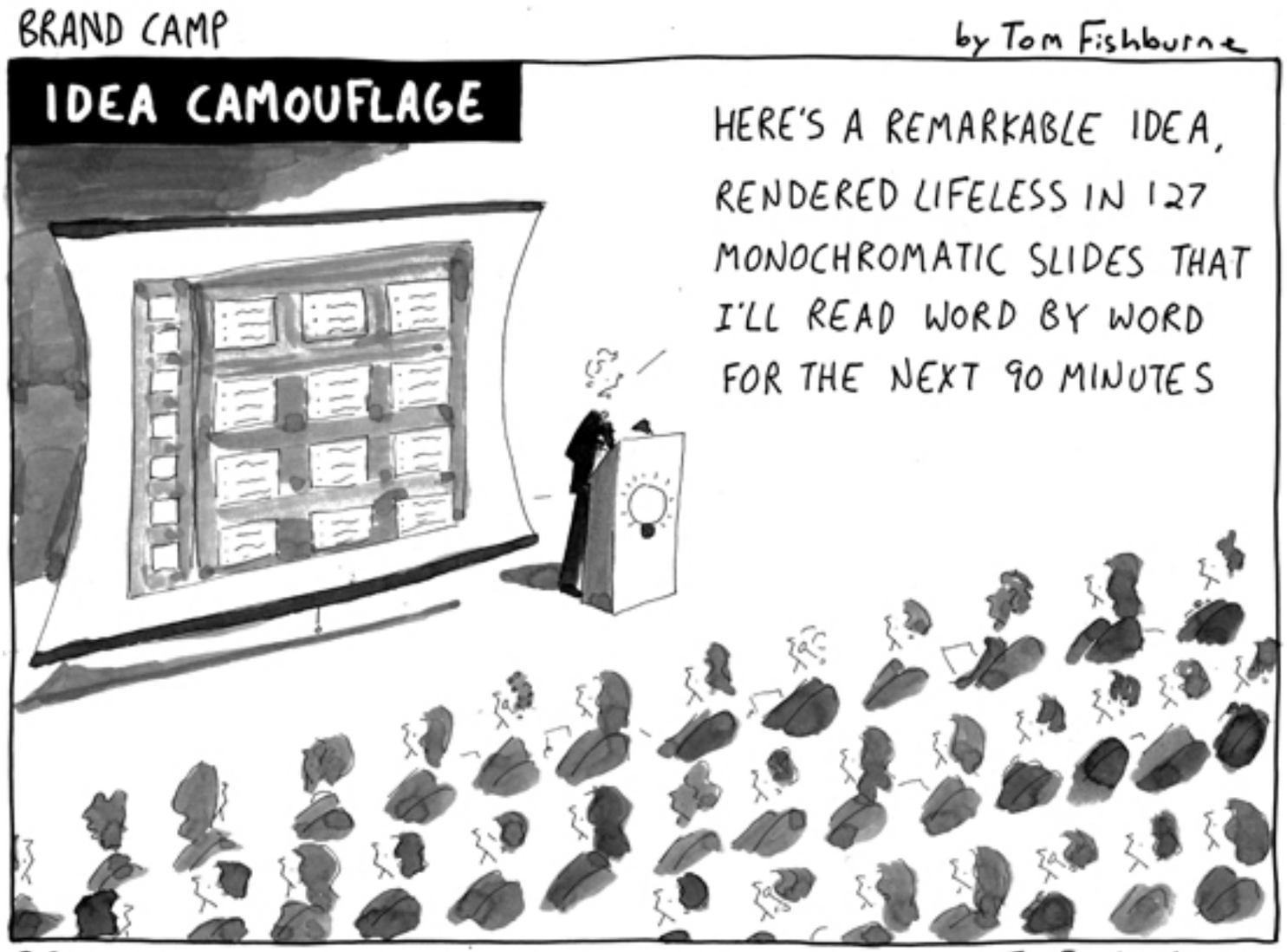
Tanja Steffen

P035: Inventarisierungssyste

- Ziel ist die Entwicklung eines datenbankbasierten online Invenatrisierungssystem, in dem man Gerätschaften erfassen kann. Es müssen Inventaraufkleber druckbar sein. Die Räume des Gebäudes werden mit einem QR-Code versehen, so dass man mit einer ebenfalls zu entwickelnden Android oder iPhone-App einfach Gegenstände zu Räumen buchen kann, um jederzeit die Geräte finden zu können.

