

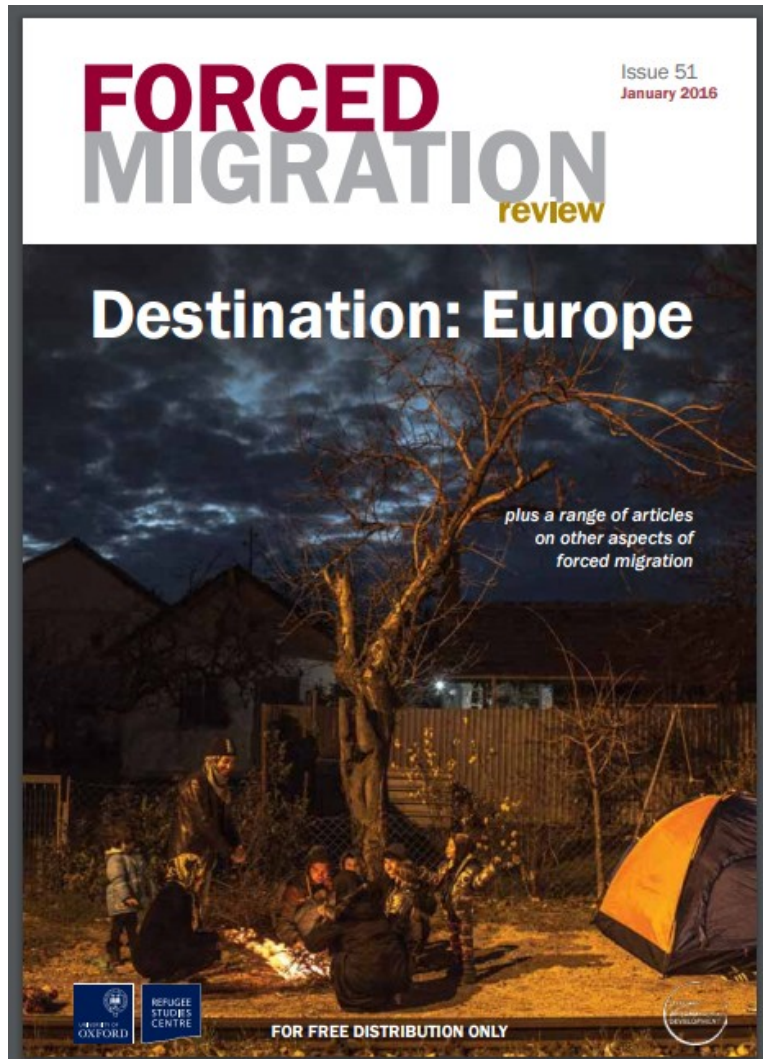
Optimal Matching Portal

A Web Application for Student Project Allocation

What is the Optimal Matching Portal?

- **A system to collect data**
- **Students and Project Proposers**
- **Housing Allocation Problem**
- **Preferences on one side**
- **Matched to each other with optimal satisfaction**

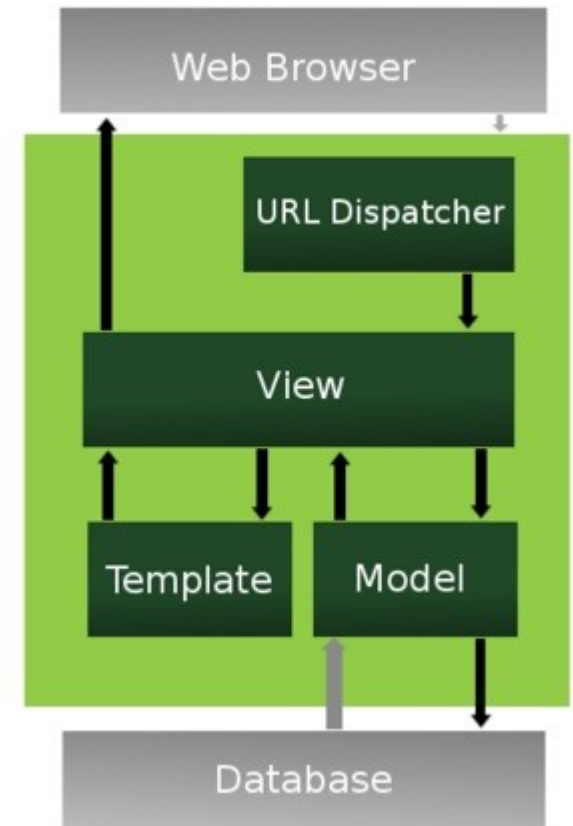
Existing Systems



THE MATCHSM
NATIONAL RESIDENT MATCHING PROGRAM[®]

