MATCH SOURCE

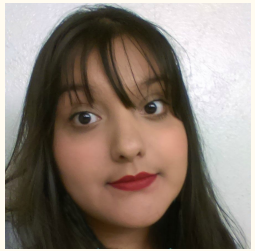
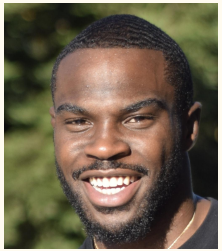
Group 12

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



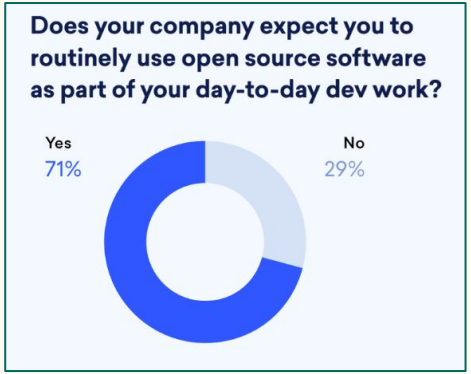
Client Background

Dr.Igor Steinmacher

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

OSS Background

- GitHub: The Largest Host of Source Code
- 65% of surveyed companies leverage OSS to speed up App dev.
- 55% leverage OSS for production infrastructure



Why contribute?

- Improving Coding Skills
- Being part of a community
- Learning new technologies
- Advancing Career
- Advancing software freedom
- Developing new products

Problem Statement

Problem...

- Lack of open source software education
- Not knowing where to start
- Incorrect skill set for project
- Information Overload

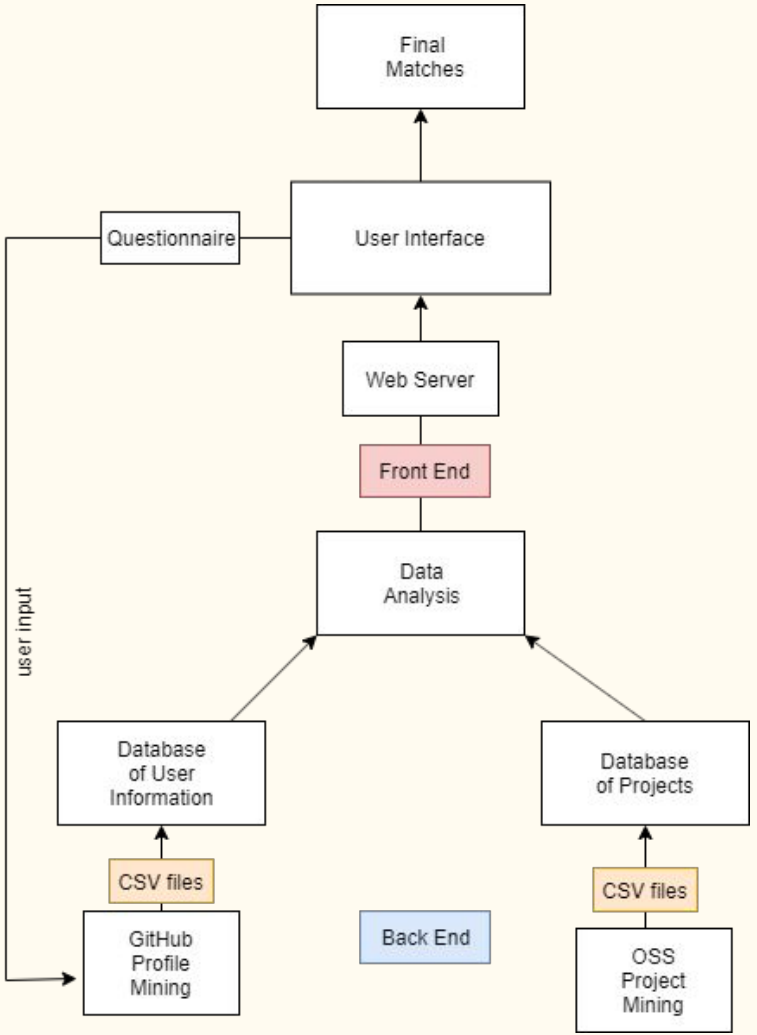
Need to...

- Match users to projects

4,300 respondents from around the world

Solution Overview

- Developer inputs username or skills
- Mine info of user & projects
- Displays suggestive matches.