P036: Just-in-Time presentation

CISPA • Joshua Steffensky



P036: Just-in-Time presentation

- The basic idea behind this project is, that while one person started with a presentation in front of an audience another (or multiple other) people can still alter/append this exact presentation. Of course the audience should not be able to notice any clues about the modifications made.

P037: MaryTTS Native Integration

DFKI / Saarland University
Ingmar Steiner

P037: MaryTTS Native Integration

- MaryTTS is an open-source text-to-speech platform written in Java. However, it stills lacks proper integration with native accessibility frameworks (desktop or mobile). We (the MaryTTS developers) are looking for components to integrate MaryTTS with the Microsoft Speech API, Android TextToSpeech, iOS AVSpeechSynthesizer, etc. -- ideally in a user-friendly package.

P038:
Gebäudeleitsvstem

CISPA • Kevin Streit

P038: Gebäudeleitsvstem

- Das Gebäudeleitsystem des CISPA zeigt derzeit die Zuordnung von Mitarbeitern zu Räumen an und kann von Gästen genutzt werden, um Personen zu finden. Dieses System soll erweitert werden um Mensa-Plan, Busfahrplan und weitere Dienste. Dabei geht es um mehr als das blosse Darstellen von Webseiten. So soll es z.B. möglich sein, Inhalte personenbezogen darzustellen. So könnte etwa, wenn ein Mitarbeiter am Monitor vorbeigeht dargestellt werden, wie viel Verspätung der Bus hat, den er wohl gleich nehmen wird. Eine Erkennung des Mitarbeiters wäre evtl. über Bluetooth, WLAN, NFC o.ä. möglich. Eine entsprechende Lösung zu finden ist Teil dieses Projektes.

P039: Auf den Spuren der Römer im

Institut für Alte Geschichte • Christine van Hoof • Samira Scheibner

ANDROID APP ON Google play

Available on the App Store

P039: Auf den Spuren der Römer im

- Durch eine Zusammenarbeit der altertumswissenschaftlichen Studierenden mit Studierenden aus dem Bereich der Informatik sollen Informationstexte zu archäologischen Denkmälern im Saarland in die Gestaltung einer App einfließen, deren genauer Aufbau (mit Sammel- und Suchspiel, Einbettung von QR-Codes, Lage an antiken Straßen o.ä.) mit den Informatikstudenten gemeinsam konzipiert werden soll.