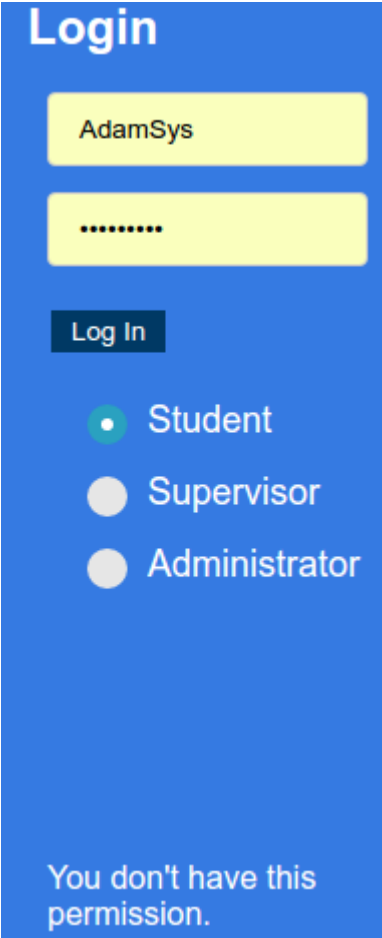
Django

- **A framework for web development**
- **Abstracts elements**
- **Uses Models, Views and Templates**
- **Database integration**
- **Security against SQL XSS, CSRF**



Django Example - Login View

- **URL renders a HTML template**
- **Login submits a form POST**
- **Details authenticated in view**
- **Successful login is verified**
- **User is redirected**
- **Failures displayed on screen**



Login

AdamSys

.....

