

# PDGo

Alberto B.  
Kevin O.  
Elias S.  
Tommy Y.

Cassidy B.  
Fernando P.  
Qian W.  
Andrew Z.

Mina M.  
Elizabeth S.  
Yin W.



# The Team

## Students

Tommy Y. (Main Lead)  
Cassidy B.  
Mina M.  
Fernando P.

Kevin O. (Sub-Lead)  
Elias S. (Sub-Lead)  
Alberto B.  
Elizabeth S.

Andrew Z. (Sub-Lead)  
Qian W.  
Yin W.

---

## Liaisons

Deepak Budwani  
Mark Perez

Brent Modell  
AJ Voisan

Xavier Narravo  
Jalena Jones

---

## Advisor

Chengyu Sun



# Santa Barbara Public Defenders



**Mission:** to protect and defend the rights of our clients through legal representation of the highest quality.

- Provide legal services to people who qualify for assistance across the cities of Santa Maria, Santa Barbara, and Lompoc.
- 130 staff members
- 54 attorneys



# Project Goals

Create minimum viable app for the average user to rollout alongside the new HR system

**Phase 1 (Fall Semester 2023)**



**Phase 2 (Spring Semester 2023)**

Clean up User Interface, receive feedback and debug, and assign accessibility features

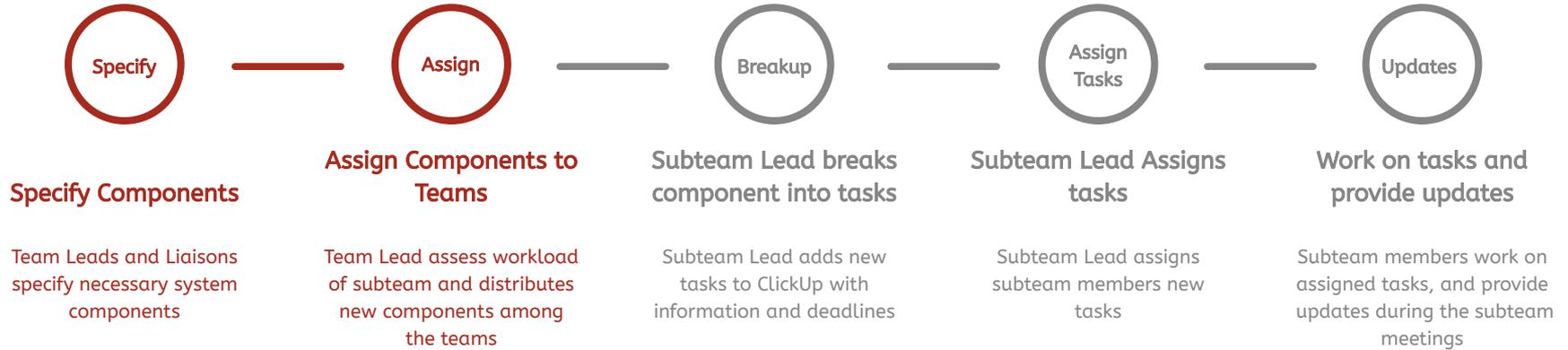


**Yin Win**

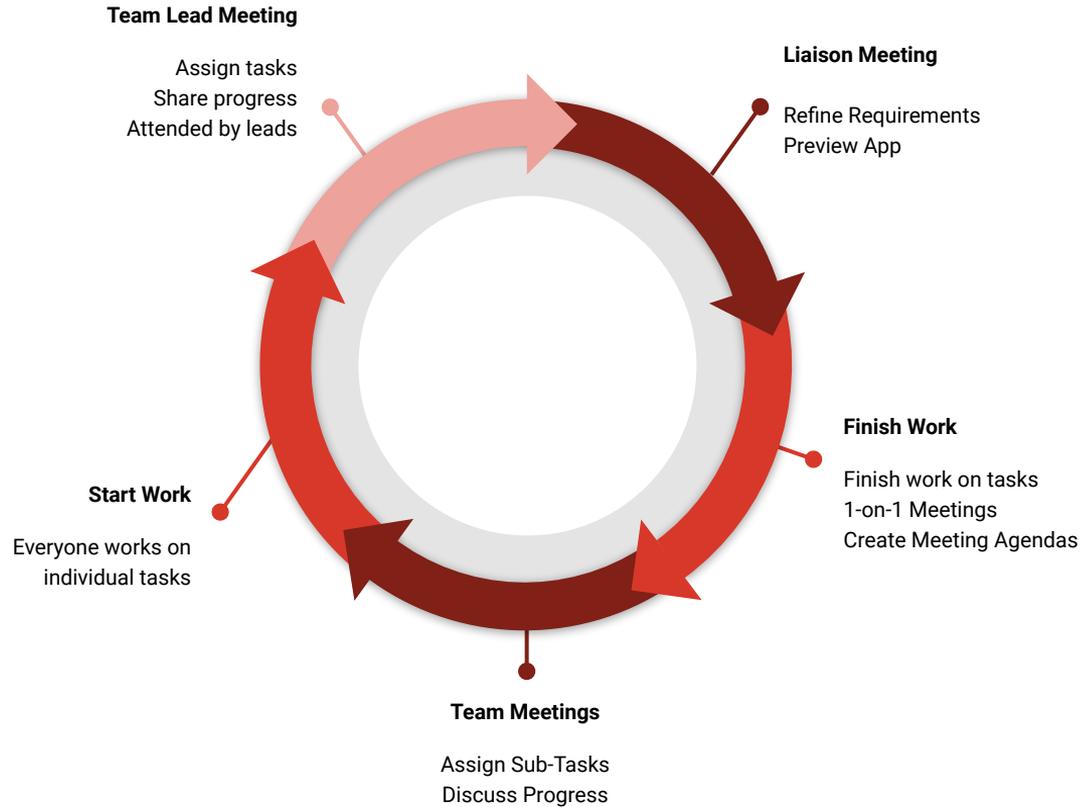


# Project Planning

Team Split into 3 subteams



# Project Communication Workflow



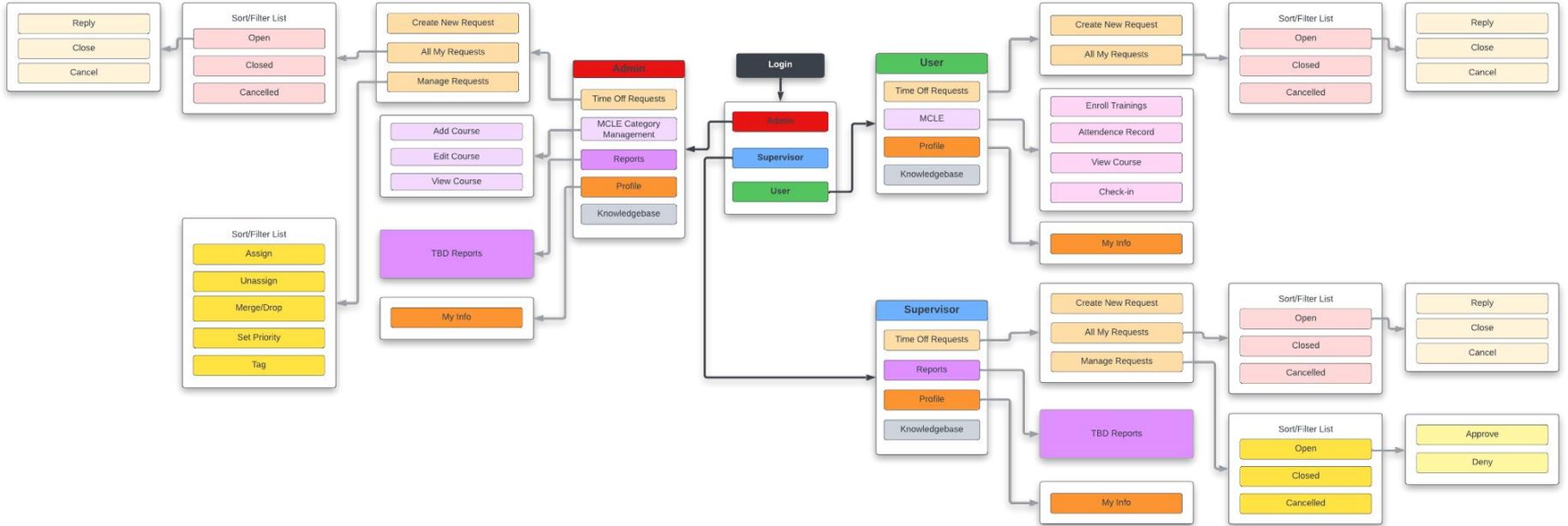


