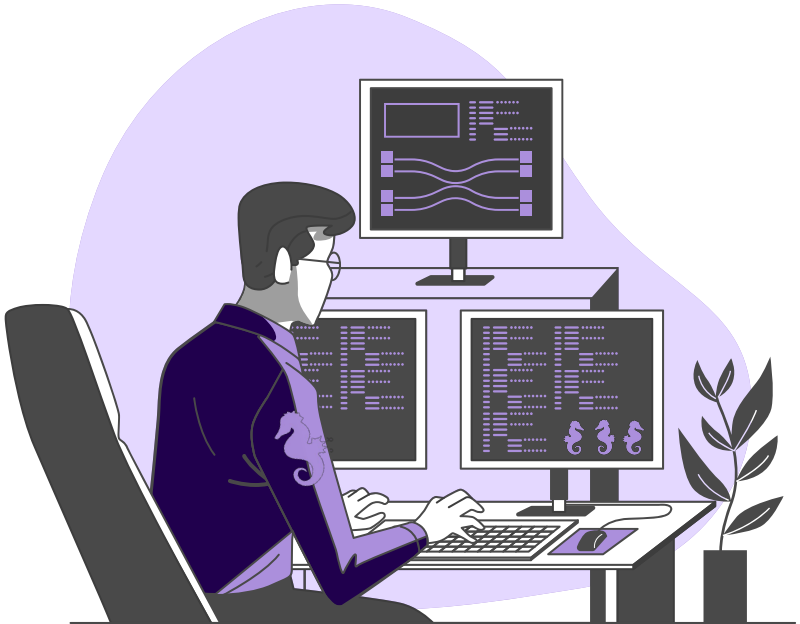
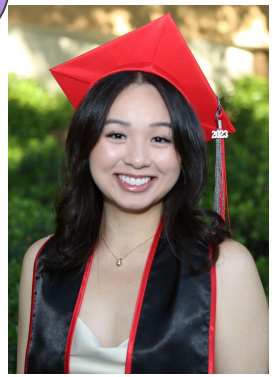
VolunteerOne



Genaro Lopez Baez
Dillon Harder
Michael Lazeroff
Carmen Lee
Cera Samson
Cicelia Siu
Edward Sung
Mathis Tessier
Matthew Yapjoco
David Zeleniak

The Team



Carmen **Lee**

Cera **Samson**

Matthew **Yapjoco**

Mathis **Tessier**

Genaro **Lopez Baez**

Michael **Lazeroff**

Edward **Sung**

Cicelia **Siu**

Dillon **Harder**

David **Zeleniak**

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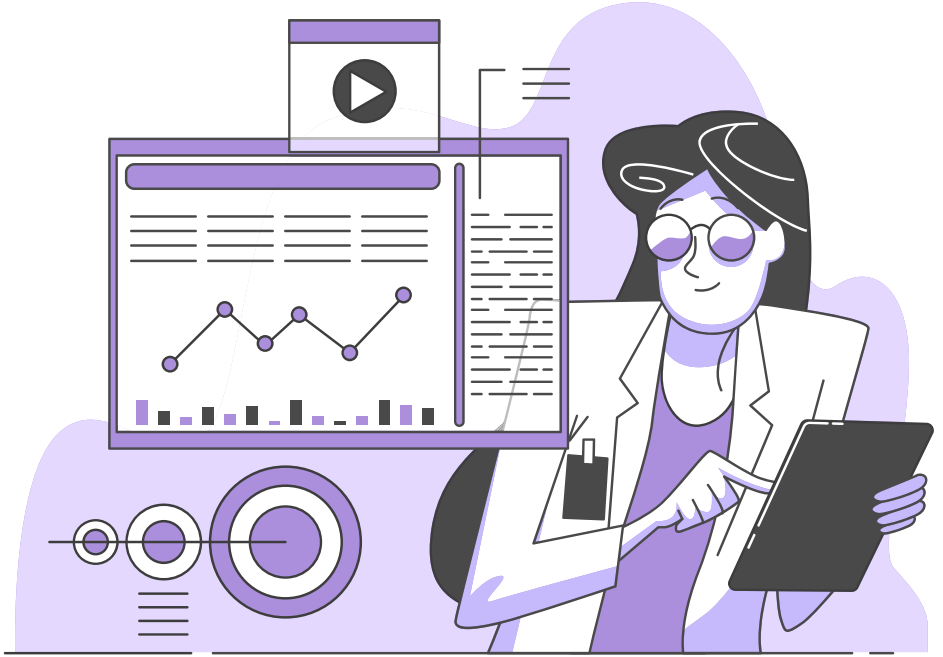

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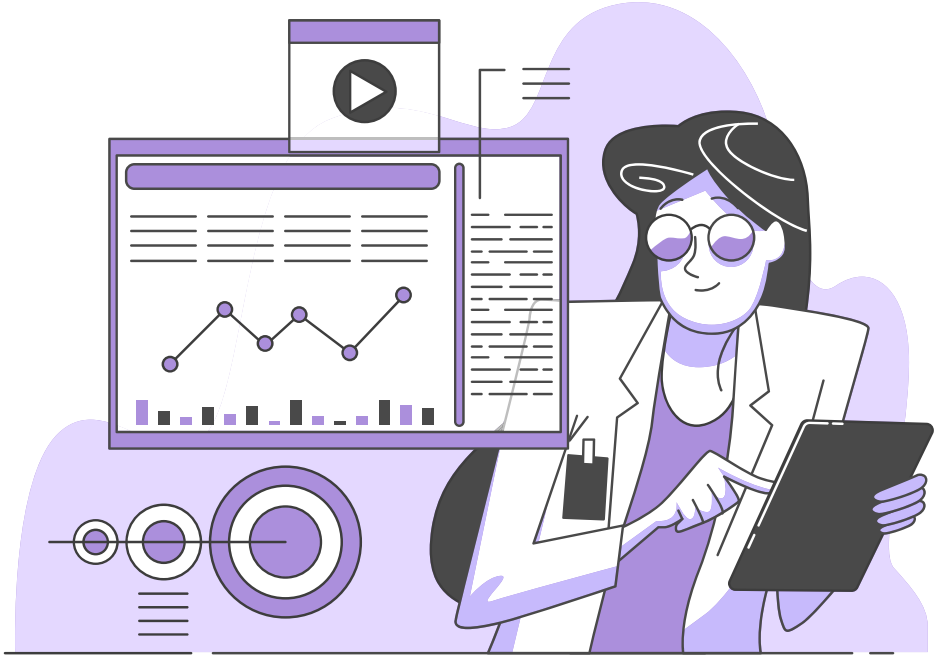


