

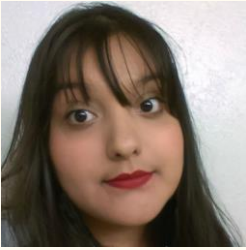


Group 12

Meet The Team

| | |
|-----------------------|------------------|
| Team Lead | Jevin Dement |
| Customer Communicator | Stavros Triantis |
| Recorder | Adriana Aguilera |
| Architect | Ugo Dike |
| Release Manager | Joseph Danciu |

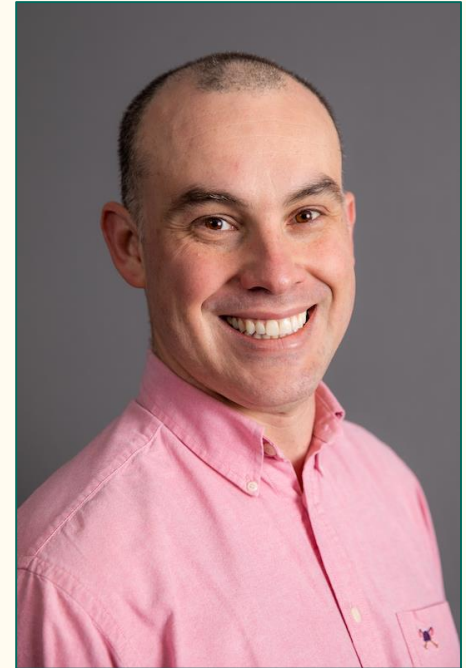
| | |
|-------------|---------------------|
| Team Mentor | Fabio Santos |
| Client | Dr.Igor Steinmacher |



Client Background

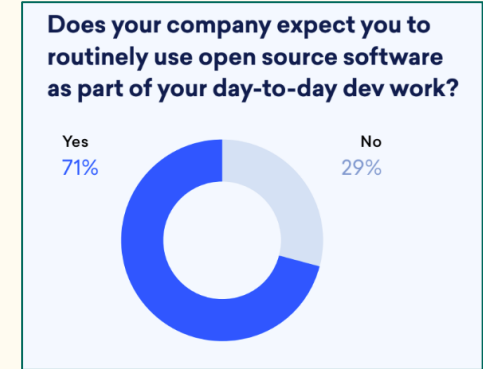
Dr. Igor Steinmacher

- ❖ Ph.D in Computer Science
- ❖ Assistant Professor at NAU
- ❖ Working on the support of newcomers to OSS development



What is OSS?

- ❖ Developed collaboratively
- ❖ GitHub: The Largest Host of Source Code
- ❖ Part of the Software Freedom movement



Problem Statement

- ❖ Why do people want to contribute?
 - Software freedom
 - Expanding resume
- ❖ Why is contribution difficult?
 - Information Overload
 - Intimidation