Andrew Zou





# UI Flow Model





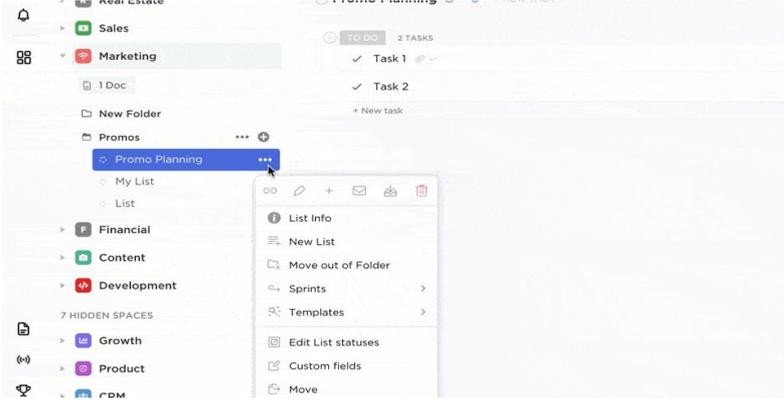
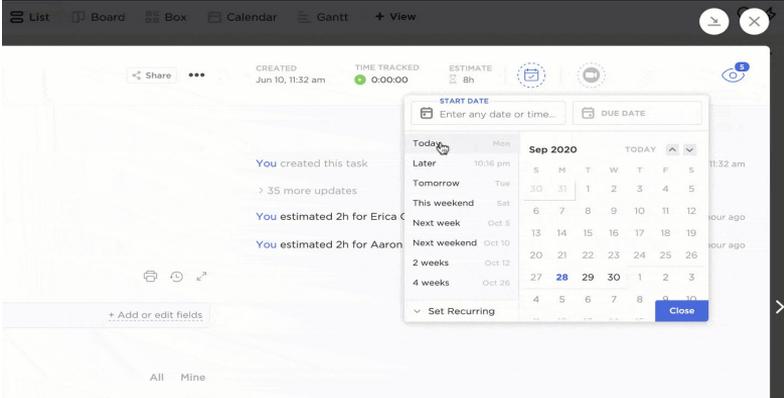
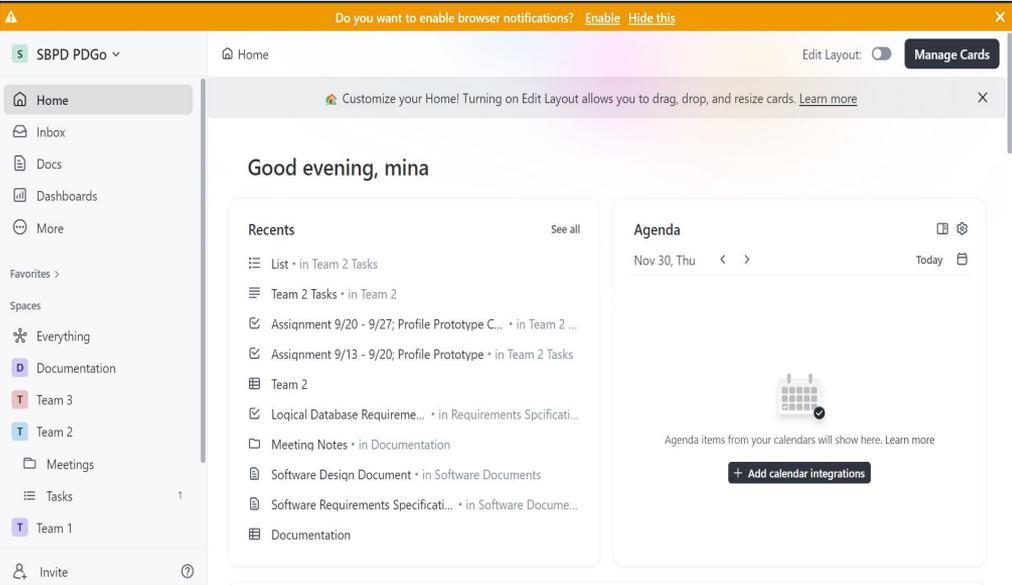
**Mina Mekhaiel**



# Streamline your work with [ClickUp](#)

- **Task Management**
  - Create, assign, and track tasks.
- **Project Planning**
  - Tracking progress over time.
- **Team Collaboration**
  - Comment on tasks, share documents, and integrated chat.
- **User Friendly**
  - Interface that is easy to navigate.
- **Customization & Integration**
  - Users can customize their workspace and workflows.
- **Why choose ClickUp**
  - Flexibility: suits teams of all sizes.