01

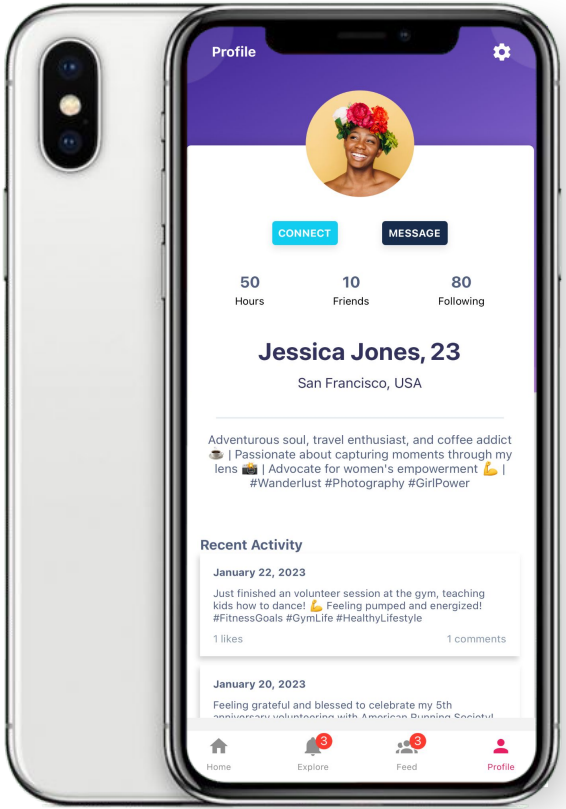
Background

VolunteerOne

A streamlined mobile platform for your volunteering needs

An open source, centralized hub for volunteers and organizations

Preview


Profile
CONNECT
MESSAGE
50
Hours
10
Friends
80
Following
Jessica Jones, 23
San Francisco, USA
Adventurous soul, travel enthusiast, and coffee addict ☕ | Passionate about capturing moments through my lens 📸 | Advocate for women's empowerment 💪 | #Wanderlust #Photography #GirlPower
Recent Activity
January 22, 2023
Just finished an volunteer session at the gym, teaching kids how to dance! 💪 Feeling pumped and energized! #FitnessGoals #GymLife #HealthyLifestyle
1 likes
1 comments
January 20, 2023
Feeling grateful and blessed to celebrate my 5th
Home
Explore
Feed
Profile

Motivation

Challenges

- Finding relevant volunteer opportunities
- Finding volunteers with relevant skills
- Scheduling
- Outreach marketing (organizations)
- Volunteer retainment

Solution

- Connect volunteers and organizations
- Streamline the application and scheduling process
- Socialize volunteering
- Market opportunities and events

Goals

01 **Simplify**

the process of finding volunteering opportunities

02 **Provide**

robust features to address challenges with volunteering

03 **Gamify**

and socialize the volunteering experience

04 **Connect**

volunteers with organizations they value

02
Requirements

Non-functional Requirements

- Cross Platform (iOS, Android)
- Designed using JavaScript and Go
    - Dependencies: React Native, Expo, Gin, GORM, and Mockery
- MySQL Database
- Containerized with Docker
- Digital Ocean Server

Functional Requirements (Frontend)

- Screens
  - Account Creation/Registration
  - Announcements
  - Explore
  - Events
  - Profiles
  - Friends/Following

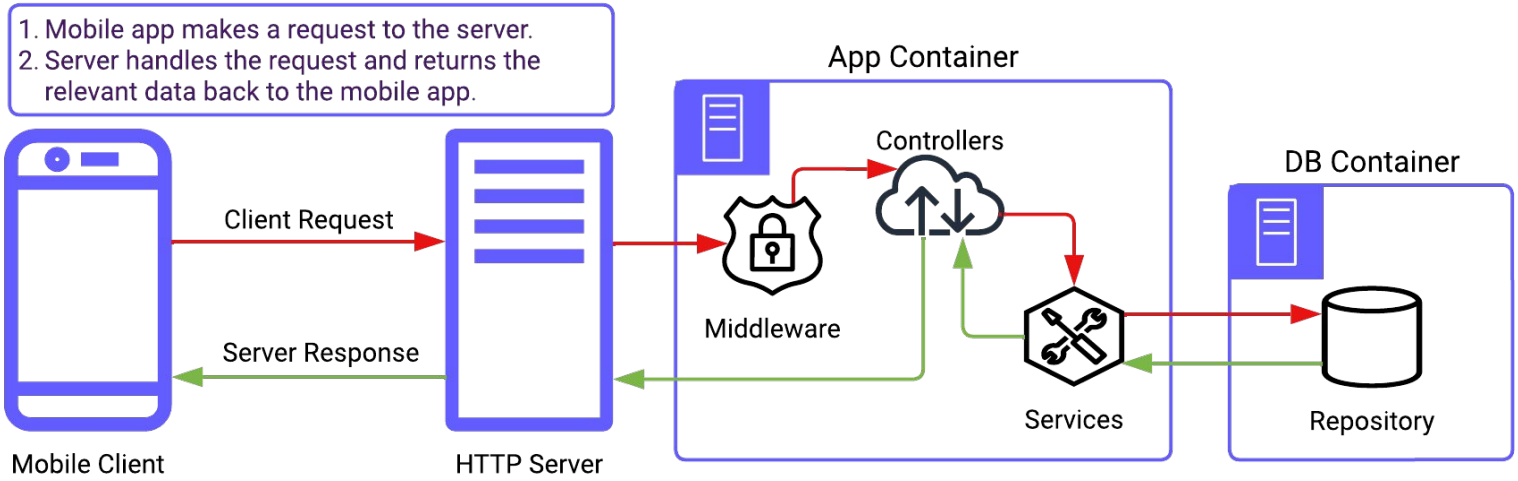
Functional Requirements (Backend)

