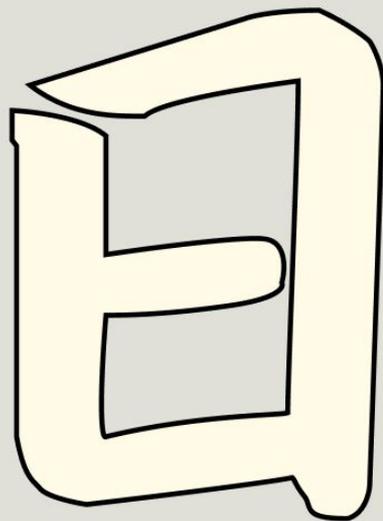


A8: Lucky Day

Lianne Cha, Ethan Bell, Em Ho,
Clare Chua



Team Members



Ethan Bell

Class of 2025
Major in Computer Science and
Digital Health

Lianne Cha

Class of 2026
Major in Computer Science

Em Ho

Class of 2025
Major in Computer Science



Clare Chua

Class of 2024
Major in SymSys
Coterm in CS



Dementia Prevention



Problem Statement

Older adults who face **language** barriers and **cultural** differences struggle to find social **connection** in their communities



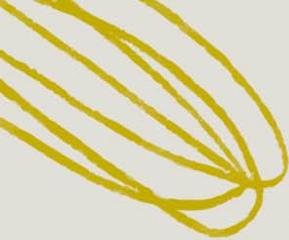
Loneliness and higher risk of **dementia** and cognitive disorders





Connecting Hearts, Protecting Minds

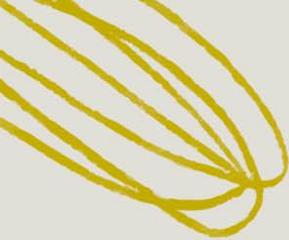




Value Proposition

Helping seniors build new friendships and find connection through culturally aligned events and activities





Solution



A **tablet** app for seniors offering a **social** calendar with **language** support and **culturally**-tailored activities

Enables seniors to easily discover, join, and organise events that **resonate** with their **cultural** background

Fosters social **connections** to prevent the onset of **dementia** and cognitive disorders

