

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

- New HR System coming in 2024
- Outdated recording systems
- Lax recordkeeping
- Scattered notifications



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

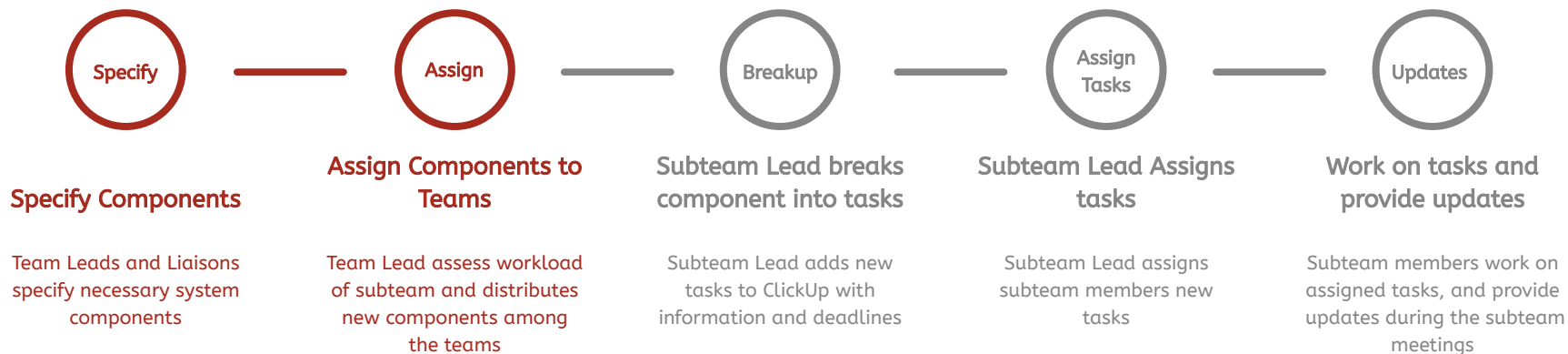


Yin Win

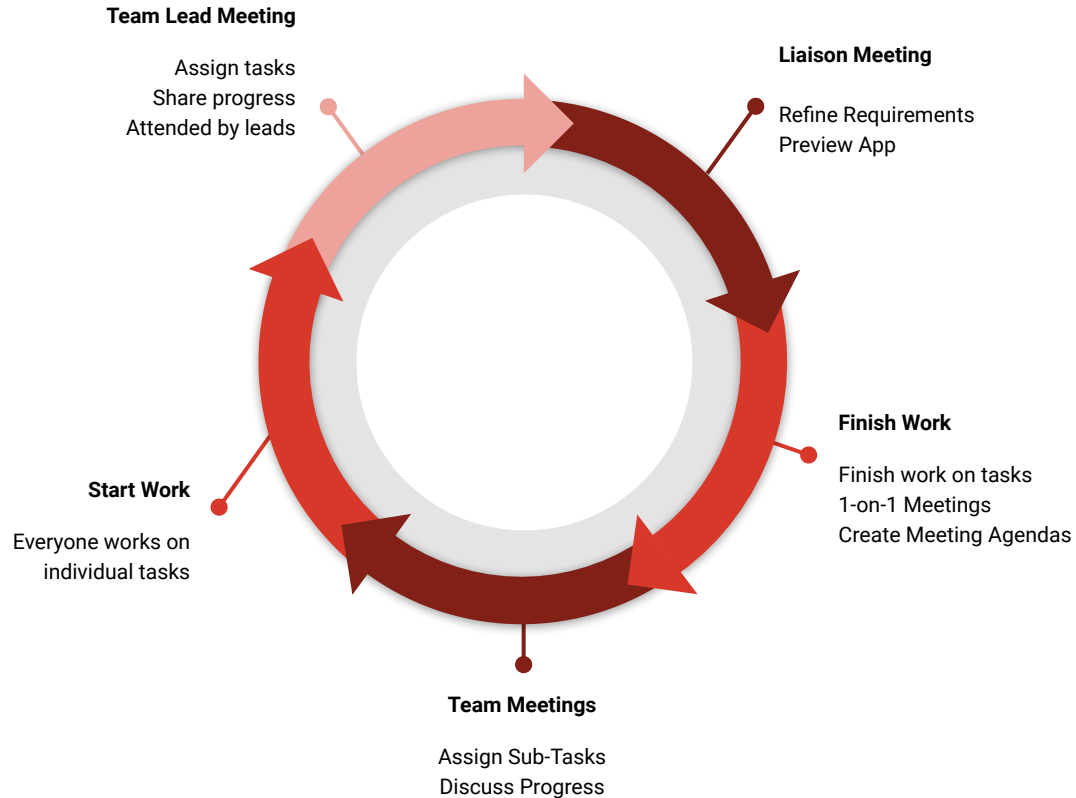


