

Git OSS-um Design Review II



Team Members

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- Van Steinbrenner
- Stephen White

Mentor: Ana Steinmacher

Sponsor: Igor Steinmacher

What is Open Source Software?

- Principles:
 - Transparency
 - Open exchange
 - Collaborative participation
 - Community-oriented development
- Licenses, rights to study and change code



Problem Statement

- Contribution process to open source
 - README.md
 - Issue Tracking
 - Wiki Pages
 - Code of Conduct
- Newcomers
 - Where do I start?



Our Client

- Dr. Igor Steinmacher, professor at NAU
- Research includes:
 - Support for newcomers in OSS
 - Contributor behavior in OSS
 - Crowdsourcing software engineering
- FLOSScoach
 - Data is manually fed
 - Manual maintenance of content
 - Data is not up-to-date





Solution Overview



Mine



Store



Analyze



Display



Host

Repository

owner/repository

Send Me Email Notifications About This Request

Submit Request

Git OSS-um

Home About Us Mining Request Form Mined Repos

Welcome, Garebake (Log Out)

Mined Repos

Search

 google/gumbo-parser

Compare

Languages

- Java
- Python
- C

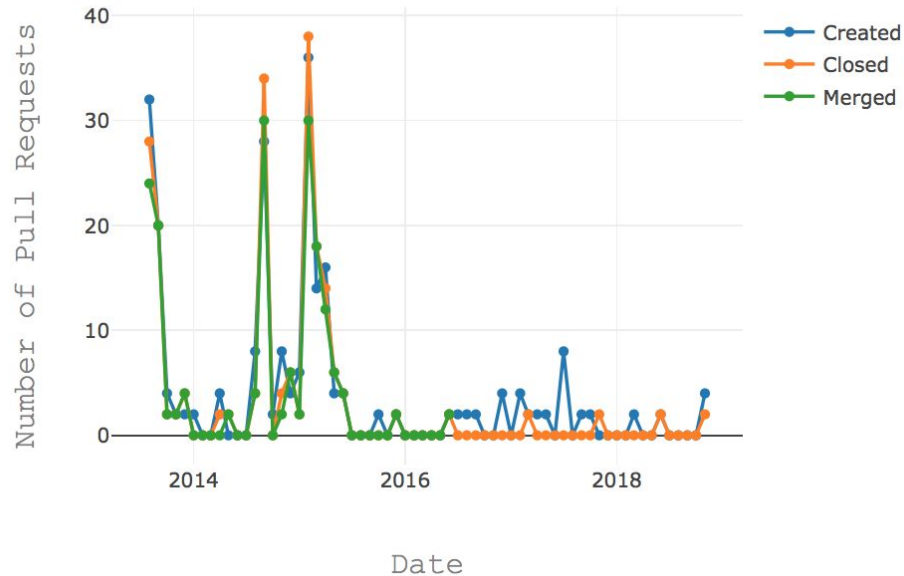
Pull Requests

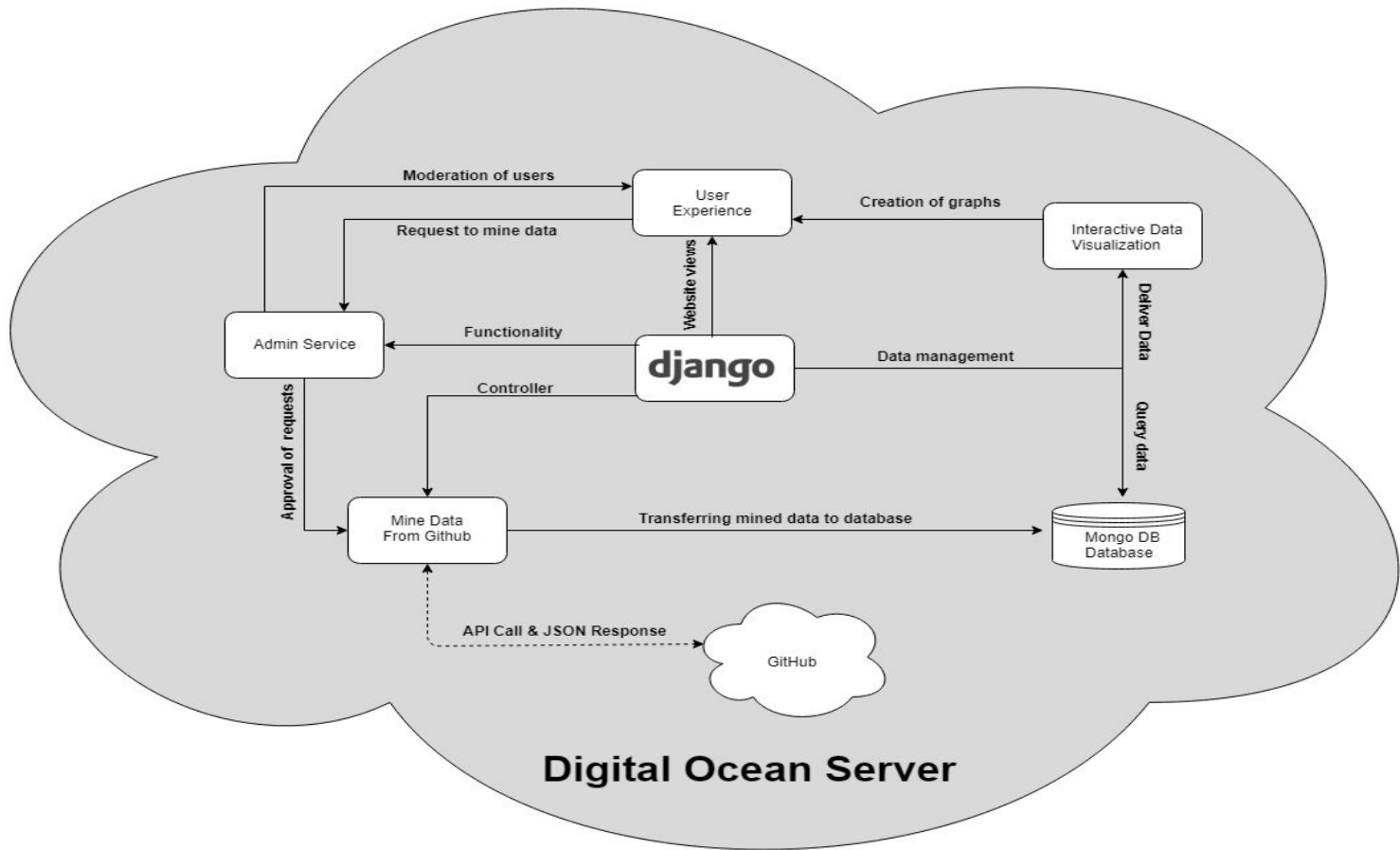
- 0-50
- 51-100
- 100+

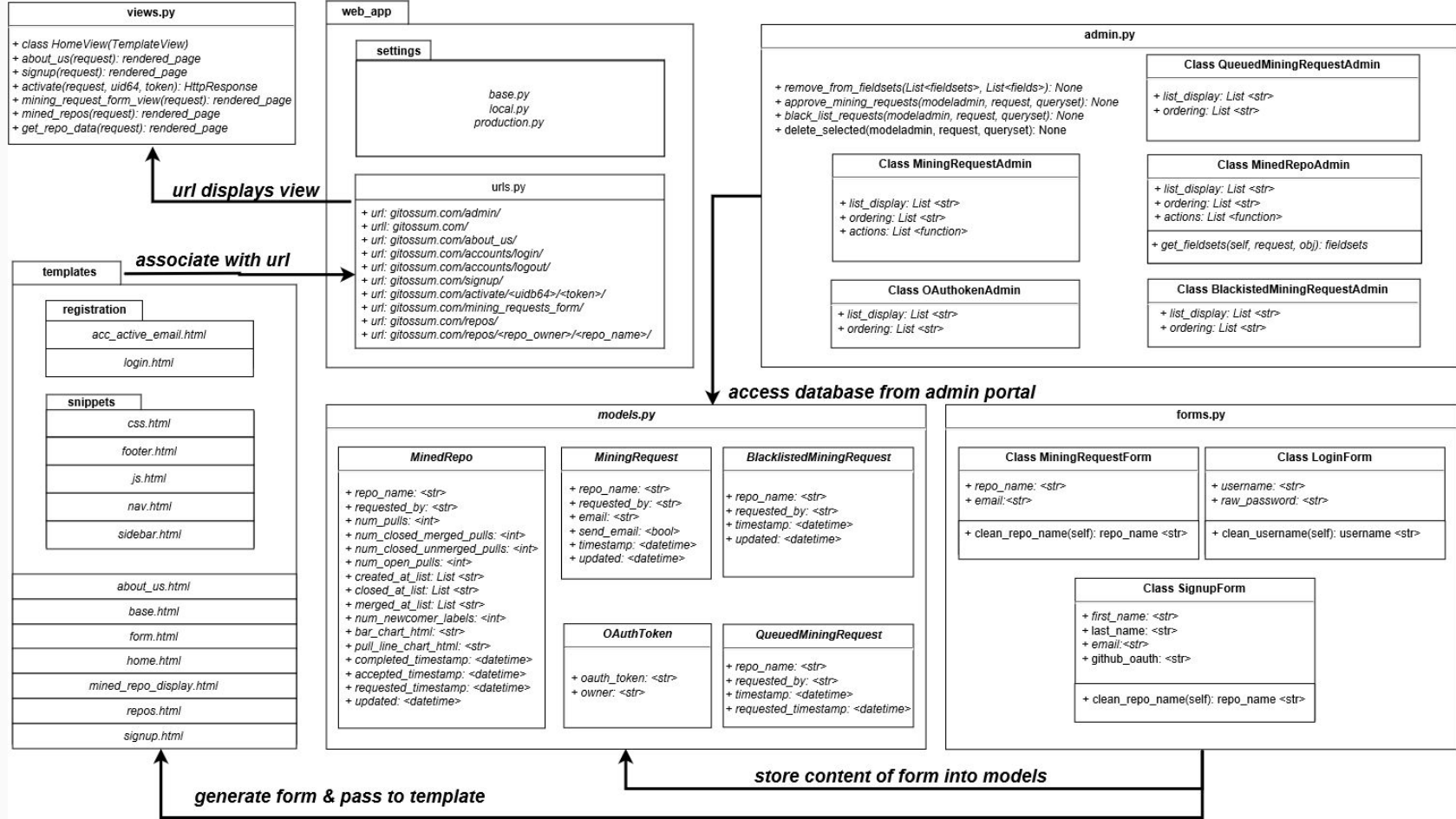
Has Homepage

- True
- False

Pull Request Frequency by Month