Lucky
Day

E

Sign Up

Log in

Design Values

Accessibility
and
readability

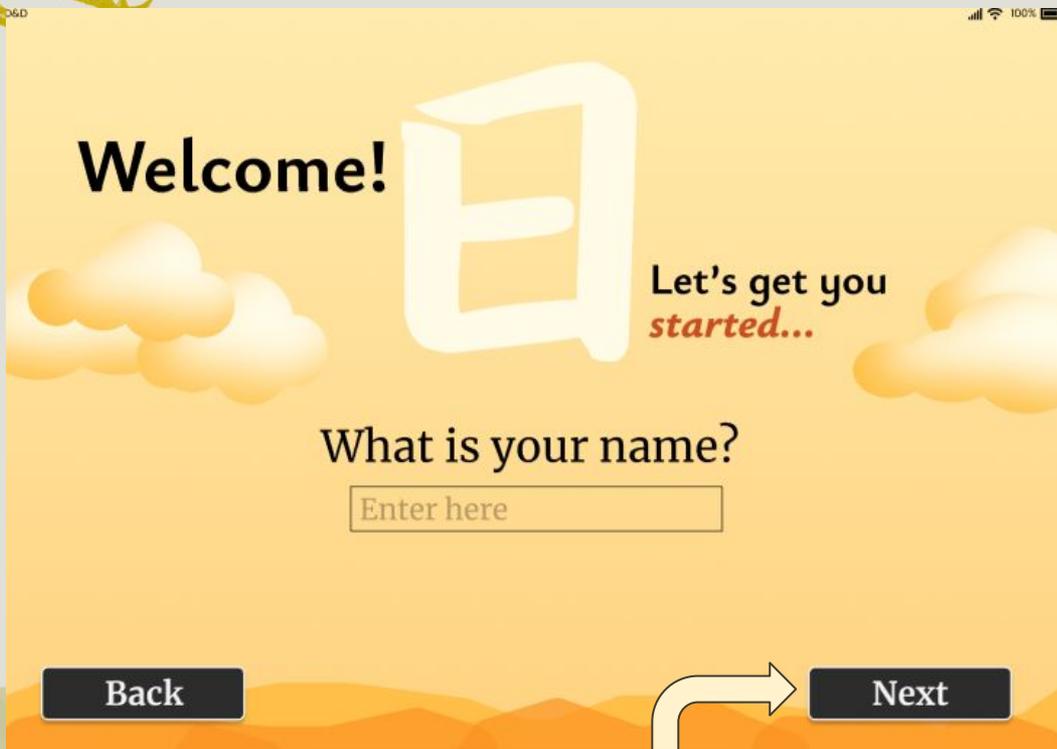
Minimal
screen
changes -
static
screens

Help and
assistance,
clarity

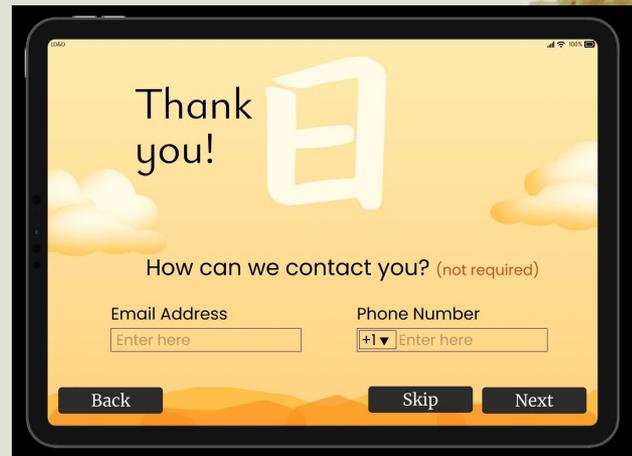
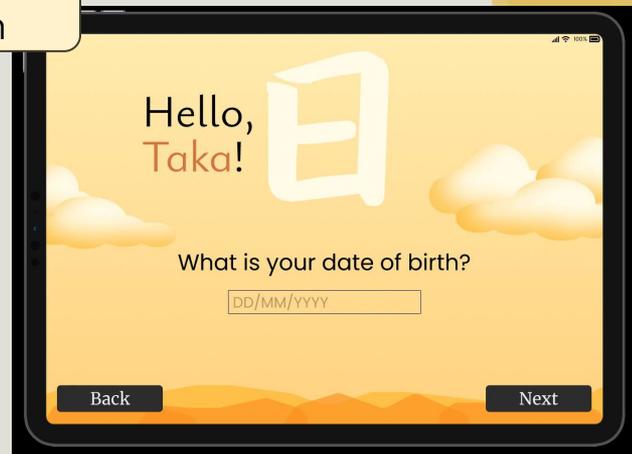
Match to
the real
world

Error
prevention
and *having*
events
happen

Help and documentation



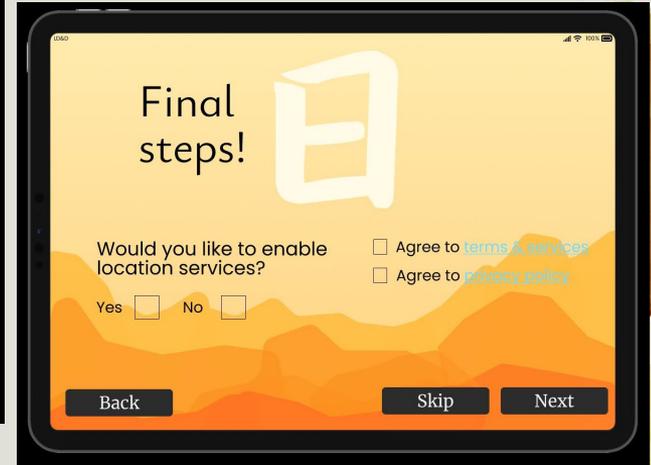
Accessibility /
navigability



Clarity



Error prevention





Taka's next event:
nothing yet!