Project Planning

Team Split into 3 subteams



Project Communication Workflow





Andrew Zou

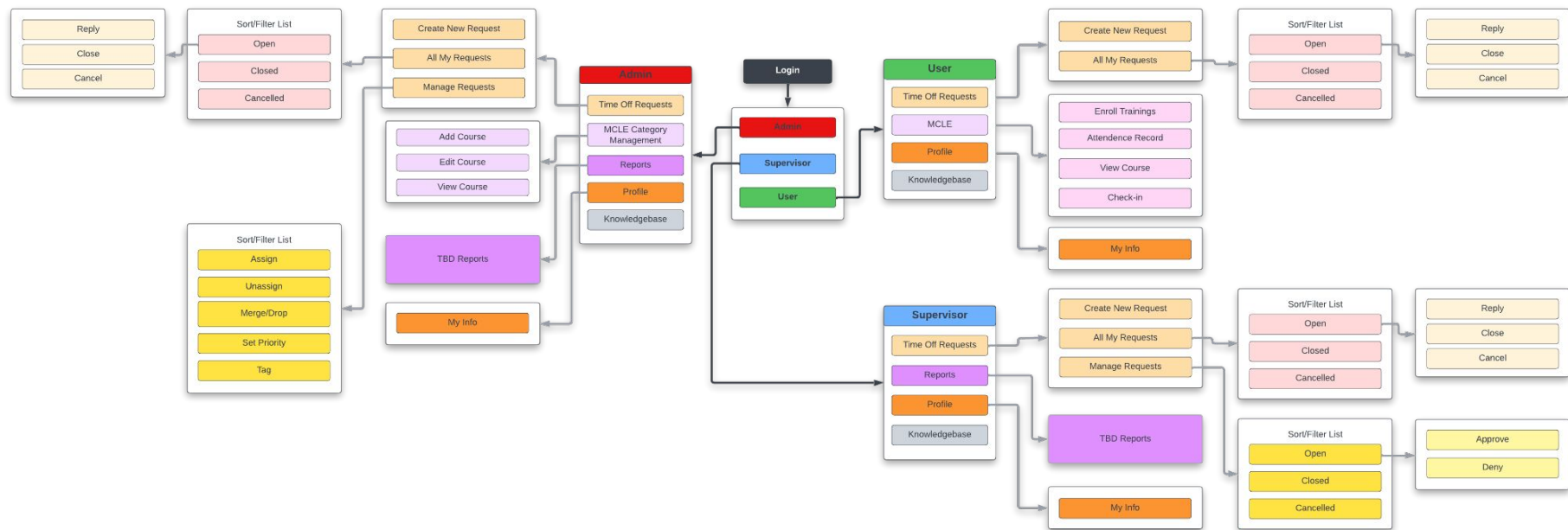
What is an Administrative System?

- Digitizes records
- Allows for stricter record keeping
- Automated HR and administrative processes