# Core Features





**Elizabeth Silvestre**

# Project Requirements

- Main Requirements
  - Intuitive for both experience and new hires
  - Access Control
  - General Availability
  - Accessibility (Section 508)
- Other Requirements
  - Use PowerApps
  - Mobile-Friendly
  - Notification System



Access Control System





# Technology Used

- Development Tools
  - Microsoft PowerApps
  - Microsoft PowerAutomate
  - Microsoft SharePoint
  - Microsoft PowerFx
- Project Management Tools
  - ClickUp
  - GitHub
- Communication
  - Discord
  - Microsoft Teams/Zoom



Power Apps

Power Automate



SharePoint



ClickUp



Microsoft  
Teams



Kevin Ornelas



# What is PowerApps?

- PowerApps is part of Microsoft's PowerPlatform and is used to create Business Applications
- Designed for non-developers with a low-code environment
- Leverages Microsoft 365 and “Connectors” for external communication
- Leverages PowerFx for internal scripting



# Pros to PowerApps

- Cross-Platform compatibility for most Mobile devices, Browsers and major Operating Systems.
- Integration to Microsoft 365 Services
- Adheres to Microsoft security and compliance standards
- Allows developers to create reusable components and templates.
- No setup required.
- Low- code environment.
- Can create a wide range of functions and layouts.
- Cost effective compared to traditional development methods.



# Cons to PowerApps

- More complex functionalities would require Power Automate.
- Depends on Microsoft ecosystem
- Managing versions of the app can be a challenge.
- Cannot access or edit the app unless connected online.
- Licensing costs for an expanded set of functions.
- Time-consuming to implement multiple apps into one.