Gathering Requirements

- Daily team communication
- Weekly client/mentor meetings
- Develop key requirements

Key Requirements

- Functional
  - Acquire username and authenticate
  - Drop down list for questionnaire to make sure language/skill exists
  - Mine user's repository & available GitHub OSS projects
  - Match user to projects

- Non-Functional
  - Stable web hosting services (at least 99.5% uptime)
  - Framework to handle user traffic must be able to store 20 projects and handle 3 users at a time
  - Simple user interface

Key Requirements

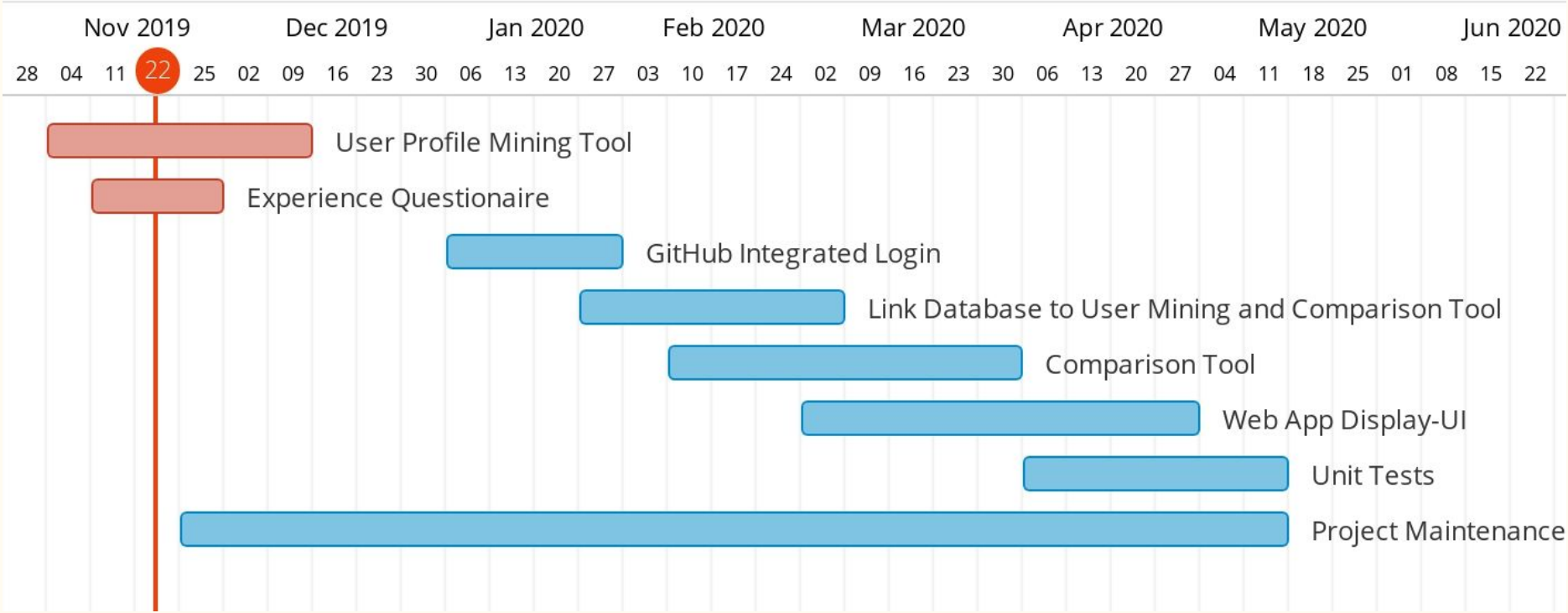
- Performance Requirements
  - Speed at which we mine data from user's profile
  - Information storage (so info is already calculated, and we just need to display)

- Environmental Constraints
  - 90 day history search on users repository
  - Must use a Java Parser that is already created
  - Must use a PostgreSQL database for projects

Risks & Feasibility

	Severity	Likelihood	Overall Risk
GitHub API V3 not being supported or modified in the future	HIGH	LOW	LOW
Over or under qualifying a user	LOW	HIGH	HIGH
Users being able to access other people's information	LOW	MEDIUM	LOW

Schedule


Nov 2019
Dec 2019
Jan 2020
Feb 2020
Mar 2020
Apr 2020
May 2020
Jun 2020
28 04 11 22 25 02 09 16 23 30 06 13 20 27 03 10 17 24 02 09 16 23 30 06 13 20 27 04 11 18 25 01 08 15 22
User Profile Mining Tool
Experience Questionaire
GitHub Integrated Login
Link Database to User Mining and Comparison Tool
Comparison Tool
Web App Display-UI
Unit Tests
Project Maintenance

Conclusion

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.

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