UI Flow Model





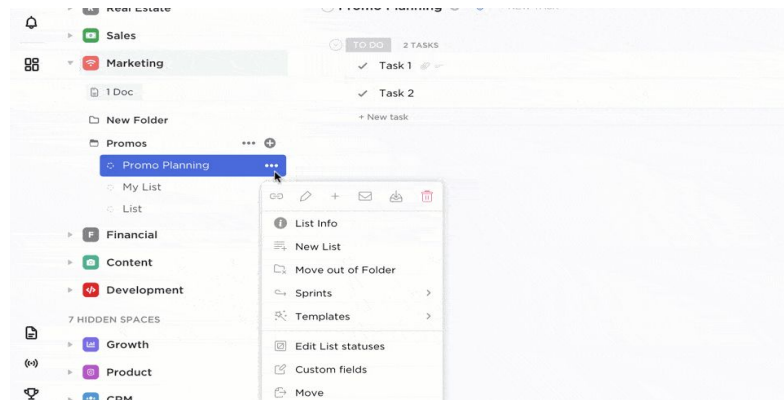
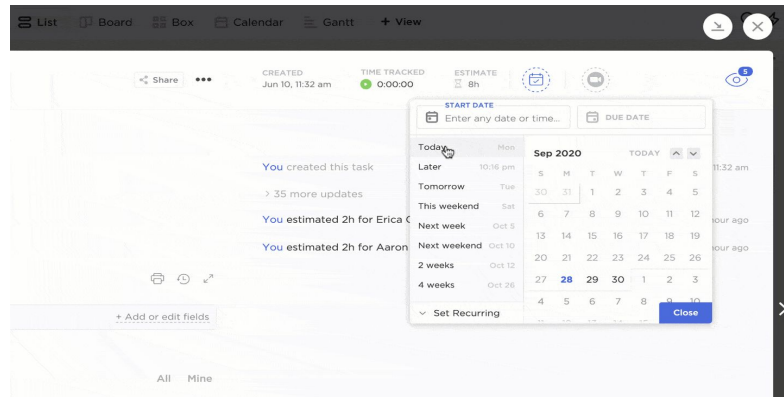
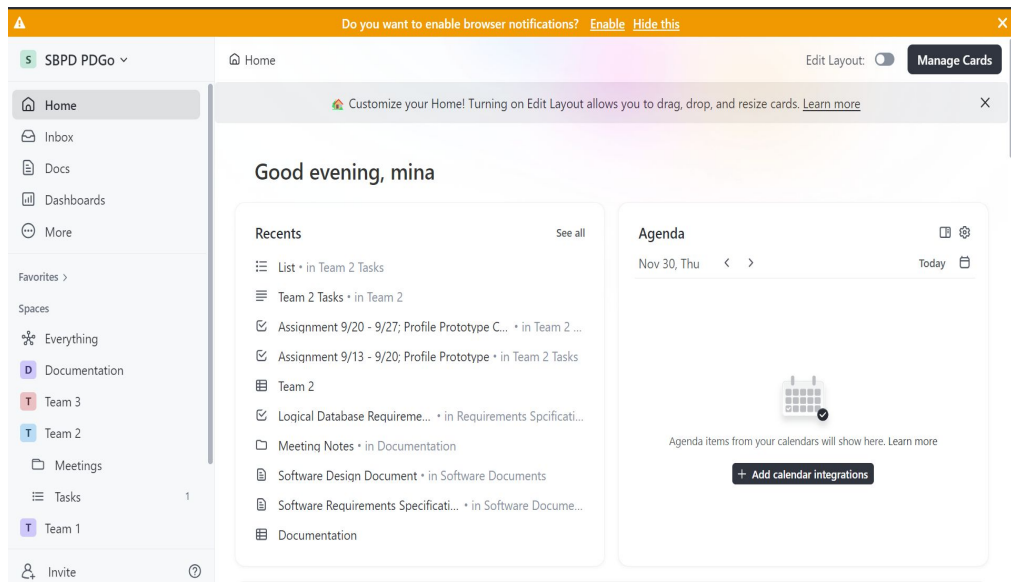
Mina Mekhaiel



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.