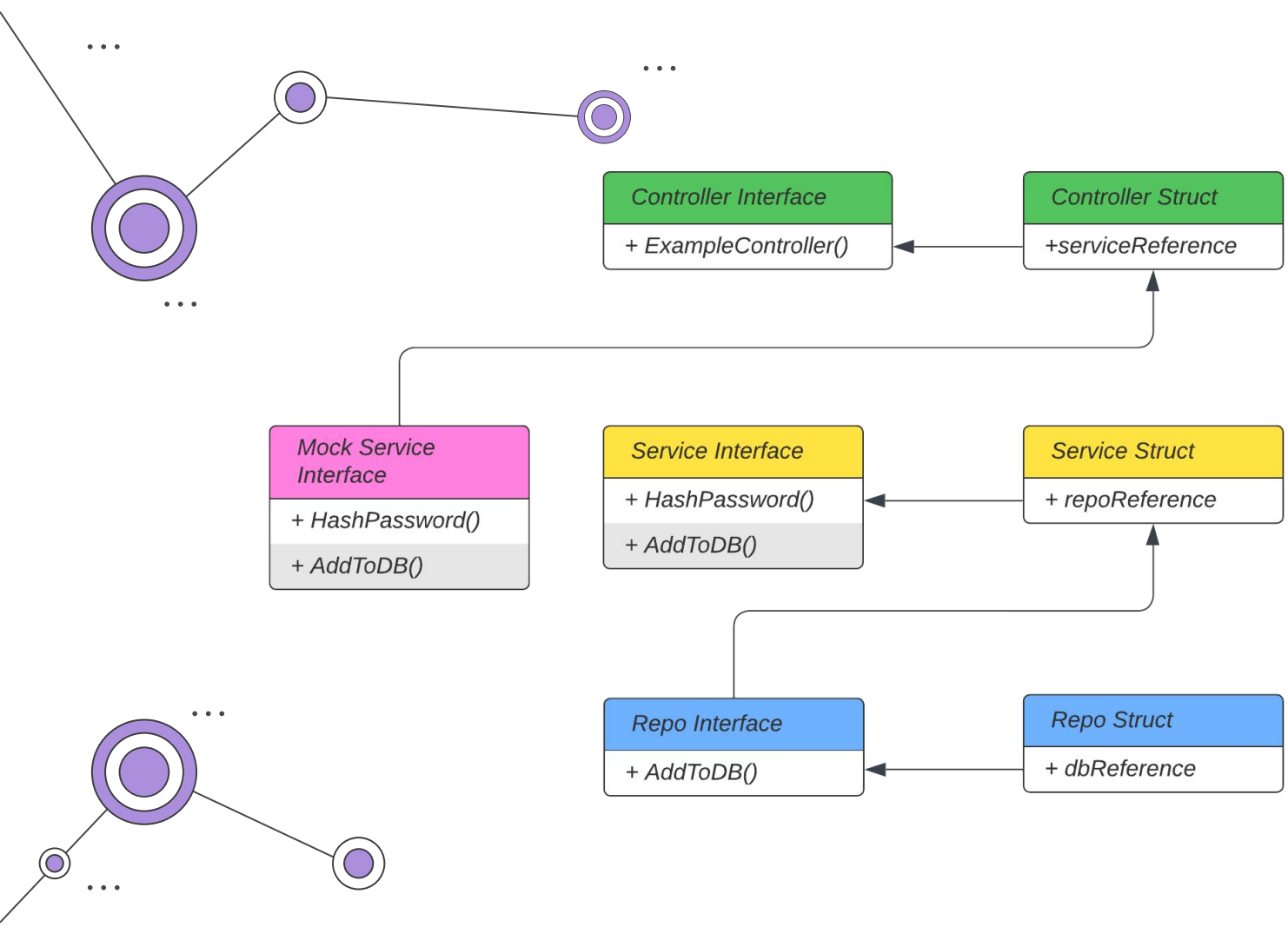
- Organizations
  - Creation, Roles, Adding Members, Interests
- Events
  - Creation, Sign Ups
- Social
  - Organization & Event Channels, Friends, Activity