P040:
Network Auto Tester

Organization: Lehrstuhl Nachrichtentechnik

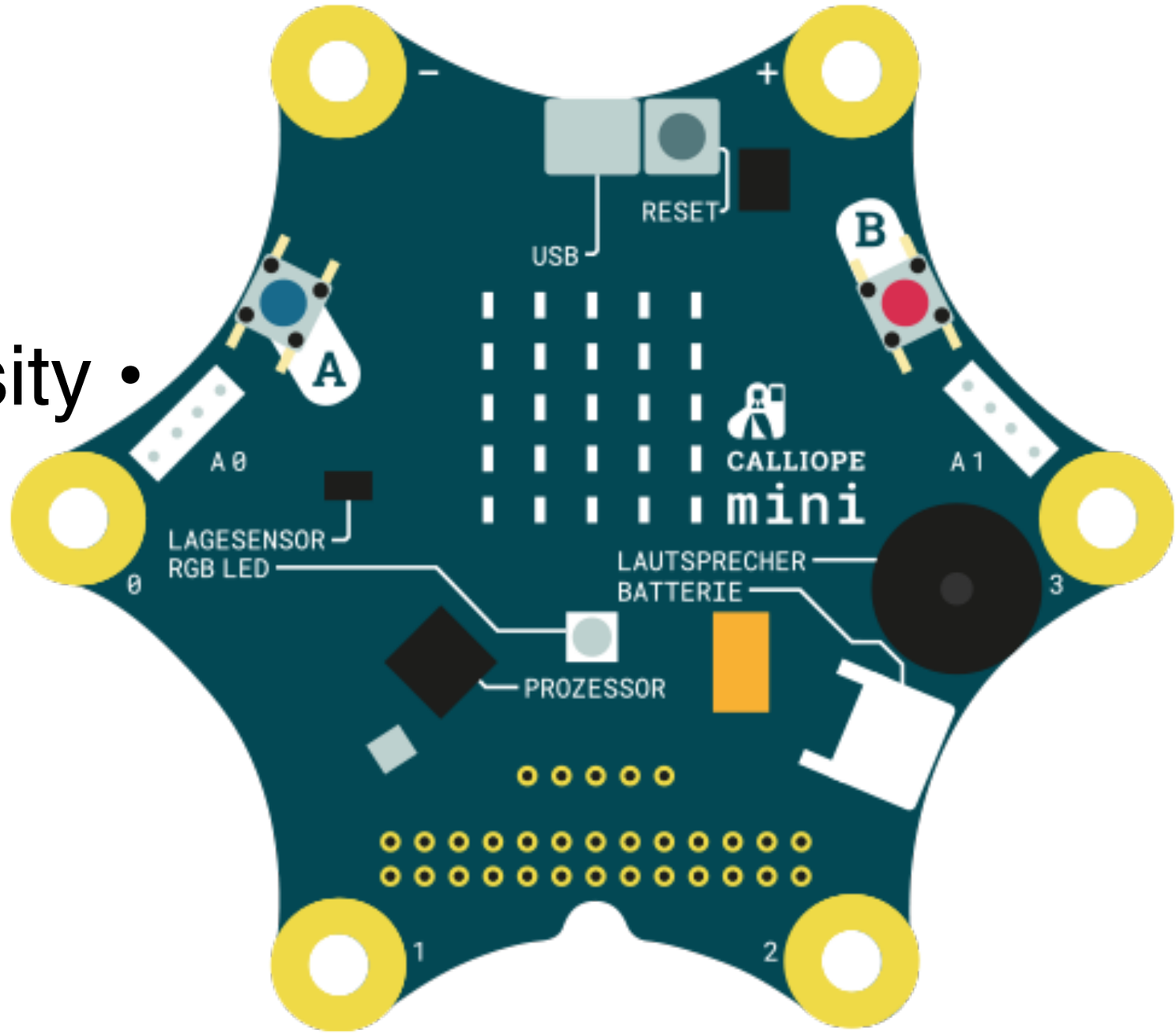
Contact: Frank Waßmuth

P040:
Network Auto Tester

- Students will develop a network connectivity tester to automate standard network troubleshooting. The tester will e.g. assemble information about the connected network such as link parameters, address information, available VLANs, etc. as well as perform basic connectivity and performance tests and display the results. The intention is to produce an open and low-cost alternative to existing commercial products. We will provide a handheld linux computer with a touch screen as a prototyping platform.