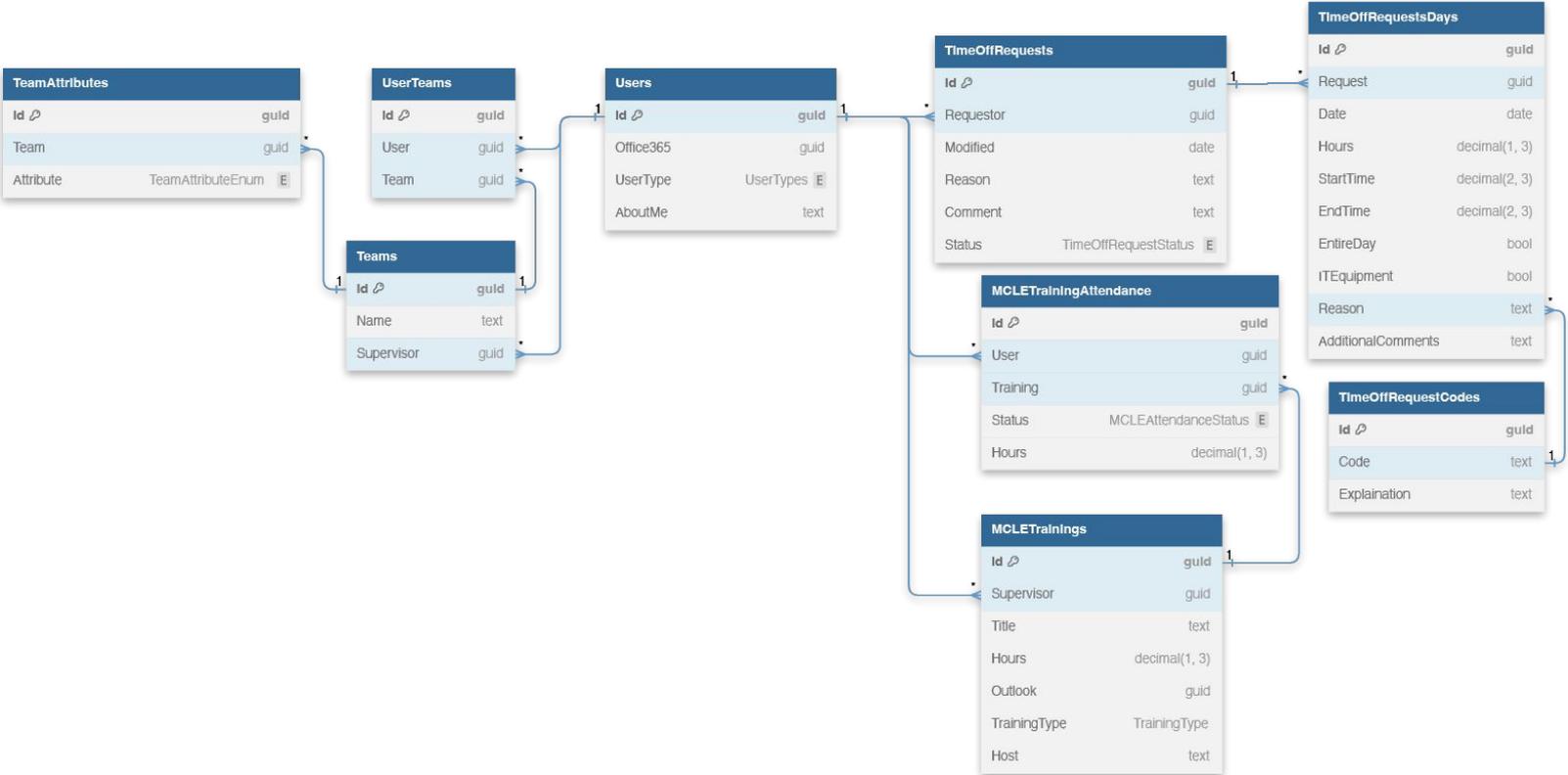
**Elias Schablowski**



# What is Microsoft Sharepoint?

- “Websites for Business”
- Lists are a sort of “Database” in SharePoint
- Native connector
- Lists can store:
  - People
  - Numbers
  - Text
  - References
  - And more
- Nosql, uses ODATA queries

# Database Schema



# SharePoint Lists

Users

Teams

Users-Teams

TimeOffRequests

TimeOffRequestDays

TeamAttributes

MCLETrainings

MCLETrainingAttendance

RequestCodes

Facility Request

| ID | Created    | Modified             | Reason     | Status    | Comments  | Requester | Days |
|----|------------|----------------------|------------|-----------|---|-----------|------|
| 1  | October 5  | Yesterday at 7:43 PM | Text input | Cancelled | Closed Request:<br>Previous comment:  | 8         | 1    |
| 2  | October 11 | October 20           |            | Denied    | Switched to deny: +++<br>Previous comment:<br>Switched to approve:<br>Accident Previous<br>comment:<br>Switched to approve: | 8         |      |
| 3  | October 12 | October 20           |            | Approved  | yes   | 8         |      |
| 4  | October 12 | October 20           | +++        | Denied    | Switched to deny:<br>tree8 Previous<br>comment:<br>Switched to approve:<br>tree7 Previous<br>comment:                       | 8         |      |
| 5  | October 12 | November 17          | test2      | Cancelled | Closed Request:<br>Previous comment:  | 8         |      |
| 6  | October 12 | October 20           |            | Cancelled |   | 9         |      |
| 7  | October 12 | October 20           |            | Approved  | tree  | 8         |      |