03

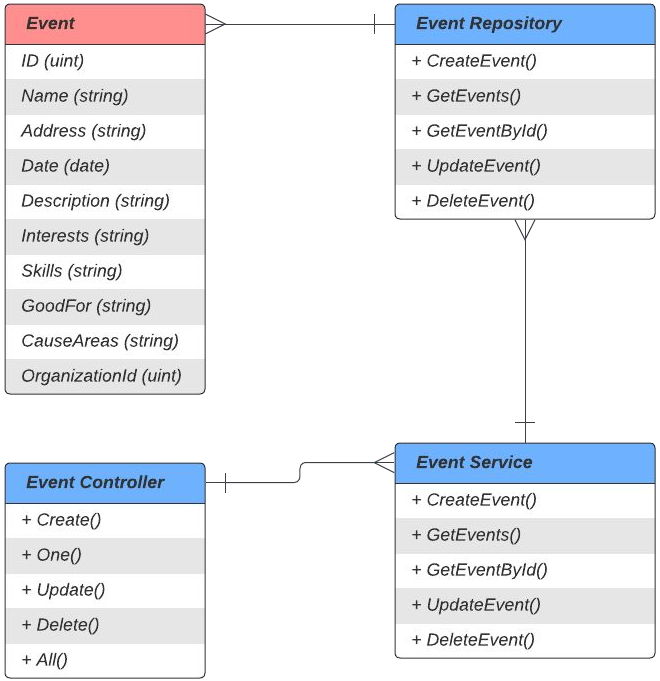
Design

Architecture

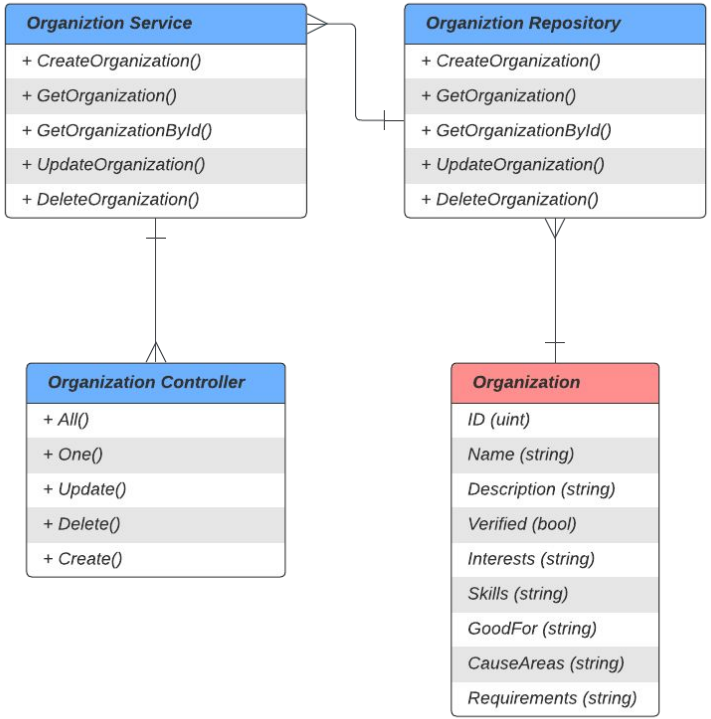



Controller Interface
+ ExampleController()
Controller Struct
+serviceReference
Mock Service Interface
+ HashPassword()
+ AddToDB()
Service Interface
+ HashPassword()
+ AddToDB()
Service Struct
+ repoReference
Repo Interface
+ AddToDB()
Repo Struct
+ dbReference

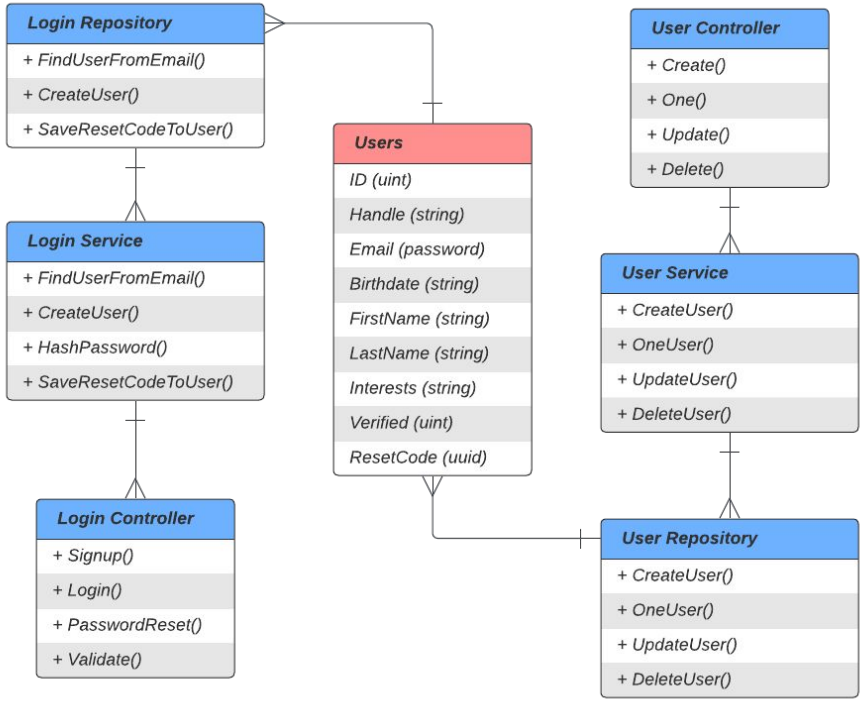
Events


Event
ID (uint)
Name (string)
Address (string)
Date (date)
Description (string)
Interests (string)
Skills (string)
GoodFor (string)
CauseAreas (string)
OrganizationId (uint)
Event Repository
+ CreateEvent()
+ GetEvents()
+ GetEventById()
+ UpdateEvent()
+ DeleteEvent()
Event Controller
+ Create()
+ One()
+ Update()
+ Delete()
+ All()
Event Service
+ CreateEvent()
+ GetEvents()
+ GetEventById()
+ UpdateEvent()
+ DeleteEvent()