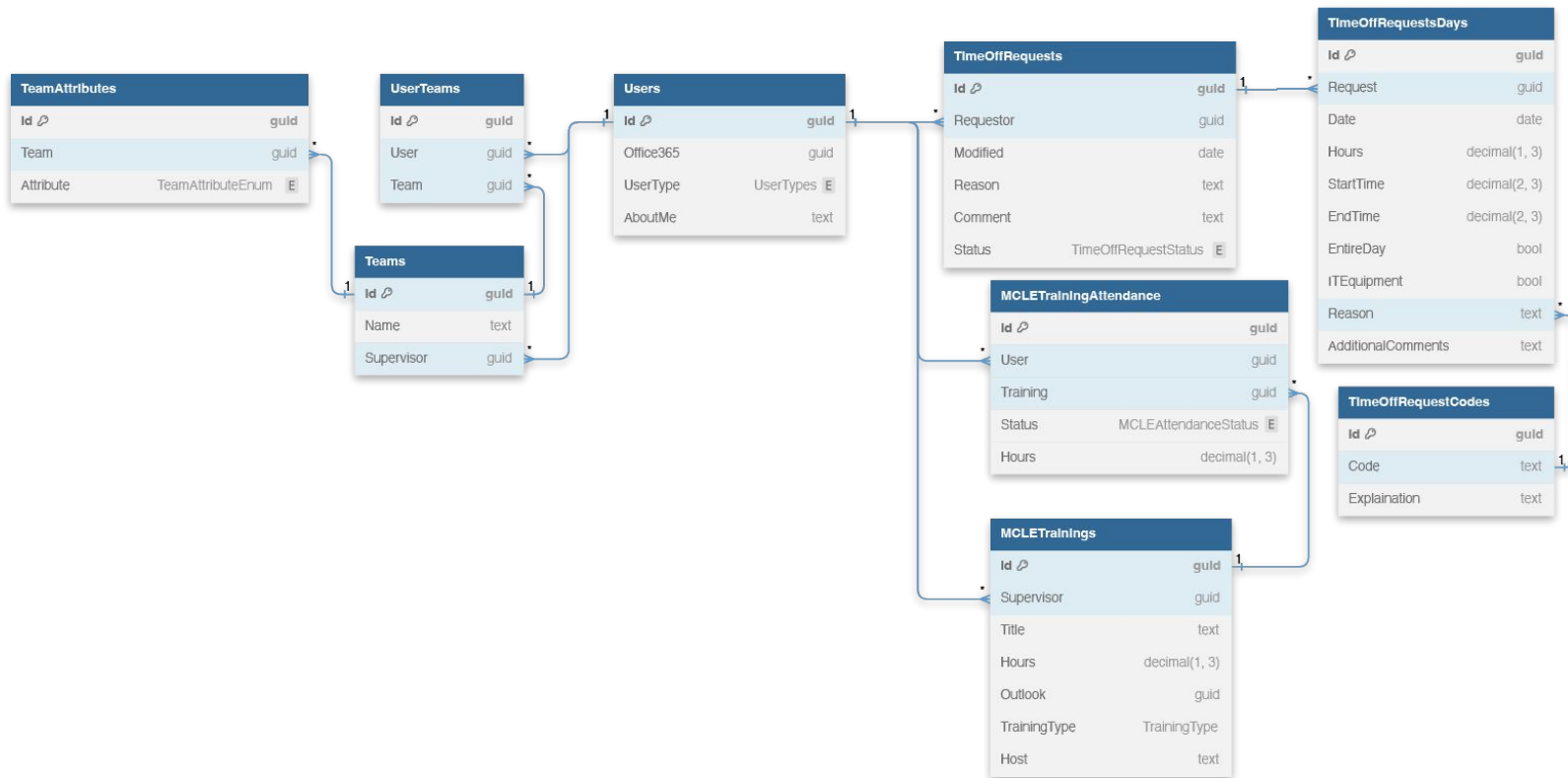
Elias Schablowski



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: Previous comment:	8	1
2	October 11	October 20		Denied	Switched to deny: +++ Previous comment: Switched to approve: Accident Previous comment: Switched to approve: 	8	
3	October 12	October 20		Approved	yes	8	
4	October 12	October 20	+++	Denied	Switched to deny: tree8 Previous comment: Switched to approve: tree7 Previous comment: 	8	
5	October 12	November 17	test2	Cancelled	Closed Request: Previous comment:	8	
6	October 12	October 20		Cancelled		9	
7	October 12	October 20		Approved	tree	8	