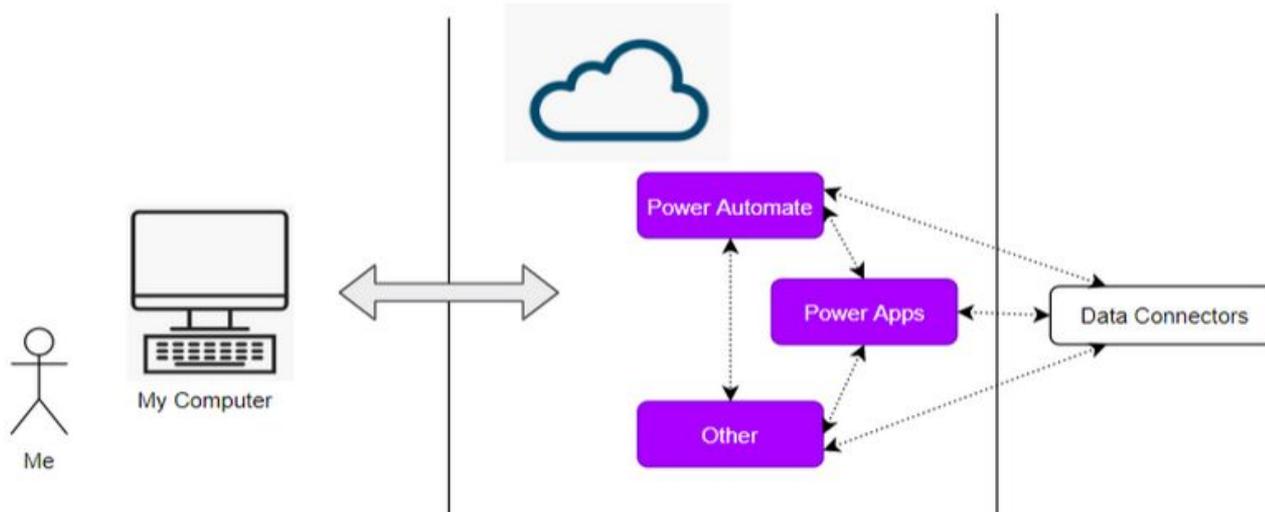


**Cassidy Barron**

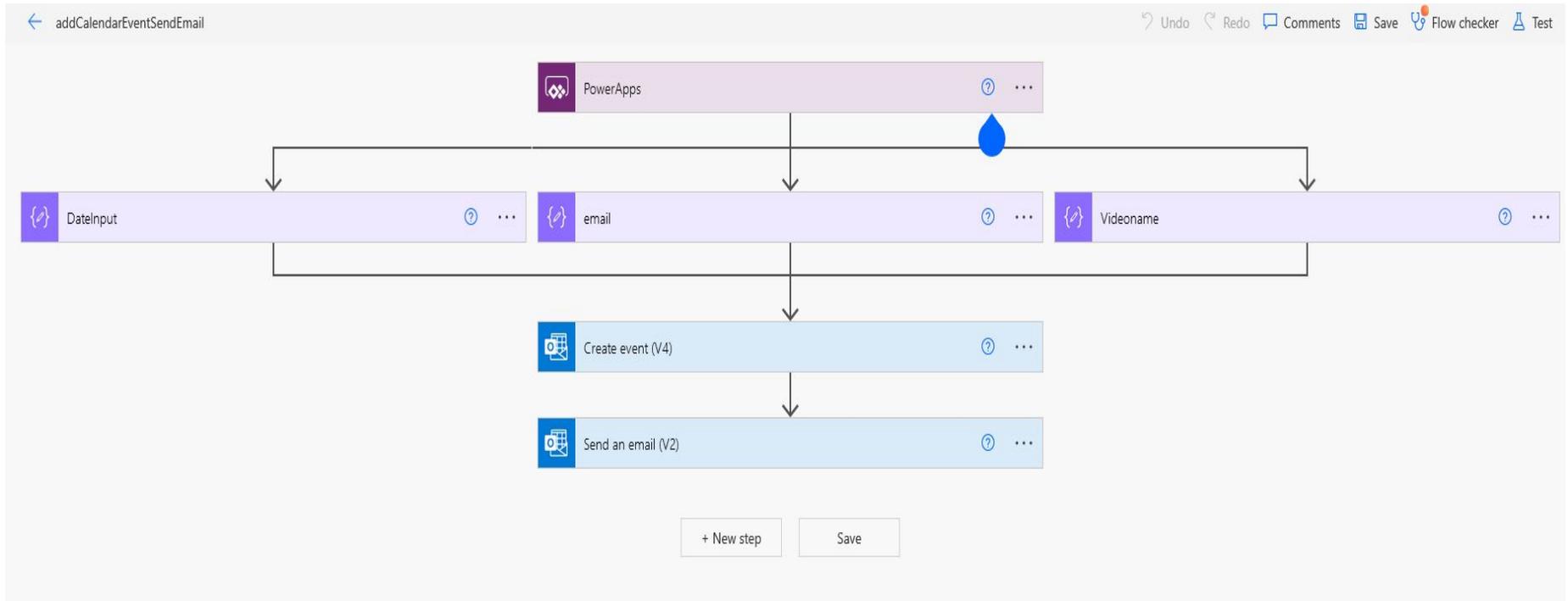


# What is Power Automate?

- Cloud Workflows
- Allow for triggered runs to run outside the client device
- Offers Automation for time consuming tasks
- Offers higher uptime