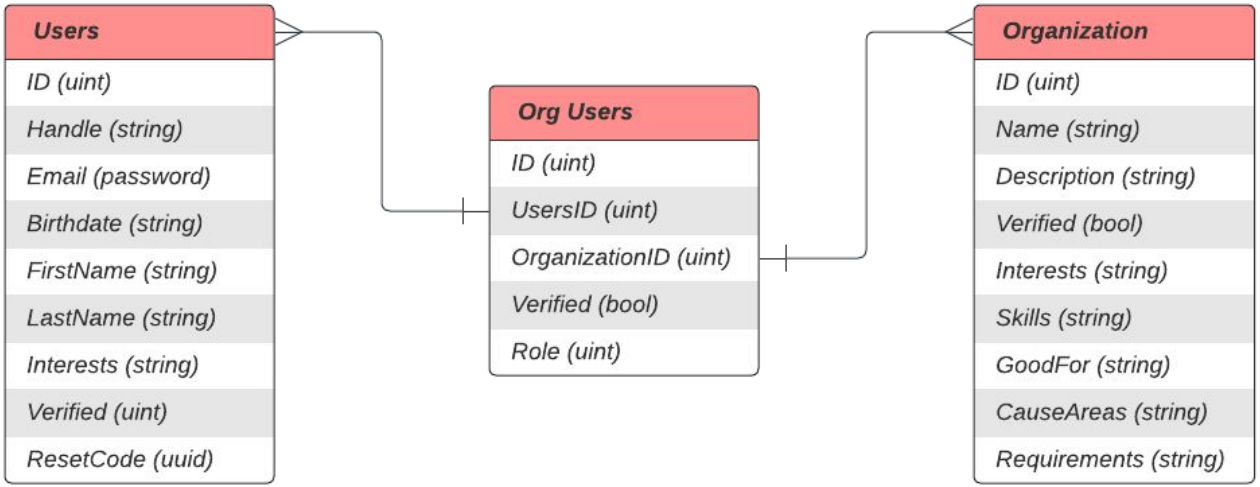
Organizations



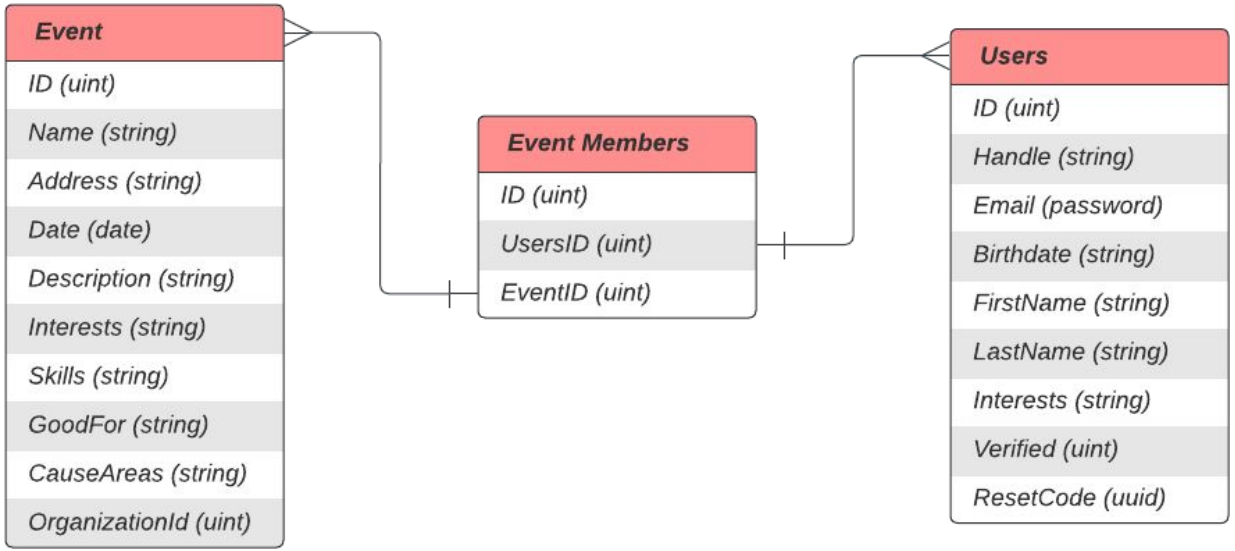
Users


Login Repository
+ FindUserFromEmail()
+ CreateUser()
+ SaveResetCodeToUser()
Login Service
+ FindUserFromEmail()
+ CreateUser()
+ HashPassword()
+ SaveResetCodeToUser()
Login Controller
+ Signup()
+ Login()
+ PasswordReset()
+ Validate()
Users
ID (uint)
Handle (string)
Email (password)
Birthdate (string)
FirstName (string)
LastName (string)
Interests (string)
Verified (uint)
ResetCode (uuid)
User Controller
+ Create()
+ One()
+ Update()
+ Delete()
User Service
+ CreateUser()
+ OneUser()
+ UpdateUser()
+ DeleteUser()
User Repository
+ CreateUser()
+ OneUser()
+ UpdateUser()
+ DeleteUser()

Organization Members



Event Members



04

Prototype

Demo Video

05

User Study

Questions

Background Questions

Who are you?

Volunteer, organizer, or both?

...

Challenges

Finding events...

Finding volunteers...

...

UI/UX of prototype

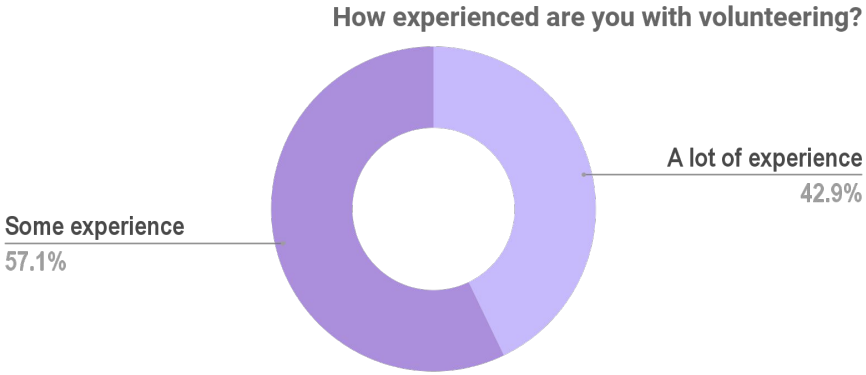
Helpfulness of the features...