Guide to Events:

- Food Events
- Game Events
- Other Events

←		November						→
Mon	Tue	Wed	Thurs	Fri	Sat	Sun		
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 							

Sign Out

Recommended events for you

[View ALL events](#)

[View MY events](#)



Yuko posted: 11/17

Moon-viewing party

[click to learn more](#)



Tags: Japanese



Gakuto posted: 11/18

Let's play mahjong! ...

[click to learn more](#)



Tags: Japanese Chinese



Kenji posted: 11/21

Join me for grocery sho ...

[click to learn more](#)



Tags: Japanese

3 events seen out of 24

[View More](#)

[+ Create Event](#)



Match to real world

Calendar

Static Screens

Unchanging

Accessibility

Large buttons,
icons, clear
format for
seniors



Taka's next event:
nothing yet!

Guide to Events:

- Food Events
- Game Events
- Other Events

←		November						→
Mon	Tue	Wed	Thurs	Fri	Sat	Sun		
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 							

Sign Out

Recommended events for you

[View ALL events](#)

[View MY events](#)



Gakuto's event on 11/18:

Tags:

Japanese

Chinese



Let's play mahjong!
Looking for 3 people to play with.

When: November 18th at 12:00 p.m.

Where: Chinatown Park



3/4 people have joined

[Help contribute?](#)

Exit

Join event

[+ Create Event](#)



Error Prevention

Exit buttons,
large- multiple
ways to exit

Recognition

Repetition of
information



Taka's next event:
nothing yet!

Guide to Events:

- Food Events
- Game Events
- Other Events

November						
Mon	Tue	Wed	Thurs	Fri	Sat	Sun
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 					

Sign Out

Recommended events for you

[View ALL events](#)

[View MY events](#)



Gakuto's event
on 11/18:

Contribute

Tags:

-
-

I need: **Mahjong set**

Gakuto will bring this



Table

Iain will bring this

Snacks

[Sign Up](#)

[Back](#)

[Exit](#)

[Leave event](#)

[+ Create Event](#)



Having events happen

Contributions, status, and ease of joining

Taka's next event:
nothing yet!

Guide to Events:

- Food Events
- Game Events
- Other Events

November

Mon	Tue	Wed	Thurs	Fri	Sat	Sun
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					

Recommended events for you

Gakuto's event on 11/18:

Tags:
Japanese
Chinese

Confirm Event
I will come to Gakuto's event on 11/18!
No Yes

Exit Join event

⊕ Create Event

Sign Out

Value Tensions

Navigability made more difficult as a result of static screens

Unnecessary use of space for real world matching-less clear?

Accessibility vs. *Accessibility*
(more inviting to specific demographic)

Tasks

Simple Task

Add events

User starts on main page- then **views** and **adds** culturally based recommended **events** onto any given day

Changes from Assignment 5

Combined moderate and simple task into one task

More specific actions user takes to add task



Tasks

Moderate Task

Contribute to Events

After adding event to their calendar, the user clicks to **contribute** supplies to the event

Changes from Assignment 5

Feedback from low-fi to add contributions / pooling

Used less frequently than culturally-based event search



Tasks

Complex Task

Create event

User starts on main page, then clicks “Create Event” to create and tag an event with appropriate descriptors, including contributions

Changes from Assignment 5

More concise description of task

Removed part about finding an empty time slot



Usability Goals



The text and icon sizes are easily readable for users with varying vision abilities.



Used iPad Type size xxxLarge for easily readability. Small number (3-4) main icons used to prevent confusion and flatten the learning curve.

Users can easily recover from mistakes.



We implemented a back button (and other exit buttons) so that the user can fix any mistakes they made. These buttons are large and there are multiple ways to click out of a screen.

However, we still want to minimize the number of times they ask to go back by having a clear interface.