# Scheduling Events on a Calendar Example



```
addCalendarEventSendEmail.Run(TimeNDate.Text, User().Email, NameofVideo.Text)
```

\* Site Address

\* List or Library Name

Folder

Show advanced options

**Initialize variable**

\* Name

\* Type

Value

**Get Requestor**

\* Site Address

\* List Name

\* Id

Show advanced options

**Switch**

\* On

**Cancelled**

\* Equals

**Do not send a notification**

\* Status

Add an action

**Pending**

\* Equals

**Get Teams**

\* Site Address

\* List Name

Limit Entries to Folder

Include Nested Items

Show advanced options

**Apply to each 3**

\* Select an output from previous steps

**Apply to each**

\* Select an output from previous steps

**Append to array variable**

**Approved**

\* Equals

**Set Recipient to Requestor (Approve)**

\* Name

\* Value

Add an action

**Denied**

\* Equals

**Set Recipient to Requestor (Deny)**

\* Name

\* Value

Add an action

**Default**

If no case contains a matching value

**Terminate on Unknown Code**

Add an action

\* Select an output from previous steps

{x} Recipient x

**Condition 2**

{x} Status V... x is equal to Pending

+ Add

**If yes**

**Send push notification**

Recipients: {x} Recipient x

Message: You have a new Time Off Request from {x} Created By Dis... x

Open App: Yes

Parameters: Key value parameters to pass with the notification.

Add an action

**If no**

**Send push notification 2**

Recipients: {x} Recipient x

Message: Your Time Off request has been {x} Status Value x

Open App: No

Parameters: Key value parameters to pass with the notification.

**Get user profile (V2)**

User (UPN): {x} Office365 x

Show advanced options

**Send Approve Deny Email**

To: Mail x

Subject: Request for: {x} body/TimeOff... x has been {x} Status Value x .

Body: Your request sent for {x} body/TimeOffDate x - {x} body/TimeOffEndDate x has been {x} Status Value x .

Show advanced options

Add an action



**Fernando Perez**



# Current Progress

## UI design

- Responsive design for device variety
- Functions triggered by user input and form submission.