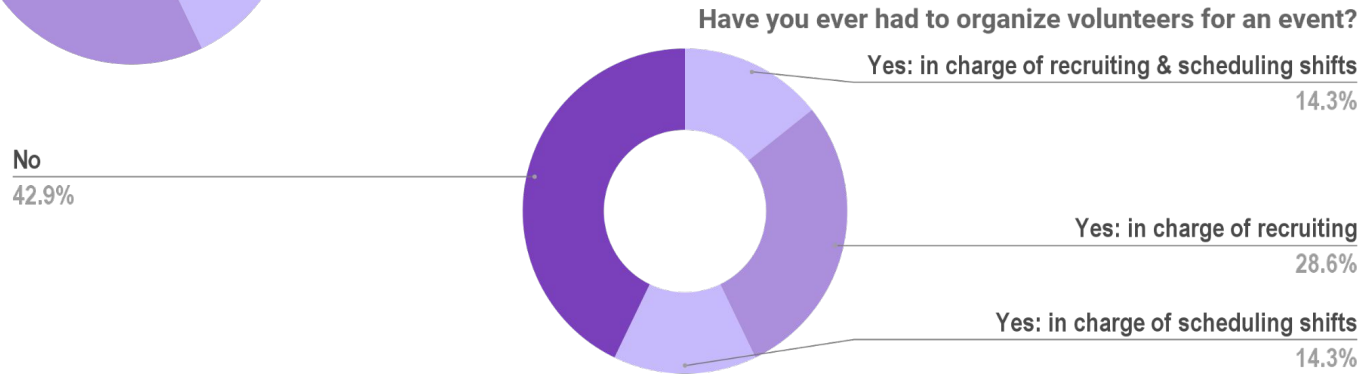
Feature implementation...

...

Anything else?

Demographics





Results

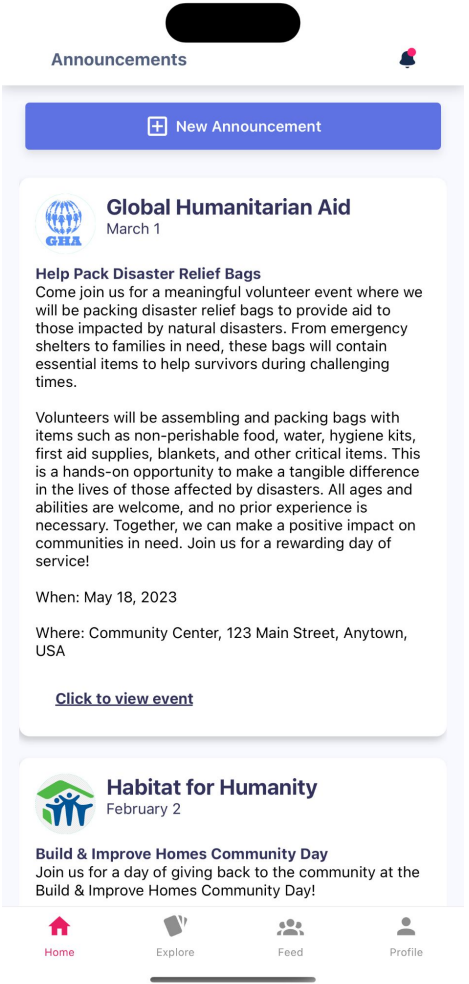
Social Tab:

Pros

- More inclined to volunteer if their friends were volunteering
- Social media has a strong influence the current generation

Cons

- Not everyone cares for social media in volunteering



Results

Quick-swipe feature:

Pros

- Feature for quick-look at events
- All important information on one screen

Cons

- Missing time that event ends or duration

Results

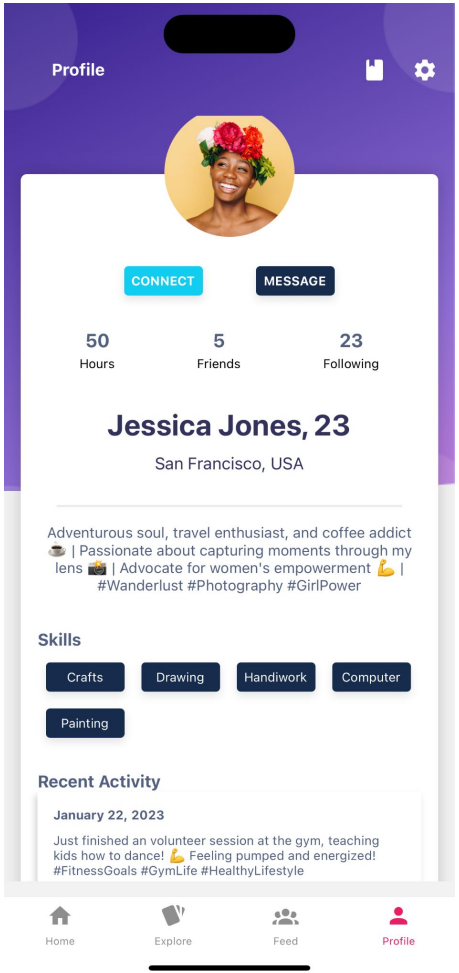
Profiles:

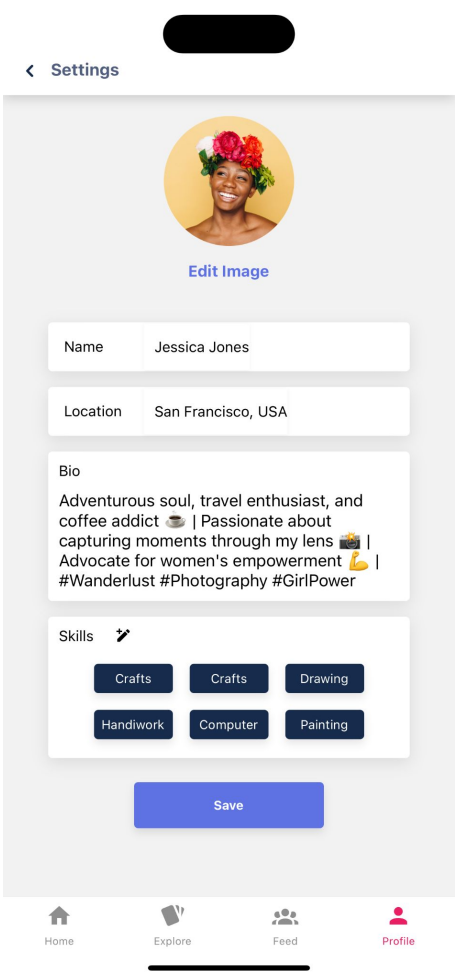
Pros

- Can include areas of passion/interest
- Reaching out from user to user is easier