**What has prevented you from getting more involved in open source?
Choose all that apply.**

It seems difficult to get started/I don't know where to start **45%**

I feel like I don't have the right skills to contribute **44%**

My company doesn't give me time to contribute **30%**

I am too intimidated to contribute **28%**

Lack of resources **24%**

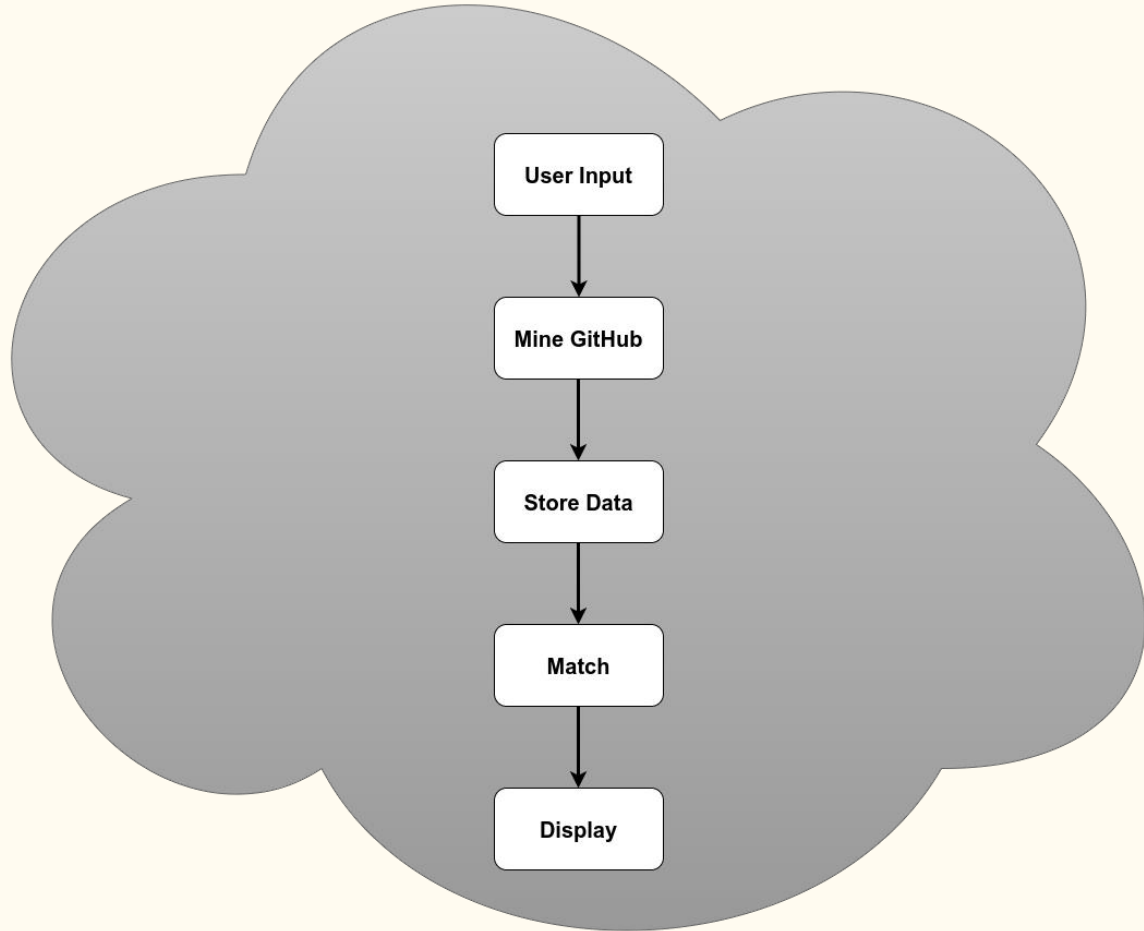
I already contribute a significant amount to open source **11%**

