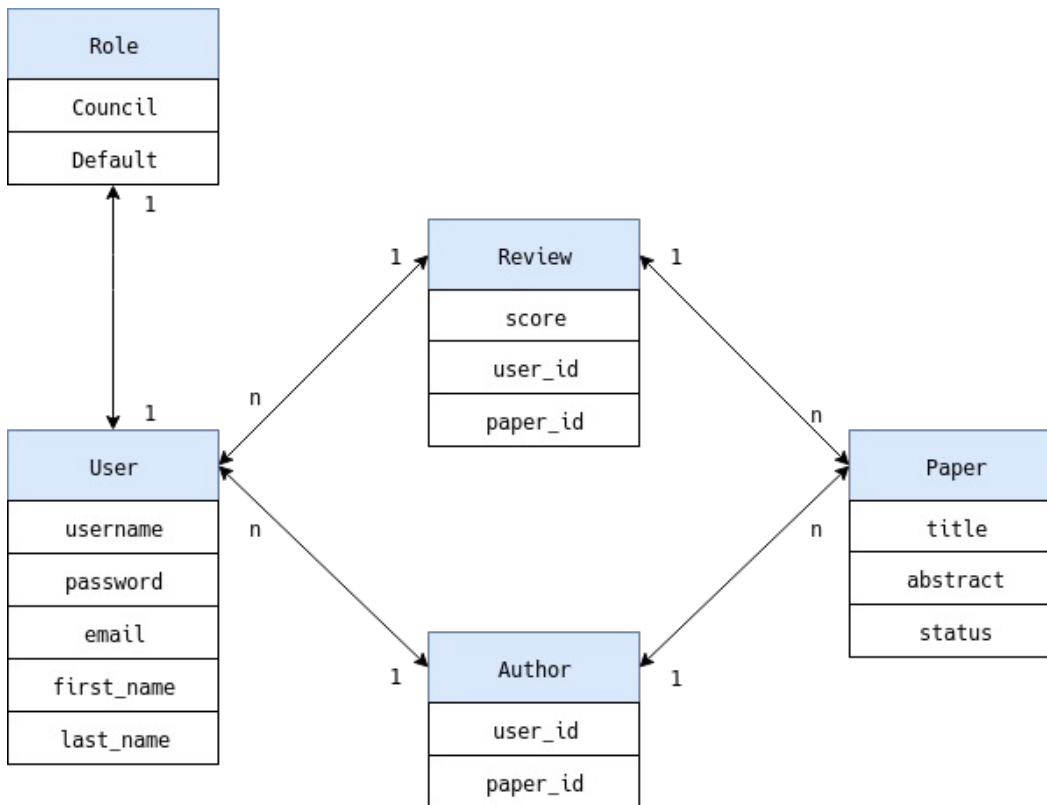# Talbe of Content

1. Technical Documentation

This Project was Developed as a part of a Univeristy exercise and is a platform to publish, rate and validate papers. It was developed in Python

Flask only and does not contain any additional libaries.

Developer Tools and Decorator Class

- The helper class url_for, was created to make it possible to get around the caching of the browsers. It is mainly meant for development purposes since it makes it easier to debug and test css styling on the fly.
- The decorator class, brings functionality such as login_required and required_role. This makes authentication and authorization requirements for parts of the application much easier.

Database-Schema

The database-schema on which this application was developed of, constists of five tables: 'users', 'papers', 'reviews', 'authors' and 'roles'. You can see the relational quantities and the contents of the tables in the detailed uml-diagram above.

Once the schema was set it was pretty straight forward to setup the

Models. The reason we decided to seperate the Author and Review tables, was to simplify the relations between the user and paper to the review and author. This way it made it is easier to use and manage the relations since additional information could be stored in either table if required.

Used Pattern for app structure

We went the with Model-View-Control(MVC) pattern for this application.