P041: Calliope Platform

Saarland University •
Verena Wolf

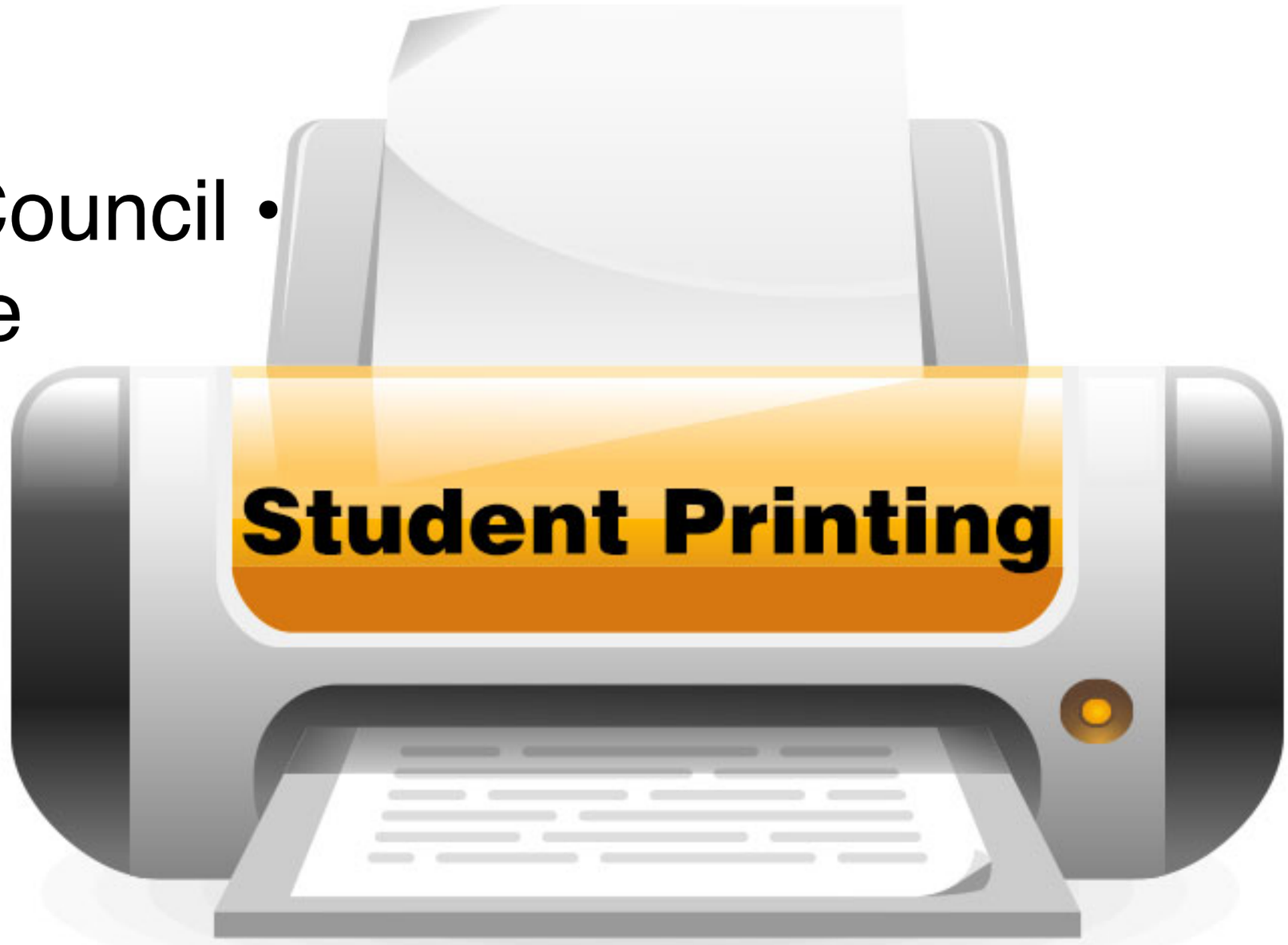


P041: Calliope Platform

The goal of this project is the development of a web platform for teachers using the Calliope mini computer. The platform should allow the upload of teaching material (description, pdfs, images, videos, etc), a categorization/search/sort function for the material and comments/discussion.

P042: Printerface

CS Student Council •
Jannis Froese



P042: Printerface

We envision an administration tool that communicates with our public (and free) student printer via a not-really-documented SOAP protocol to automate certain repetitive tasks (detect fault conditions in which queues need to be cleared or a restart of the device is required), as well as providing a few convenience features (queue management, statistics etc.). This project would require a certain amount of reverse engineering of an XML-based protocol, which might be attractive for students.