Cons

- Could be expanded for more information





06
Team Contribution

Frontend Team

Carmen
Lee

Cera
Samson

Matthew
Yapjoco

Mathis
Tessier

Genaro
Lopez Baez

Backend Team

Michael
Lazeroff

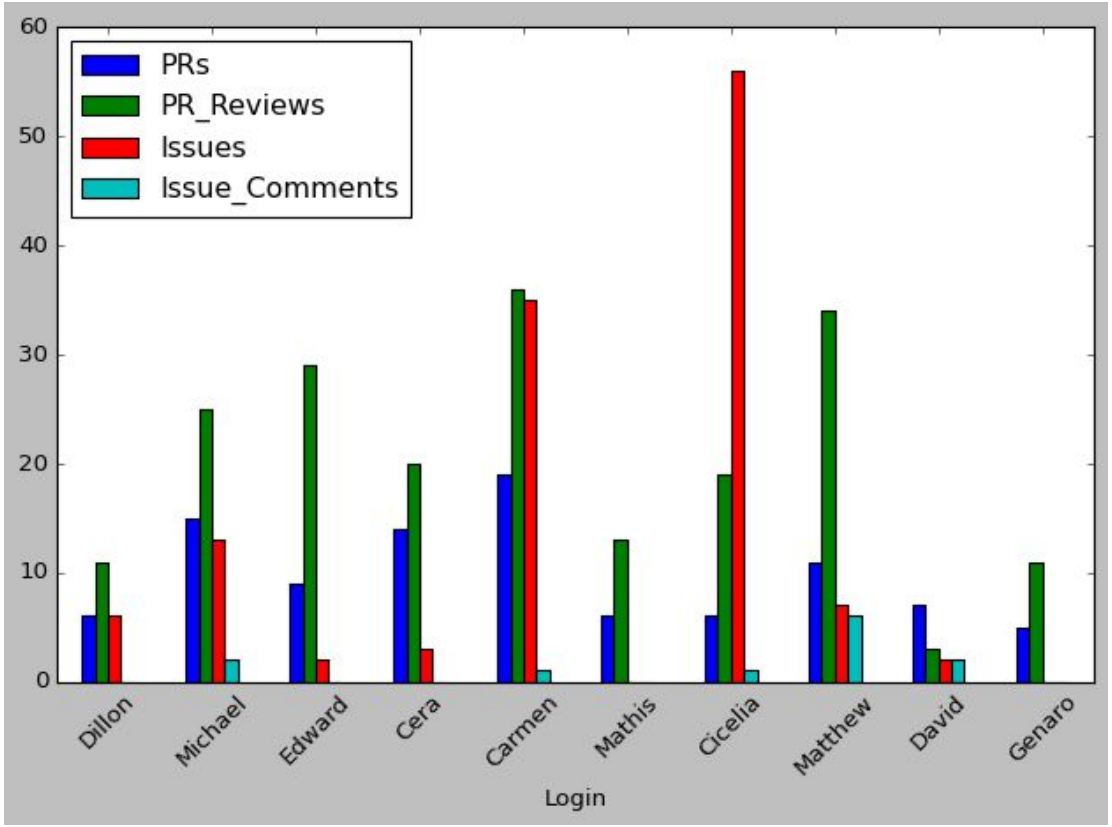
Edward
Sung

Cicelia
Siu

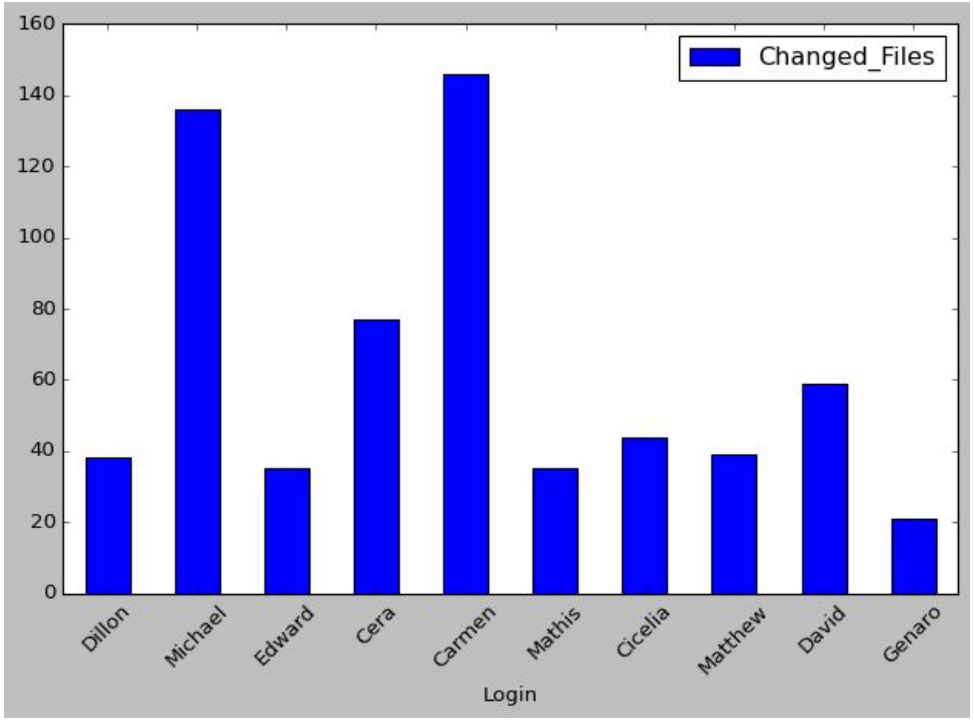
Dillon
Harder

David
Zeleniak

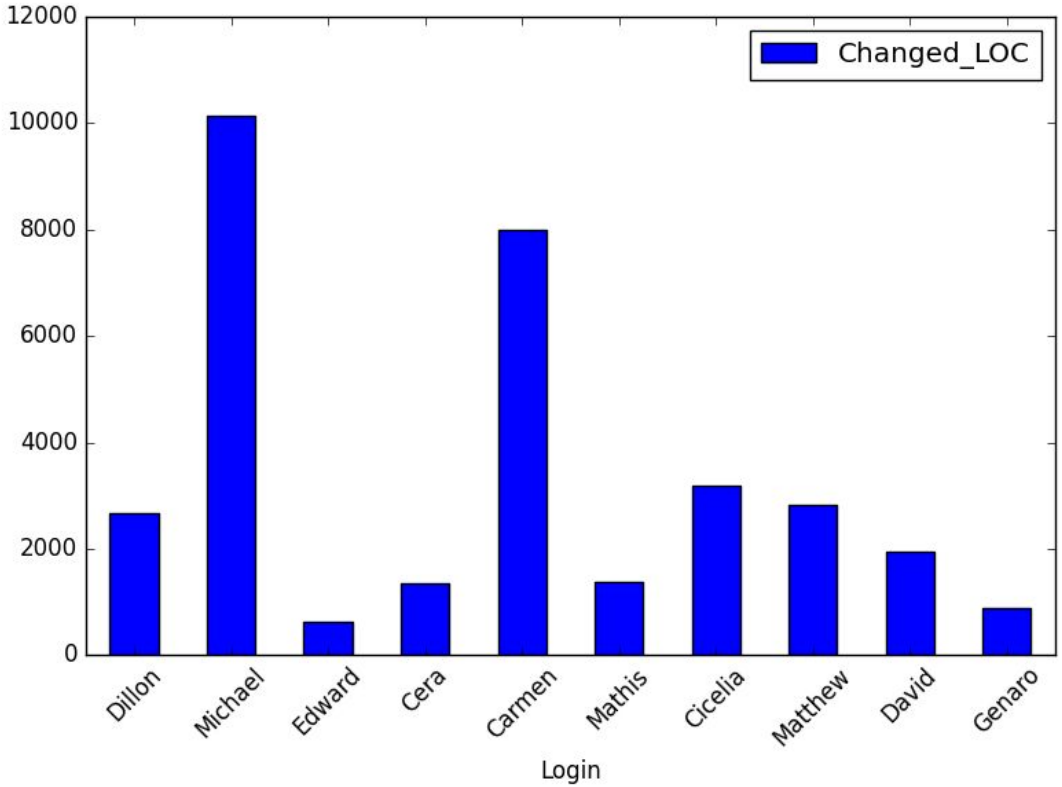
Pull Requests



Changed Files



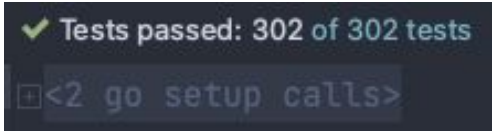
Changed Lines of Code



Testing

	Controllers	Services	Repositories
Branch Coverage	100%	100%	100%
Statement Coverage	100%	100%	100%

Go Test and Gobco




```
➜  backend git:(main) ✗ gobco controllers
ok      github.com/VolunteerOne/volunteer-one-app/backend/controllers   0.195s

Branch coverage: 190/190
```

```
➜  backend git:(main) ✗ gobco service
ok      github.com/VolunteerOne/volunteer-one-app/backend/service       1.376s

Branch coverage: 0/0
```

```
➜  backend git:(main) ✗ gobco repository
ok      github.com/VolunteerOne/volunteer-one-app/backend/repository    0.200s

Branch coverage: 60/60
```

07

Conclusion

Challenges & Expandability

Challenge 1

Overlooking key features

Challenge 2

Not deploying the backend from the beginning

Challenge 3

The lack of prebuilt tooling with Go web frameworks

Challenge 4

Lack of communication between teams

Expansion 1

Self-cancellation feature

Expansion 2

Skill-matching events

Expansion 3

Being able to volunteer as a group

Expansion 4

Location-based events

Acknowledgements & Recognition

Advisors

- Dr. John Businge for support during development
- Molly Marks from the UNLV College of Engineering

Survey Participants

- Leora Dumanlang
- Kelly Chicas
- Matt L.
- Alyson P.
- Omari Ware
- Najmah Nassri
- Jeremy

References

[1] Remarkable outcomes. VolunteerMatch. (n.d.). Retrieved March 28, 2023, from https://www.volunteermatch.org/.

[2] Team, V. (2022, September 19). 9 Problems You May Be Facing With Your Current Volunteer Management Process. Volgistics. Retrieved March 28, 2023, from https://www.volgistics.com/blog/problems-current-volunteer-management-process/.

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[4] Bang, H., & Ross, S. D. (2009). Volunteer motivation and satisfaction. Journal of venue and Event Management, 1(1), 61-77. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=57bcd374bf289b02f99651d06adda4bdde4208f5.

[5] McAllum. (2014). Meanings of Organizational Volunteering. Management Communication Quarterly, 28(1), 84–110. https://doi.org/10.1177/0893318913517237.

Thanks!

Any questions

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