Key Metrics

**Number of participants
who successfully completed
all tasks.**



Our medfi prototype features many more features compared to our bare bones lofi prototype (toggling views on the side panel, contributing to an event, etc.). We kept our original, simple interface with clear directions for each task, so despite the added features, we want a high ratio for users completing all tasks vs. not.

**Number of times user stops
to ask questions.**

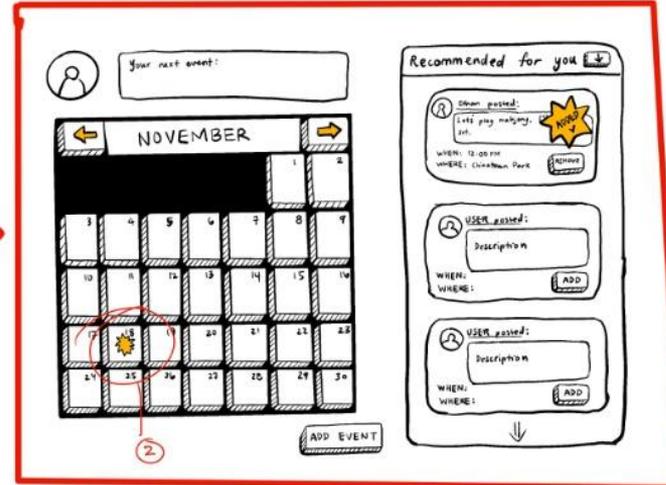
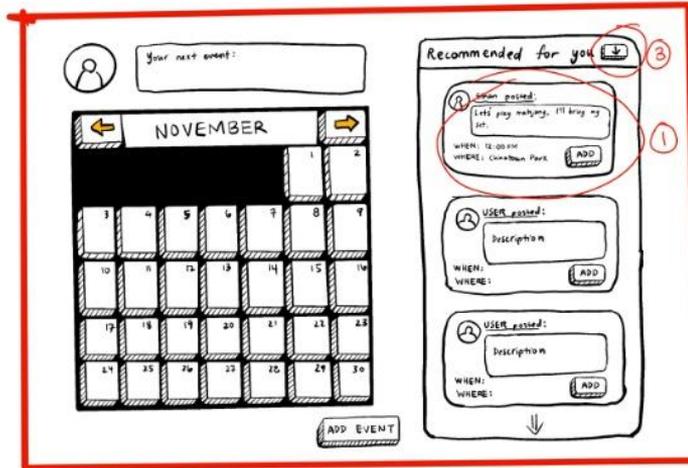


We will later implement a “help” and a “tutorial” feature in our final product.

Interface changes

Before :

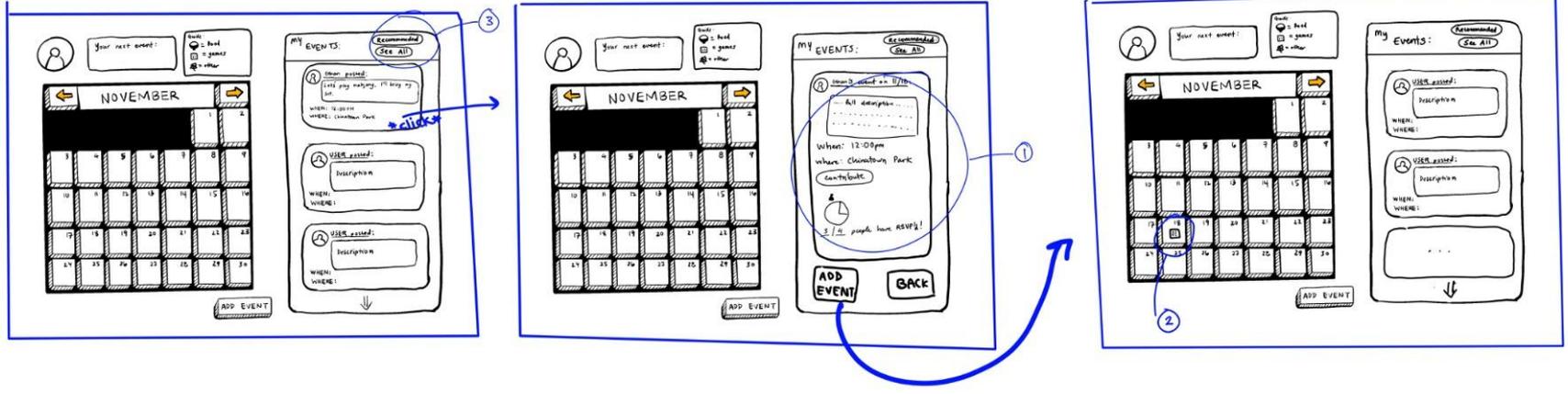
- ① Small screen of minimal event description
- ② adds a non-descriptive sticker to the calendar
- ③ sidebar of drop down filter options