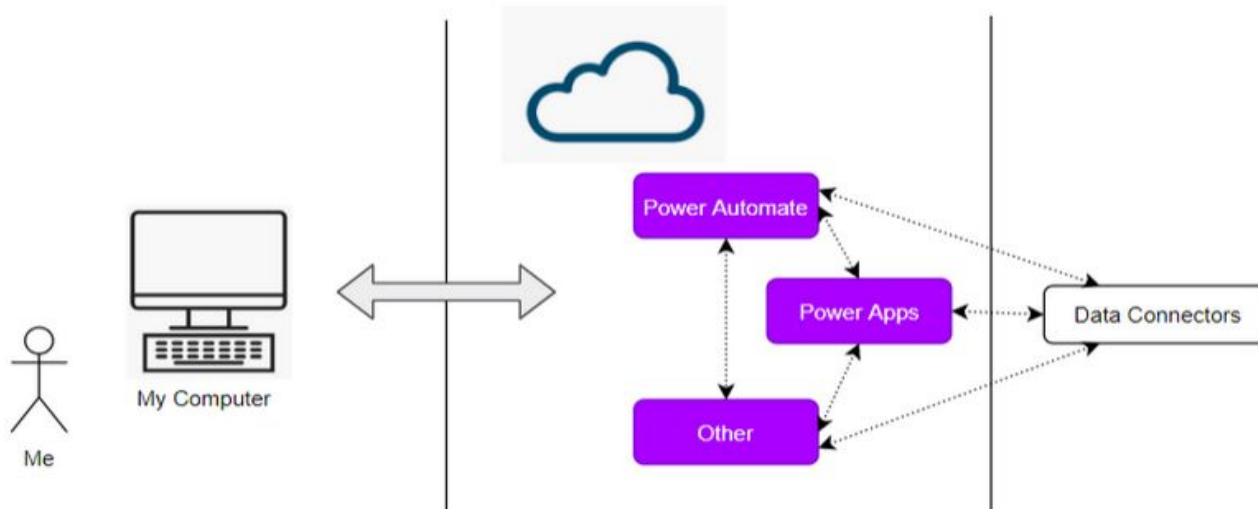


Cassidy Barron

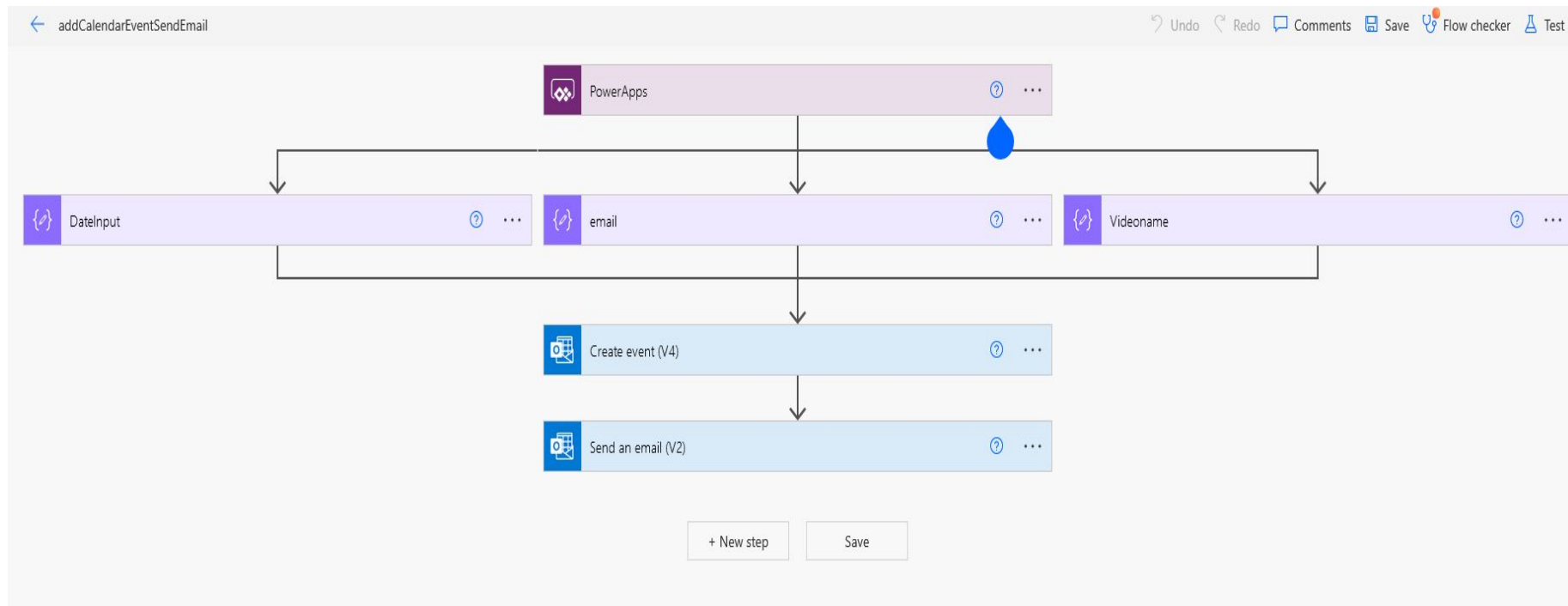


What is Power Automate?

