Final Presentation

SLR Tool - Data Storage and Interface for Processing

Introduction

Team - SSD-31

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Problem Description

- Develop a Systematic Literature Review Tool for data storage and processing of research papers from various digital libraries.
- SLR Tool helps in analyzing multiple research studies or papers through a systematic process.
- Based on inclusion/exclusion criteria, research papers have to be filtered.
- Filtered research papers can be viewed.
- User can perform quality assessment on paper.

Solution Approach

- Created a basic HTML form for uploading the bibtex file.
- Read the data from BibTeX files and store it in database.
- Redirected user to Inclusion/Exclusion page where user can select various criterias like year , publisher, conference title, language and keywords.
- Filter papers on the basis of Inclusion/Exclusion criteria and perform quality assessment on them.
- User can also view research papers and provide Quality assessment details.

Technical Details

- Front-end Development - HTML, CSS, Javascript
- Back-end Development - Python, Django
- Database - SQLite
- Additional Libraries - Pybtex

Demo

Demo Link: https://youtu.be/rMONJRKNZjw

Work distribution

- Team members contributed equally in the project.
- Firstly, together studied Django and developed basic page for file upload.
- Arpit - Pybtex library, Filtered Result Page, Database.
- Aviral - Inclusion/Exclusion page, Database.
- Ankit - Quality Assessment page, Database.
- Rest of the project work is done as a team.

Problem faced and shortcomings

- Initially faced problems in understanding Django workflow and MVT.
- Gradually developed understanding of Django while developing project.
- Faced problems in reading bibtex files and implementing form validations.
- Later on used pybtex library for reading bibtex and stored data in Database.
- There is a scope of improvement in Quality Assessment Page.
- Additionally, user login can be implemented to save the progress of SLR Tool.

Submission Checklist

- Mentor approval for code submission.
- TA approval for code submission.
- Moodle submission
- Github Master/ main has running code.
- All/most of requirements are met as per project outline.
- Mentor /TA is aware of any caveats/ waste features in your code.
- Work Division stated in the presentation is honest and none of the team members have a conflicting opinion.

Learnings and Conclusions

- Django basics
- MVT Development process used in Django.
- Request response model and Forms
- Bibtex and bibliography data basics
- Team Work

Thank You