- Model
    - Our models are the database representations of the tables.
    - To improve performance minor tweaks could have been done to the paper model since it contains functionality which should be in the controllers, the functions mentioned here are the: get status and get score functions
- Control
    - The main controller is the views.py
        - Redirect requests and general form request are processed here
        - It is responsible to process every incomming query, request and only return processed data to the view
        - Helper controllers such as user_controller, paper_controller and role_controller were written to abstract functionality and handle database specific queries
- View
    - The views are the jinja2 templates which display the data delived by the controllers, which get rendered through flasks render_template method

Design Decisions

The whole design of the pages were done manually and support mobile usage, but are not meant for mobile usage.

We focused strongly on the aspect reusablity of css and html code through inheritance of jinja2 templates.

Outlook

The current version of the website is just the first step – MVP. There are a lot of points that can be extended to increase the user experience and should be considered in the future.

- Improved ui for mobile
- Extend usablity of the website by working together with the user.
  - example: Select boxes for assigning reviwer, allow double click to assign.
- More validation on all forms and fields
  - example: Minum lenght for title & abstract
- Feedback about wrong input (Currently its mostly the happy path).
- Upload for the file of the paper
  - A way to display the paper on the website
- More concret Role description.
  - What is a normal user allowed to see & change.
    - Can only create papers for him self?
    - Only the intial creator can add authors and can not be removed?
  - What can the conference chair do?
    - Creation of paper?
    - Nominate new conference chair member?
- User & Invitation system.
  - User can send invation to co-authors of their paper, that are not yet registred on the page.
  - Profile page of user, where other user can see the papers of them.
  - Profile page with avatar and some comments from the user.

3. Setting up the project

download the repository

```
git@github.com:SebastianKapunkt/paper-review-
platform.git
```

cd into the project folder

```
cd paper-review-platform
```

install requirements

```
pip install -r requirements.txt
```

set envirement varaible

```
export FLASK_APP=app/__init__.py
```

2. Instruction for use of website

Registration

Information required to create an account:

- a username
- firstname
- lastname
- email
- password

You can find the signup page here or under /signup

please enter the require information into the form:

Login

To signin you need to enter your e-mail and password. You can find the Login under /signin

Logout

You can find the logout in he top right of the page, in a dropdown by hovering your name. Or go to /signout

Submitting a paper

For submitting a paper you go to /submission or find the tap in the navigation bar:

Now you can See the form.

1. Field for the title of the paper.
2. Field for the abstract of the paper.
3. A list of people that can be authors. Note here that if you don't select any author, you will be the author automaticly. To assign someone as a author select a user and press on the button 'Add'(4).
4. Buttons to push items from one box to the other. 'Add' will push selected item from left to right and 'Remove' the other way around.
5. This is the list of selected authors. Only the user in that list will be author, don't forget your self if you are one!
6. Once everything is filled you can submit 'create' the paper.

Clara Sanders ▾

Paper Review Platform

Overview   Paper   Submit Paper

①

| Title | Action |

Abstract ②

⑥ create

Authors ③

| council |
| clara |
| peter |
| julia |

④ Add →
← Remove

⑤

Paper list/detail/edit

List of all paper

All papers that were submitted on this plattform are listed here and shown in reveresd chronological order, latest first

The list of paper can be found here: /paper or in the navigation bar:

1. Column for title of paper
2. Column for list of authors of that paper
3. Column for status of paper
4. If you click on a row you come to the detail view of a paper

Clara Sanders ▾

Paper Review Platform

Overview | Paper | Submit Paper

Title ①	Authors ⓒ	Status ⓙ
The products of a single maize sesquiterpene synthase form a volatile defense signal that attracts natural enemies of maize herbivores ④	elias	Under Review
Results from a Low-Energy Analysis of the CDMS II Germanium Data	maria peter	Under Review
Zur Rührabhängigkeit des Grenzstromes an teilweise bedeckten rotierenden Scheibenelektroden bei relativ grossen Umdrehungszahlen	clara elias maria	Under Review
Practical application and evaluation of no-SQL databases in Cloud Computing	julia maria peter	Approved
sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam vol	clara elias julia	Under Review

Paper detail view

In this view you can find all the information that are public, to see for all user.