Lack of interest **7%**



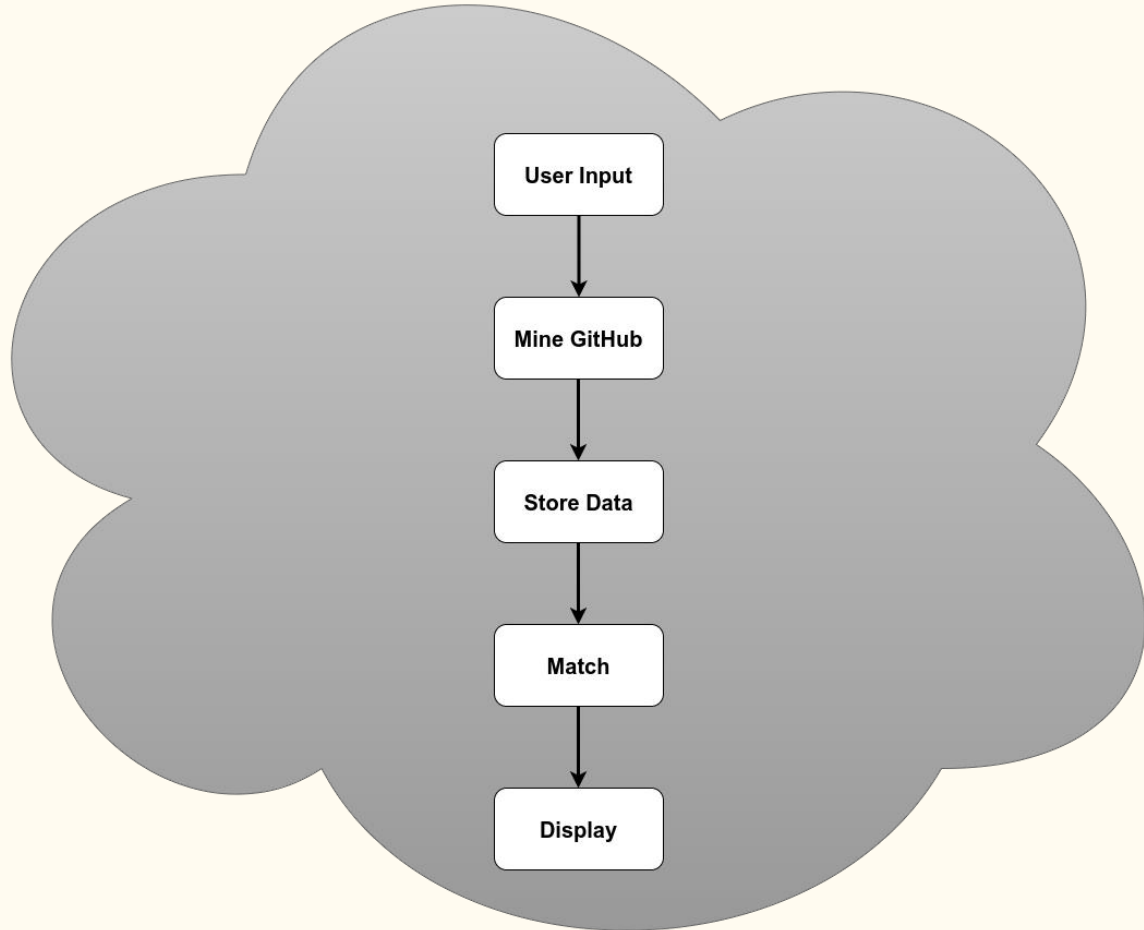
Solution Overview

- ❖ Web Application
- ❖ Layer on top of GitHub



Solution Overview

- ❖ Maximum two steps
 - Username
 - Questionnaire
- ❖ Automated matches



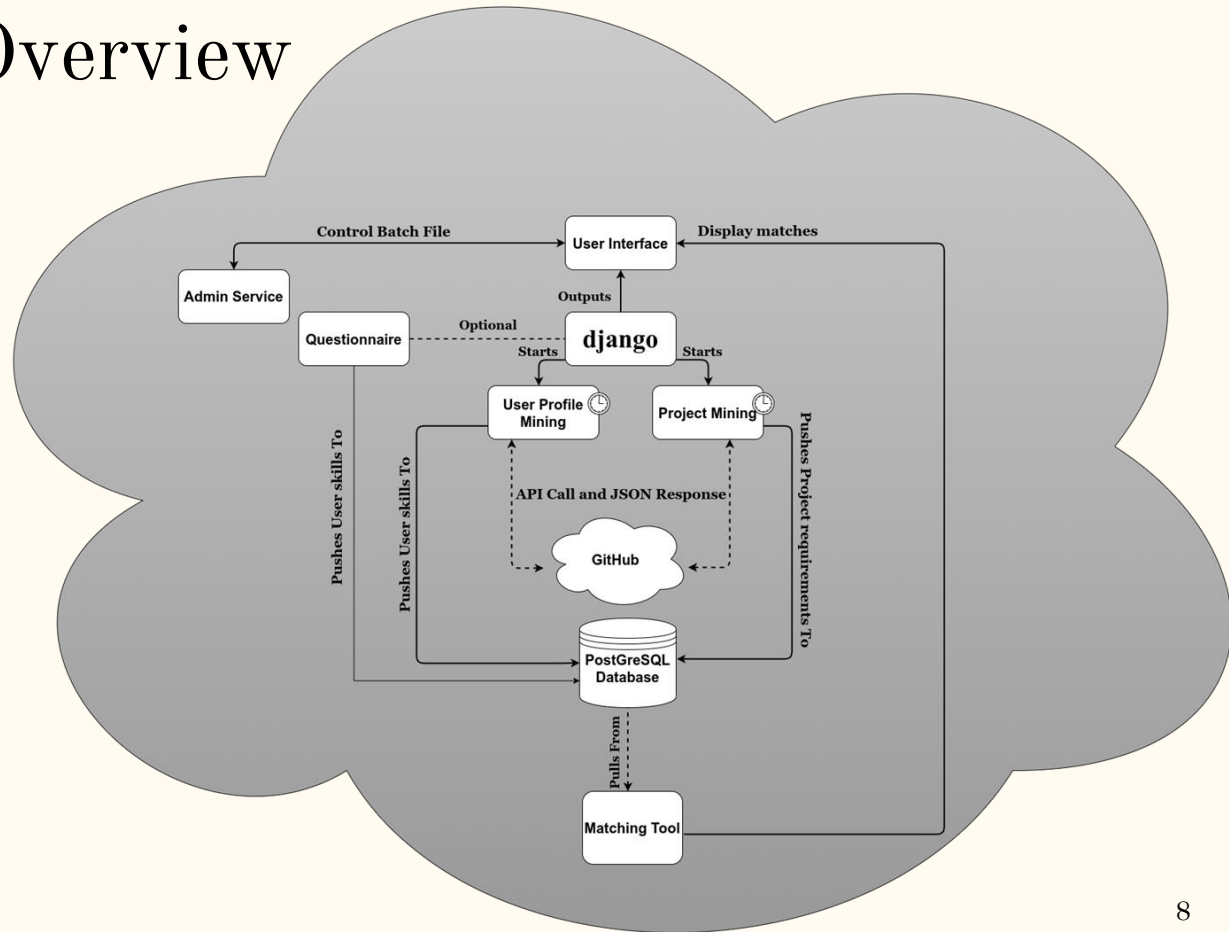
Implementation Overview

❖ User/Project Skills

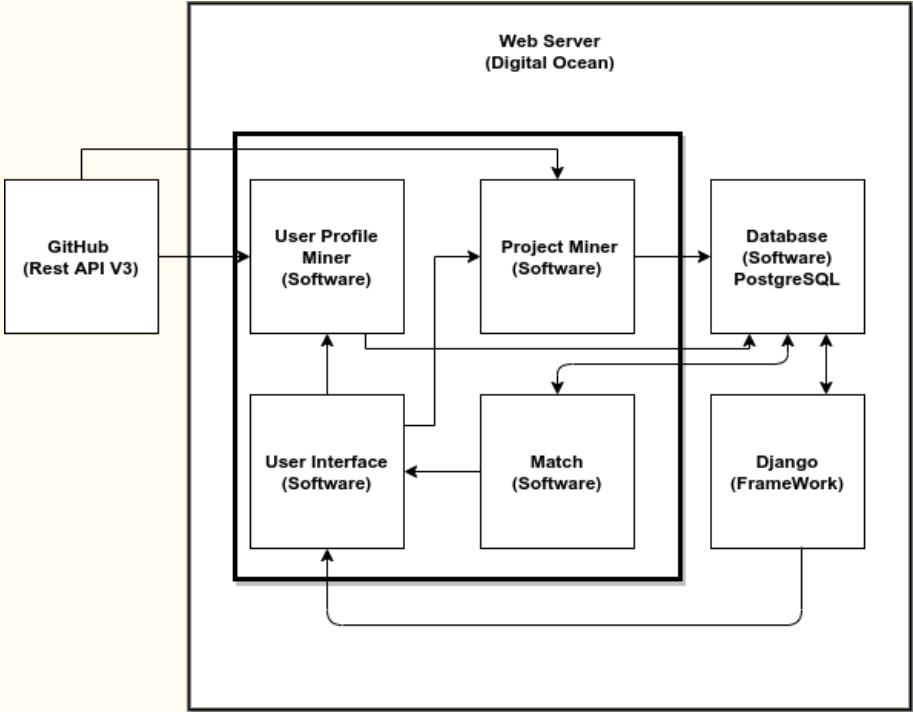
➤ JSON

❖ Match

❖ Display



Architectural Overview



Challenges

Resolutions

Schedule

| | Task Name | Duration | February | | | | March | | | | April | | | | May | |
|----|----------------------------------|-------------|--------------|---|---|---|-------|---|---|---|-------|---|---|---|-----|---|
| | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 |
| 1 | User Profile Mining Tool | 3 1/2 Weeks | [Task 1 bar] | | | | | | | | | | | | | |
| 2 | Push Test Data to Database | 3 Days | | | | | | | | | | | | | | |
| 3 | Pull Test Data from Database | 3 Days | | | | | | | | | | | | | | |
| 4 | Comparison Function - Match Tool | 1 1/2 Weeks | | | | | | | | | | | | | | |