Interface changes

After:

- 1 clicking on an event enlarges it for more details/options
- 2 symbol added to calendar provides more clarity
- 3 sidebar filter options



Interface changes

Allowing users to skip information

Rewording of cultural questions, ability to add more than one

More obvious buttons

Less wasted space (while avoiding clutter), especially pertaining to the calendar

Option to contribute to events (request and sign up for items)

More functionality to the calendar - navigating through this interface

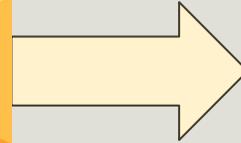
Sidebar utility- less complex sorting algorithms

Vibrant background and design

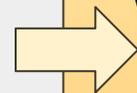
Task Flow: Simple task



User "logs in", enters in personal information



Populated on click for ease of prototyping



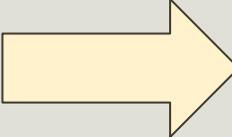
Task Flow: Simple task



Onboarding screens, for cultural event matchmaking



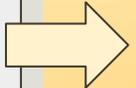
Error message to guide user- "Wizard of Oz"



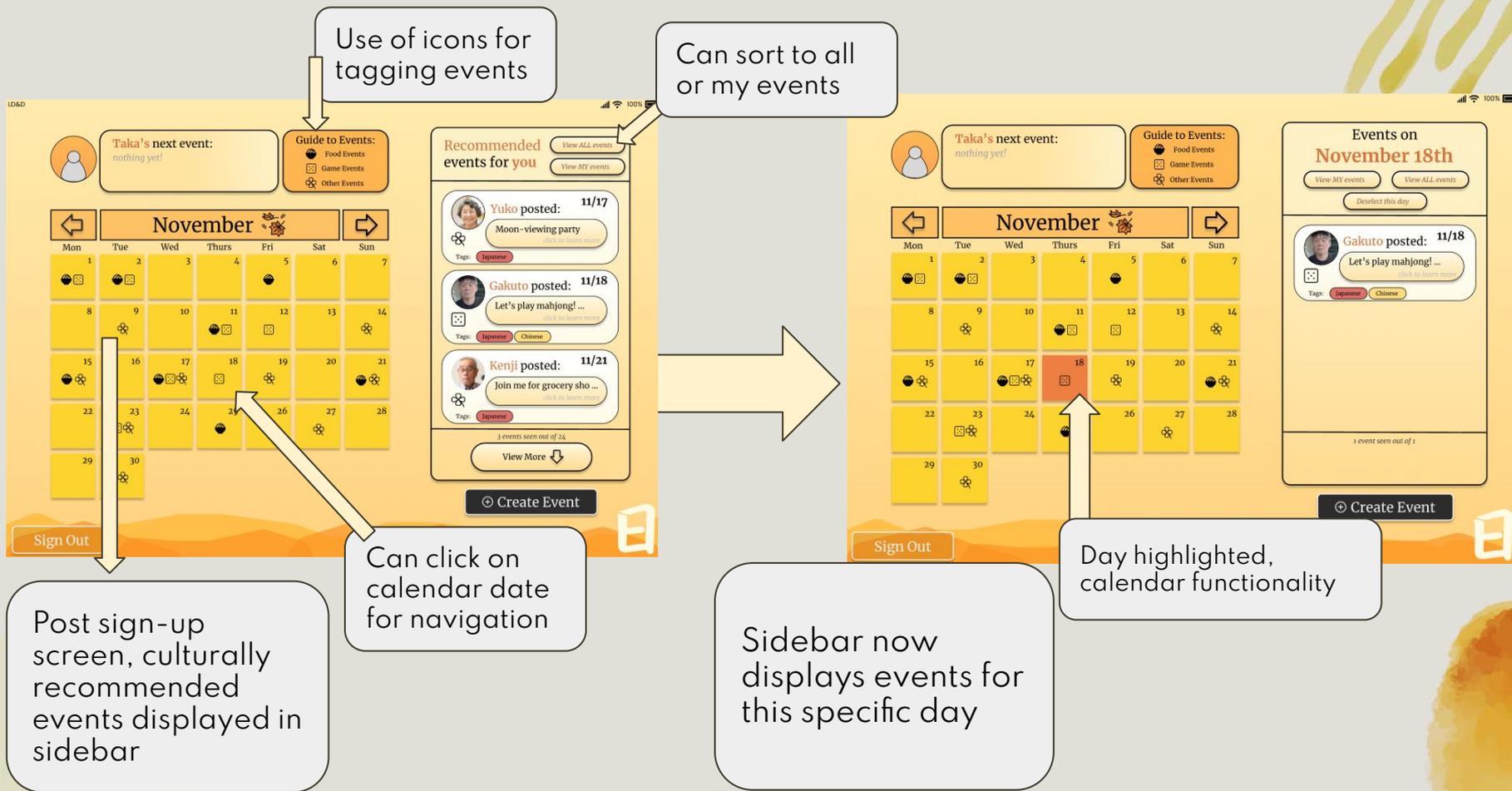
User enters from dropdown menu- can add more than one



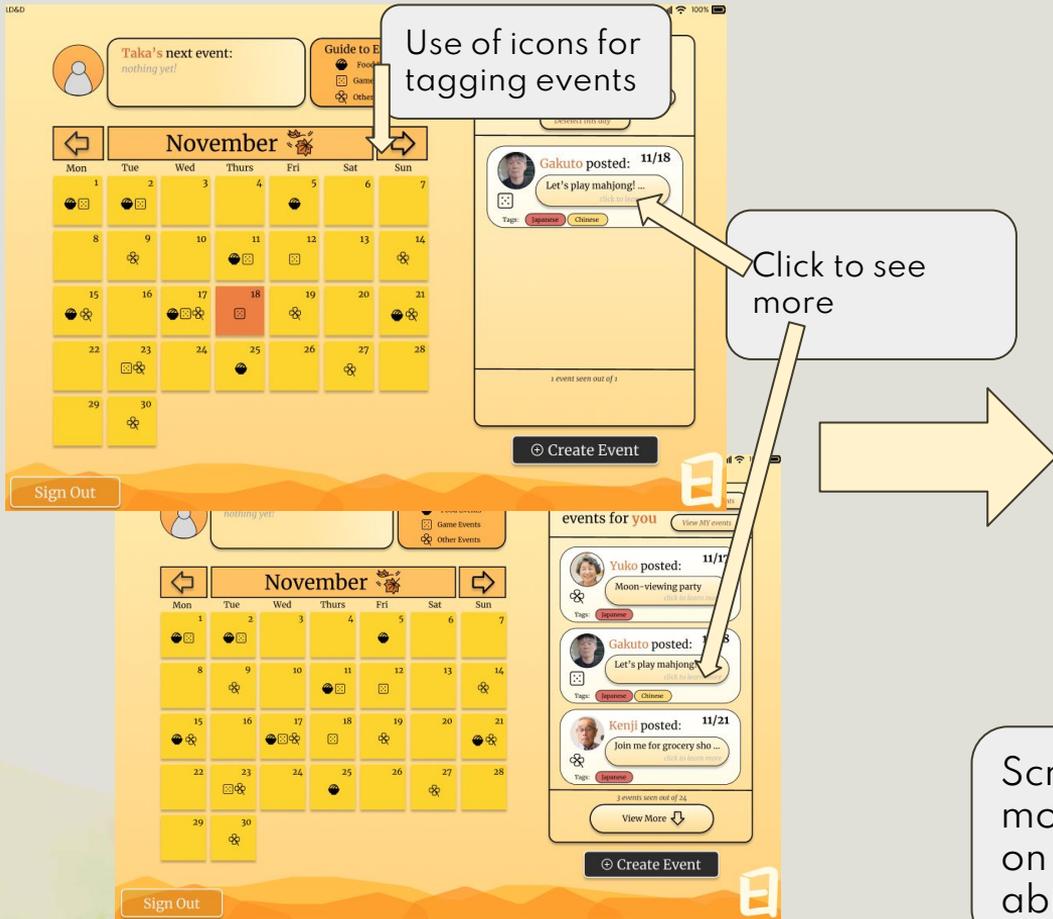
Skip button allows user to withhold personal information