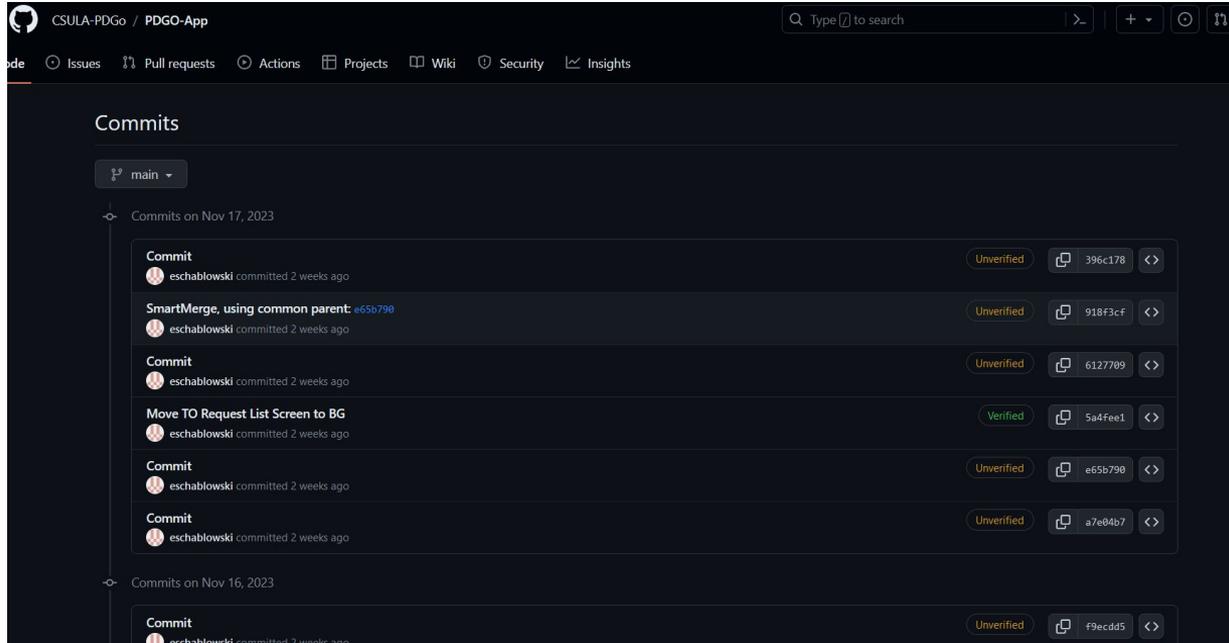
## Database System

- Microsoft SharePoint lists for secure storage of sensitive data.
- Connect the list to the Power App UI to Store and pull data.

## Github

- Created a Repository to maintain all builds of PDGo.
- All of PDGo's developers can make changes to the build at the same time without issue.

# Our GitHub Page



Link: <https://github.com/CSULA-PDGo/PDGO-App>



Qian Wang



# UI Design

- Stands for **User Interface design**, is the process of designing interfaces in software or computerized devices
- UI design include both the visual design aspects (like layout, colors, typography, and icons) and the functionality( how users interact with the app and the overall user experience)

**primary goal** is to make the user's interaction as simple, efficient, and enjoyable as possible.

**A well-designed** interface not only looks good but also enhances usability, accessibility, and user satisfaction

# UI Design (WIP)

← Requests

Start Date 12/15/2023

End Date 12/30/2023

Entire Day

Reason Code HLB

I need access to SBPD IT equipment while abroad

Additional Comments

Add to Request

← Office



**SB Public Defender Main Office**  
1100 Anacapa Santa Barbara 93101  
(805) 568-3470

Hours: Monday 8 AM - 5 PM  
Tuesday 8 AM - 5 PM  
Wednesday 8 AM - 5 PM  
Thursday 8 AM - 5 PM  
Friday 8 AM - 5 PM  
Saturday Closed  
Sunday Closed

←



Tommy Youn

Team Office Calendar Supervisor Settings

**About Me**  
I am a video game developer and have previously worked in web development. I love playing and making video games and wish to make that my full time career in the near future.

(323) 848-0418

tyoun@calstatela.edu

← Schedule

Calendar

November 2023

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-----|-----|-----|-----|-----|-----|
| 29  | 30  | 31  | 1   | 2   | 3   | 4   |
| 5   | 6   | 7   | 8   | 9   | 10  | 11  |
| 12  | 13  | 14  | 15  | 16  | 17  | 18  |
| 19  | 20  | 21  | 22  | 23  | 24  | 25  |
| 26  | 27  | 28  | 29  | 30  | 1   | 2   |

Friday, November 17, 2023

9:30 AM Cal State LA - PDGo Project Meetings  
60m Microsoft Teams Meeting

← Facility Requests

2023 Title: Elevator Broken N/A

15 NOV 2023 ID: 32 Urgent Tommy Youn Closed  
Title: Another Elevator Req Tommy's Requests

ID: 25 Urgent Mina Mekhaiel Closed  
Title: Window First Floor Office

ID: 24 Urgent Mina Mekhaiel Closed  
Title: Bathroom N/A

ID: 23 Urgent Mina Mekhaiel Closed  
Title: Door 10



**Alberto Barboza**



# Challenges faced

- PowerApps
  - Responsive Design is non-default
  - Only allows 1 person to edit at a time without Git (experimental)
  - Only has experimental VCS support, and sometimes overrides work in collaborative mode
- Time Conflicts
- Progress Check
  - Some teams used incompatible methods which need some redesign to be responsive
  - Some confusion over the status of Github integration
  - Subteams reliant on subteam lead, otherwise progress diverted



# Future Work

- Homogenize UI
- Ensure PDGo is accessible for users with disabilities
- Test for concurrency issues
- Review feedback and bug reports from users
- Create training material
- Ship application to SBPD



**Thank you!**

The background is a solid orange color. In the upper right quadrant, there are several decorative elements: a large, semi-transparent white circle containing a smaller white circle, and two smaller semi-transparent white circles, each containing a white triangle pointing towards the top-left.



# Q&A

ANY QUESTIONS?