| 5 | Sorting Function - Match Tool | 1 1/2 Weeks | | | | | | | | | | | | | | |
| 6 | Output Basic Display | 4 Days | | | | | | | | | | | | | | |
| 7 | Connect All Components | 2 Days | | | | | | | | | | | | | | |
| 8 | Create Alpha Prototype | 1 Week | | | | | | | | | | | | | | |
| 9 | Testing | 6 Weeks | | | | | | | | | | | | | | |
| 10 | User Interface | 6 Weeks | | | | | | | | | | | | | | |

Demo

Conclusion

Simplistic Solution Summary

- ❖ Developer inputs their username or skills.
- ❖ The program collects information
- ❖ The program displays suggestive matches.



References

Gousios, Georgios; Vasilescu, Bogdan; Serebrenik, Alexander; Zaidman, Andy. "Lean GHTorrent: GitHub Data on Demand" (PDF). The Netherlands: Delft University of Technology & †Eindhoven University of Technology: 1. Retrieved November 12, 2019.

"GitHub passes 100 million repositories". VentureBeat. November 8, 2018. Retrieved November 12, 2019.

"User search". GitHub. Retrieved November 12, 2019.

Currents Research on DigitalOcean. (n.d.). Retrieved from <https://www.digitalocean.com/currents/october-2018/>.