Task Flow: Simple task



Task Flow: Simple task



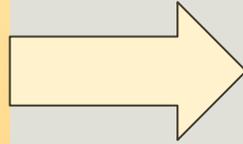
Screen that grants more information on the event and ability to join event

Event details are displayed on the sidebar

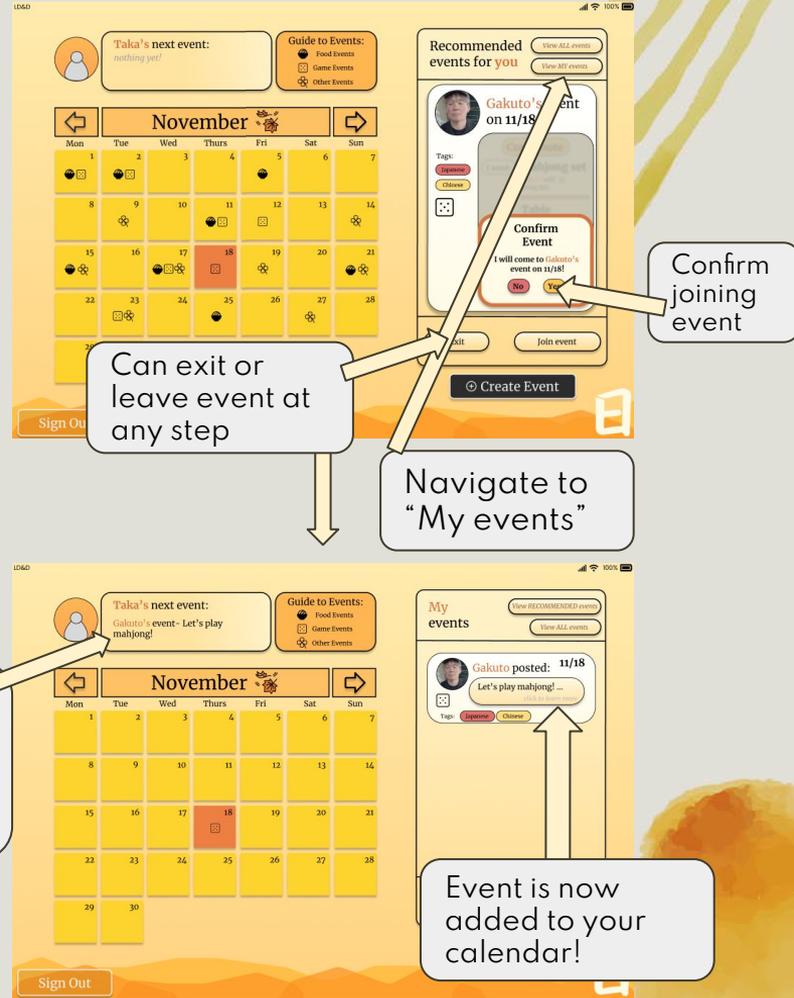
Task Flow: Simple task



Join event directly



Your next event now displayed at the top of the screen



Can exit or leave event at any step

Navigate to "My events"