- 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
2023-2024 SB POGs Development -
<https://csla.sharpoint.com/sites/2023-2024SBPOGsDevelopment> ✓

* List or Library Name
TimeOffRequests ✓

Folder
Select a folder, or leave blank for the whole library

Show advanced options ▾

{x} Initialize variable

* Name
Recipient

* Type
Array ▾

Value
Enter initial value

Get Requestor

* Site Address
2023-2024 SB POGs Development -
<https://csla.sharpoint.com/sites/2023-2024SBPOGsDevelopment> ✓

* List Name
Users ✓

* Id
body/Requests... X

Show advanced options ▾

Switch

* On
Status Value X

Cancelled

* Equals
Cancelled

Do not send a notification

* Status
Succeeded ▾

Add an action

Pending

* Equals
Pending

Get Teams

* Site Address
2023-2024 SB POGs Development -
<https://csla.sharpoint.com/sites/2023-2024SBPOGsDevelopment> ✓

* List Name
Users-Teams ✓

Limit Entries to Folder
Select a folder, or leave blank for the whole list

Include Nested Items
Yes ✓

Show advanced options ▾

Apply to each 3

* Select an output from previous steps
value X

Apply to each

* Select an output from previous steps
Team ID Lookup X

Append to array variable

Approved

* Equals
Approved

Set Recipient to Requestor (Approve)

* Name
Recipient

* Value
Office365 X

Add an action

Denied

* Equals
Denied

Set Recipient to Requestor (Deny)

* Name
Recipient

* Value
Office365 X

Add an action

Default

If no case contains a matching value

Terminate on Unknown Code

Add an action



Apply to each 2



* Select an output from previous steps

{x} Recipient x



Condition 2



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

{x} Mail x

* Subject

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

* Body

Font 12 B I U

Your request sent for {x} body/TimeOffDate x -

{x} body/TimeOffEndDate x has been {x} Status Value x .

Show advanced options



Add an action



Add an action



Fernando Perez



Current Progress

UI design

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

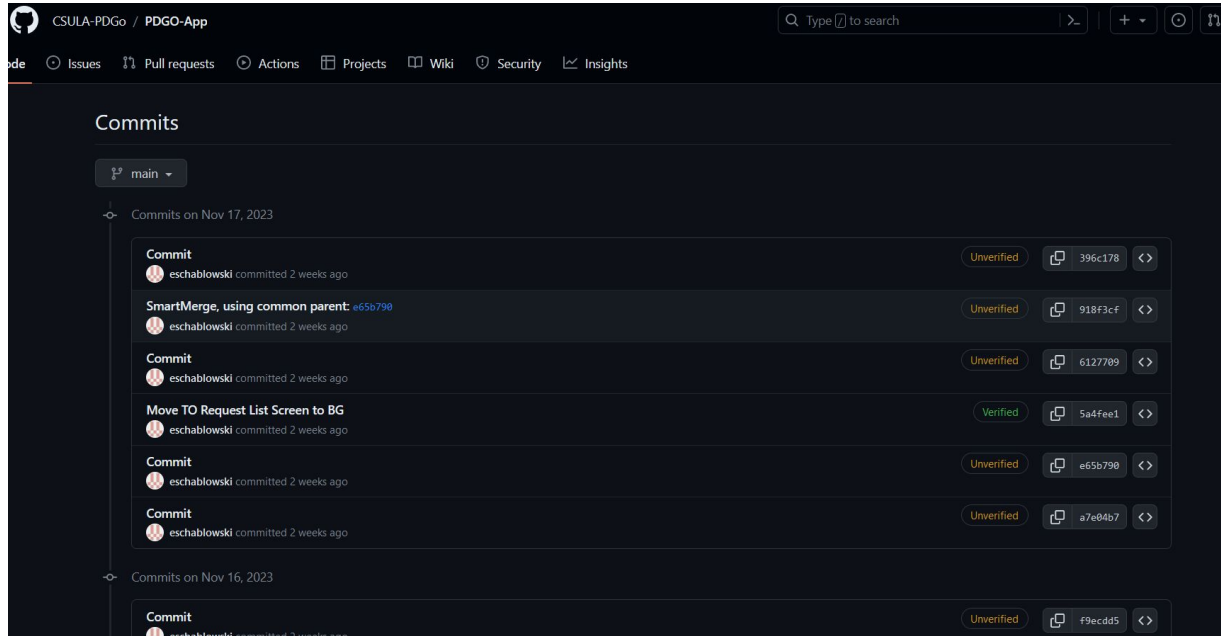
Database System

- 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 Date12/15/2022

End Date12/20/2022

Entire Day

Reason CodeHLB


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

TeamOfficeCalendarSupervisorSettings

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 Mekhaieel Closed Title: Window First Floor Office

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

ID: 23 Urgent Mina Mekhaieel 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!



Q&A

ANY QUESTIONS?