Log In

☒ Student

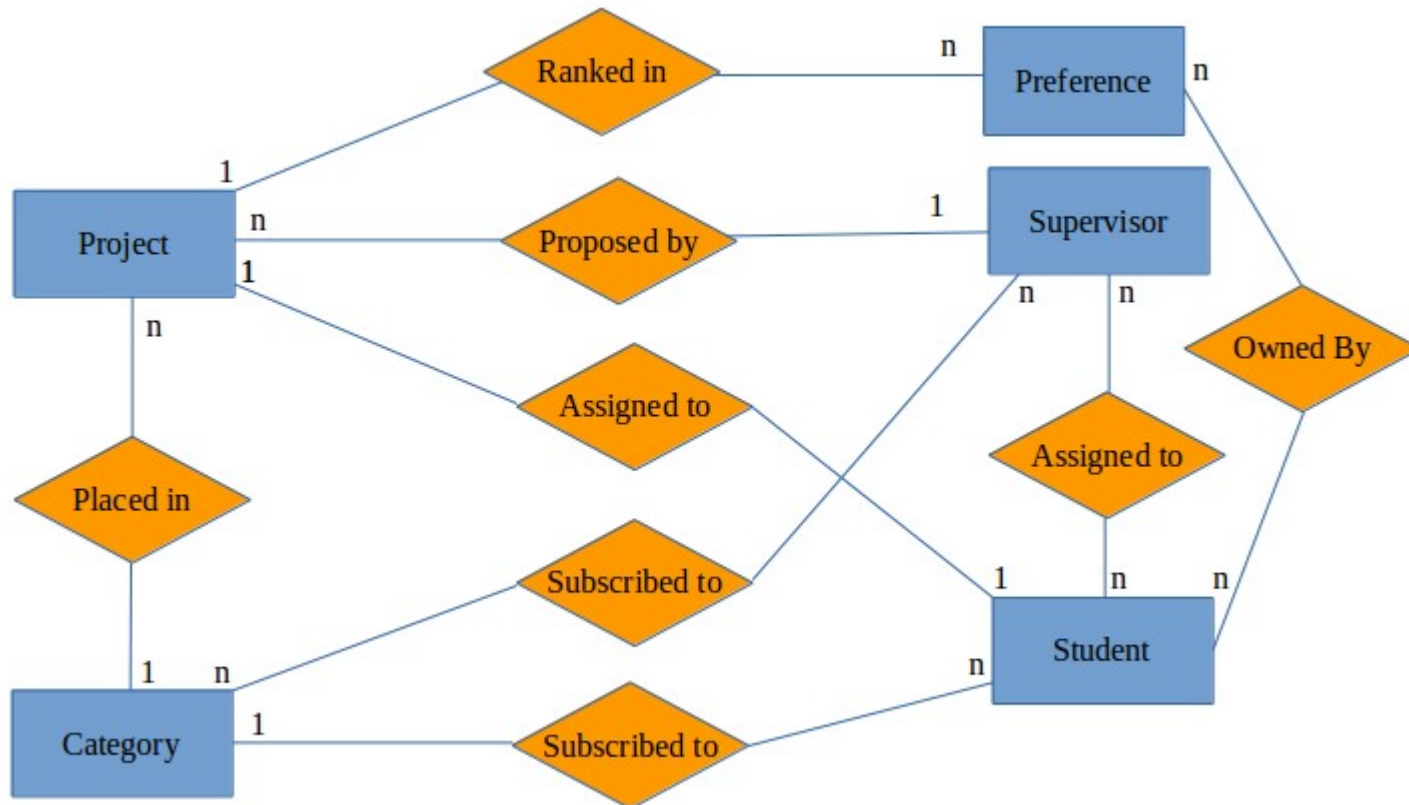
☐ Supervisor

☐ Administrator

You don't have this permission.

Database Design

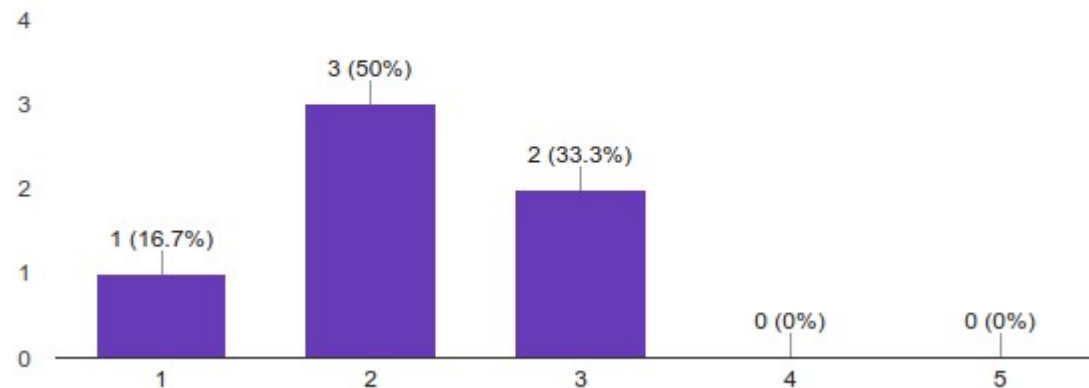
- **SQL Lite database provided by Django**



User Evaluation

- **Direct Observation**
- **Users complete a list of tasks**
- **Fill out a Google survey after**

I found the application easy to navigate (6 responses)



Feedback

Suggest one thing about the application you think could be improved

(6 responses)

navigation, more links

Clearer as to where the match button is

Interface is a little bland looking

More information on dashboard

Button sizing and placement

A more structured site layout e.g. with menu bars and context.

Say one thing you liked about the application (6 responses)

minimalistic

The HCI aspect of it, the user interface is very clean

favourite feature is good

Easy to add project preferences

Visual theming, fonts etc.

User interface was clean and simple; seemed well thought out.

Conclusion

- **Faced a lot of challenges**
- **Excellent learning experience**
- **Learned about software design process**
- **Future Work:**
 - More Robust Matching Algorithm
 - Collection of matching statistics
 - User Interface Tweaks

Thank You for your time!

Any questions?