1. Tiel of the paper.
2. Abstract of the paper.
3. List of the authors.
4. Status of the paper.
5. If you are an author, you can see the edit button and use it to get to the edit view.

Paper Review Platform

Overview | **Paper** | Submit Paper

Title ①

Edit ⑤

Zur Rührabhängigkeit des Grenzstromes an teilweise bedeckten rotierenden Scheibenelektroden bei relativ grossen Umdrehungszahlen

Abstract ②

Model electrodes having a known number of active circular sites were used to obtain the dependence of the limiting current on the rate of rotation of disk electrodes. The limiting current may be calculated by means of the formula for the ring electrode if the sites are sufficiently large and sufficiently far apart. For smaller sites, the current is larger than that given by this equation because non-linear as well as linear diffusion and convection contribute to it. The current to each site is influenced by that to neighbouring sites if they are not sufficiently far apart. In this case it was not possible to calculate the contribution of non-linear diffusion to the limiting current. It lay between the value calculated considering linear and non-linear diffusion and that calculated taking into account convection in addition to the two types of diffusion.

Authors ③

clara

elias

maria

Status ④

Under Review

Paper edit

In this view as an author you can edit your paper information. And also add or remove authors (also your self!)

1. Change title of paper.
2. Change abstract of paper.
3. Add & Remove authors.
4. [Save & continue] -- you save the data you changed and also stay on the page.
5. [Save] -- you save the data you changed and go back to the detail view (As a feature request it can also be the list of papers or the users overview page).
6. [Cancel] -- You don't save any data and just go back to the detail view (Or if requested as a change to another view).
7. Status of the paper

Paper Review Platform

Overview | **Paper** | Submit Paper

Title ①

Zur Rührabhängigkeit des Grenzstromes an teilweise bedeckten rotierenden Scheiben

Abstract ②

Model electrodes having a known number of active circular sites were used to obtain the dependence of the limiting current on the rate of rotation of disk electrodes. The limiting current may be calculated by means of the formula for the ring electrode if the sites are sufficiently large and sufficiently far apart. For smaller sites, the current is larger than that given by this equation because non-linear as well as linear diffusion and convection contribute to it

Actions

⑥ save and continue

⑤ save

① cancel

Status ⑦

Under Review

Authors

julia	③	clara
council	Add →	elias
peter	← Remove	maria

User overview page and review

User overview page

This page is the landing and main page for the logged in user (you 😃) You can find it at the root "/" or in the navigation bar:

Here you have two 'filter'/main lists of paper

1. Your submitted papers / where you are author
2. Papers where you are assigned to review

Submitted paper

This is a list of papers you submitted or you are an author of.

1. Title of the paper.
2. Authors of the paper.
3. Stauts of the paper.
4. If you click on a row you come to the detail view of the paper (explained here).

Clara Sanders ▾

Paper Review Platform

Overview   Paper   Submit Paper

submitted	to review

Title ①	Authors ②	Status ③
Zur Rührabhängigkeit des Grenzstromes an teilweise bedeckten rotierenden Scheibenelektroden bei relativ grossen Umdrehungszahlen ④	clara elias maria	Under Review
sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam vol	clara elias julia	Under Review

Papers to review

This is a list of papers where you got requested from the conference chair to review them.

1. Column title of paper.
2. Column authors of paper.

3. Column status of paper.
4. Column of score of your review of that paper. It is None if you haven't reviewed it yet or has the score you have it.
5. If you click on the row you can go to submit or change a review

Paper Review Platform

Overview   Paper   Submit Paper

submitted	to review

Title ⟳	Authors ②	Status ③	Score ⑨
The products of a single maize sesquiterpene synthase form a volatile defense signal that attracts natural enemies of maize herbivores ⑤	elias	Under Review	None
Practical application and evaluation of no-SQL databases in Cloud Computing	julia maria peter	Approved	2

Review a paper

At this page you can see the papers you were requested to review

Review

Please add a review:

★★ ☆ ☆ ☆   save and continue   save

1. represents the rating in stars.
   - 1 star = –2
   - 2 stars = –1
   - 3 stars = 0
   - 4 stars = 1
   - 5 stars = 2
2. This button will submit your review and you will stay on that page.
3. This button will submit your review and you will be redirected to

your overview page

4. The title of the paper to review.
5. The abstract of the paper to review.

Conference Chair

If you are a member of this group you will be able to access the 'conference chair' site. You can find it in the navigation bar:

List of paper

1. Column title of paper.
2. Column reviwer of paper. This are the user that are assigned by the conference chair to review a paper.
3. Column authors of paper.
4. Column status of paper.

5. Column score of review of paper. This is the average over all the scores in reviews given.
6. When you click on a row you will come to the work view for the conference chair of that paper.

Paper Review Platform

Overview   Paper   Submit Paper   **Conference Chair**

Title	Reviewer	Authors	Status	Score
The products of a single maize sesquiterpene synthase form a volatile defense signal that attracts natural enemies of maize herbivores	clara julia peter	elias	Under Review	None
Results from a Low-Energy Analysis of the CDMS II Germanium Data		maria peter	Under Review	None
Zur Rührabhängigkeit des Grenzstromes an teilweise bedeckten rotierenden Scheibenelektroden bei relativ grossen Umdrehungszahlen		clara elias maria	Under Review	None
Practical application and evaluation of no-SQL databases in Cloud Computing	clara elias	julia maria peter	Approved	2.0
sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam vol	maria peter	clara elias julia	Under Review	None

Work view for the conference chair

1. Title of the paper.
2. Abstract of the paper.
3. Add & Remove reviewer. Note that if you unassign a reviwer the review is gone to, even if you add the reviwer again.
4. Button to set the status 'approve'
5. Button to set the status 'rejected'
6. Button to set the status 'under_review'
7. [save and continue] -- save changes made on the page and stay on the page.
8. [save] -- save changed made and go back to the list of paper (conference chair).
9. [cancel] -- save nothing and go back to list of paper (conference

chair).

10. Current status of the paper.

11. Authors of the paper.

12. Reviews of the paper. First row is the average score of the paper over all reviews. The following rows are the individual reviews with their scores.

Paper Review Platform

Overview | **Paper** | Submit Paper | Conference Chair

Title ①
The products of a single maize sesquiterpene synthase form a volatile defense signal that attracts natural enemies of maize herbivores

Abstract ②

Plants can defend themselves against herbivores by attracting natural enemies of the herbivores. The cues for attraction are often complex mixtures of herbivore-induced plant volatiles, making it difficult to demonstrate the role of specific compounds. After herbivory by lepidopteran larvae, maize releases a mixture of volatiles that is highly attractive to females of various parasitic wasp species. We identified the terpene synthase TPS10 that forms (E)-β-farnesene, (E)-α-bergamotene, and other herbivory-induced sesquiterpene hydrocarbons from the substrate farnesyl diphosphate. The corresponding gene is expressed in response to herbivore attack and is regulated at the transcript level. Overexpression of tps10 in Arabidopsis thaliana resulted in plants emitting high quantities of TPS10 sesquiterpene products identical to those released by maize. Using these transgenic Arabidopsis plants as odor sources in olfactometer assays showed that females of the parasitoid Cotesia marginiventris learn to exploit the TPS10 sesquiterpenes to locate their lepidopteran hosts after prior exposure to these volatiles in association with hosts. This dissection of the herbivore-induced volatile blend demonstrates that a single gene such as tps10 can be sufficient to mediate the indirect defense of maize against herbivore attack.

Reviews

③

council	
maria	

Add →

← Remove

clara	
julia	
peter	

Set status ④ ⑤ ⑥

approve | reject | review

Actions

⑦ save and continue

⑧ save

⑨ cancel

Status ⑩
Under Review

Authors ⑪
elias

Reviews ⑫
summary	1.0
clara	None
julia	1
peter	None