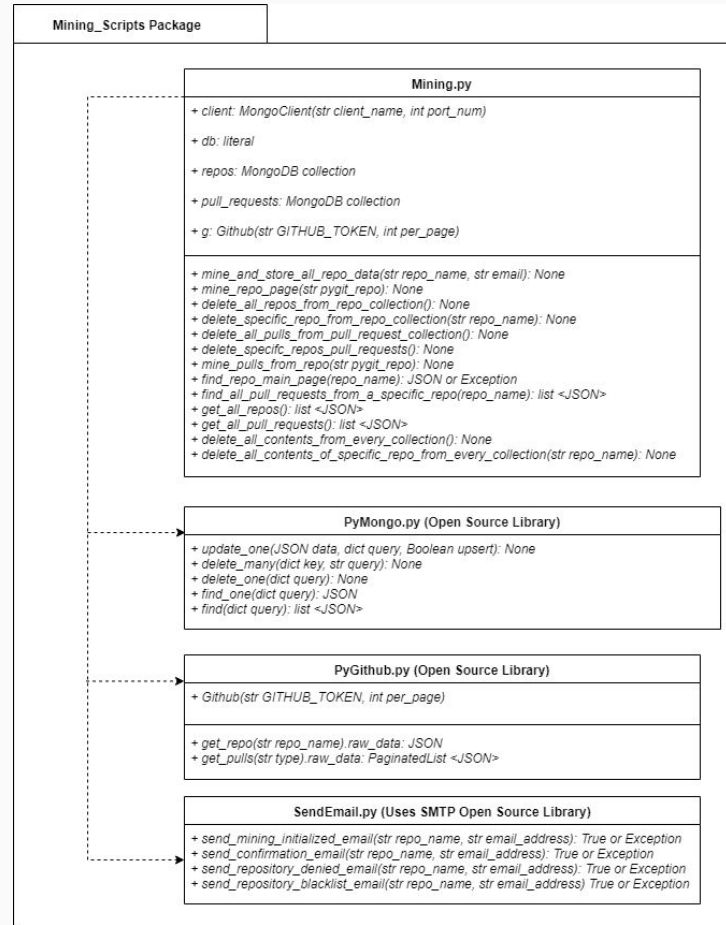




ADMIN

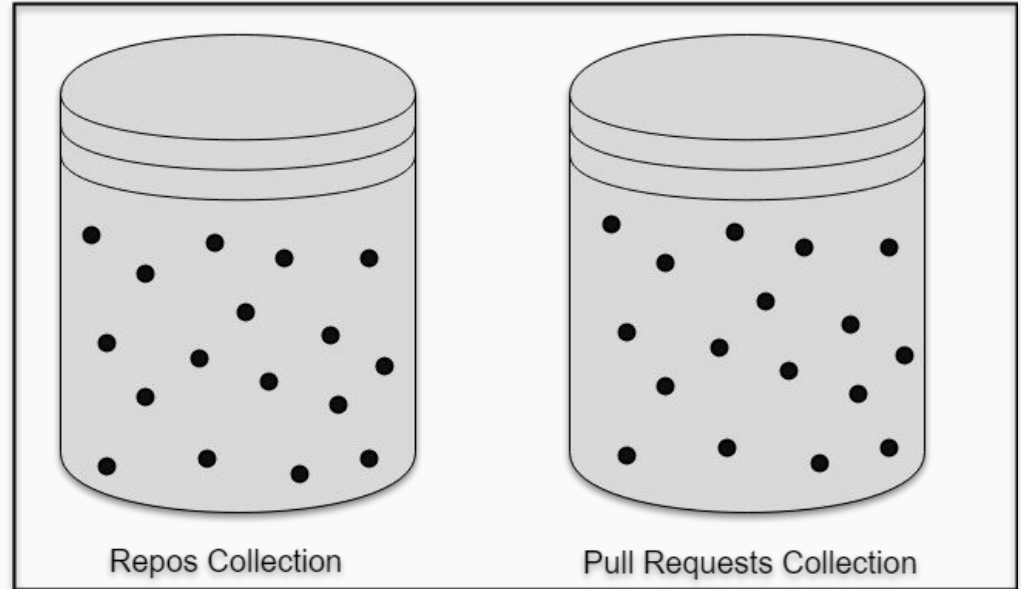


APPROVE



```
1 // 20181110140906
2 // https://api.github.com/repos/rails/rails
3
4 {
5   "id": 8514,
6   "node_id": "MDEwO1JlcG9zaXRvcnk4NTE0",
7   "name": "rails",
8   "full_name": "rails/rails",
9   "private": false,
10  "owner": {
11    "login": "rails",
12    "id": 4223,
13    "node_id": "MDEyOk9yZ2FuaXphdG1vbG9yMjM=",
14    "avatar_url": "https://avatars1.githubusercontent.com/u/4223?v=4",
15    "gravatar_id": "",
16    "url": "https://api.github.com/users/rails",
17    "html_url": "https://github.com/rails",
18    "followers_url": "https://api.github.com/users/rails/followers",
19    "following_url": "https://api.github.com/users/rails/following{/other_user}",
20    "gists_url": "https://api.github.com/users/rails/gists{/gist_id}",
21    "starred_url": "https://api.github.com/users/rails/starred{/owner}/{repo}",
22    "subscriptions_url": "https://api.github.com/users/rails/subscriptions",
23    "organizations_url": "https://api.github.com/users/rails/orgs",
24    "repos_url": "https://api.github.com/users/rails/repos",
25    "events_url": "https://api.github.com/users/rails/events{/privacy}",
26    "received_events_url": "https://api.github.com/users/rails/received_events",
27    "type": "Organization",
28    "site_admin": false
29  },
```

MongoDB Database (● = JSON File)



Risks & Obstacles

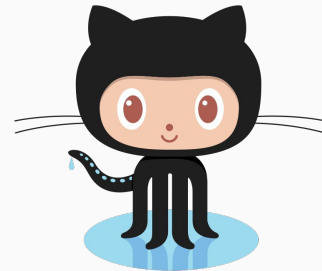
Risks

- We provide facts, not opinions
- Repository name changes
- Microsoft changing API
- Errors during data collection



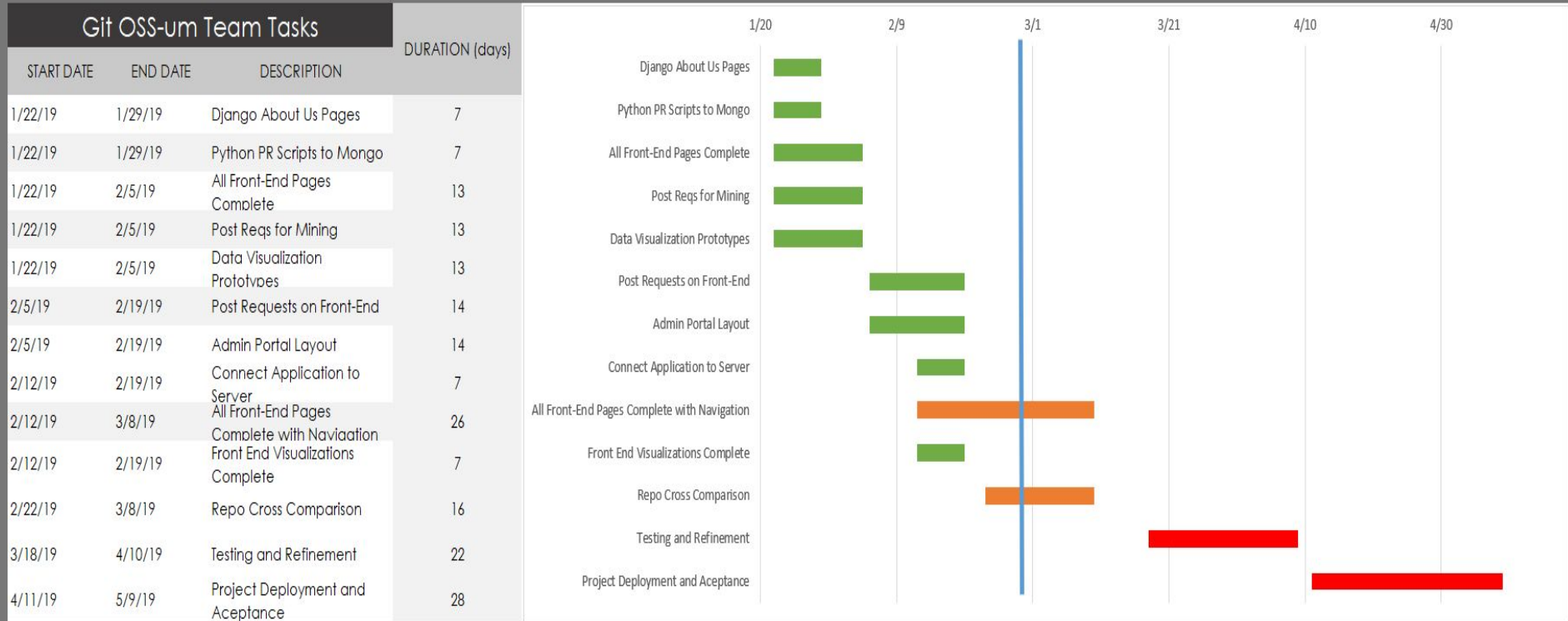
Obstacles

- Speed of data delivery to the user.
 - Increased mining time, decreased display time.
- Learning Django syntax and combining with HTML/CSS.



Project Plan & Schedule

Git OSS-um Gantt Chart



Conclusion



- Previous platform
 - FLOSScoach
- Solution:
 - Django: admin
 - Dynamic interactive web app
- Risks: delivery and API changes
- Schedule



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