Confirm joining event

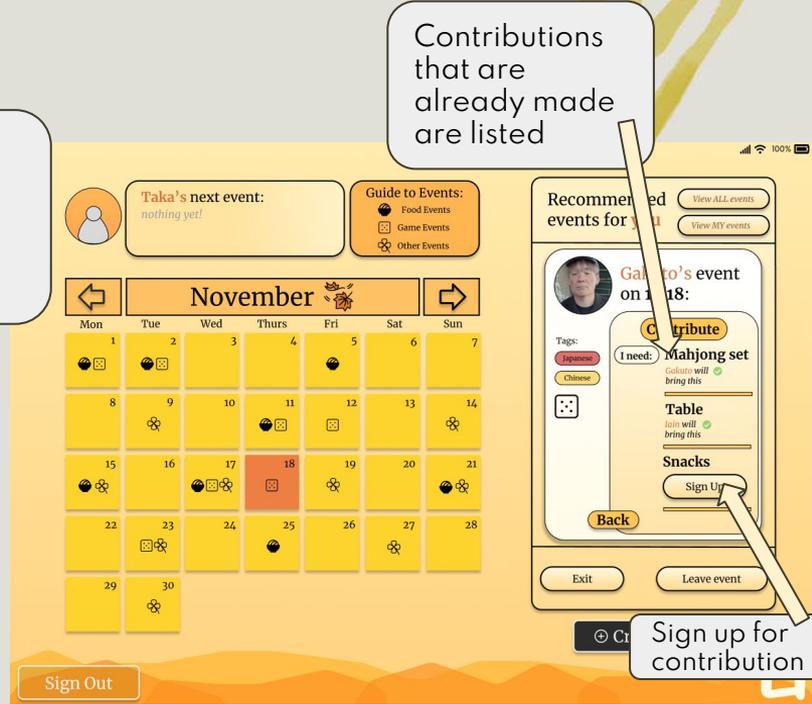
Event is now added to your calendar!

Task Flow: Moderate task



Click "help contribute?"

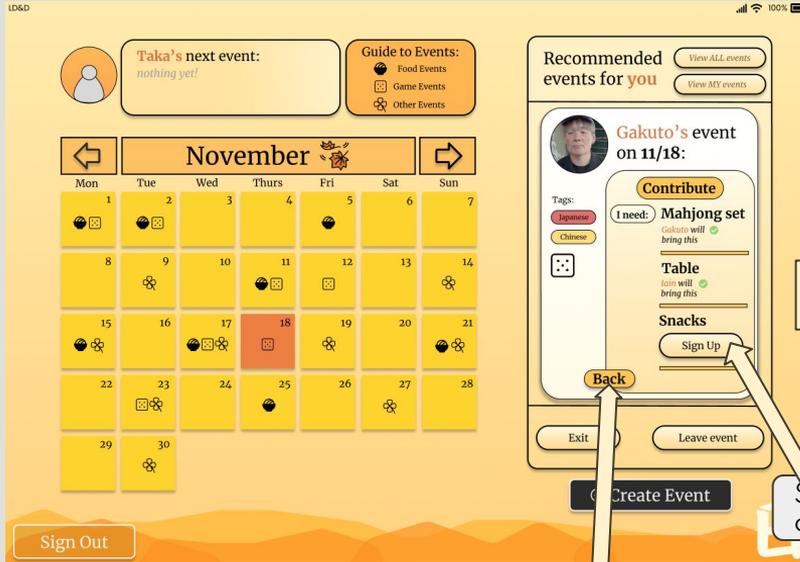
Sidebar now displays contributions needed for the event



Contributions that are already made are listed

Sign up for contribution

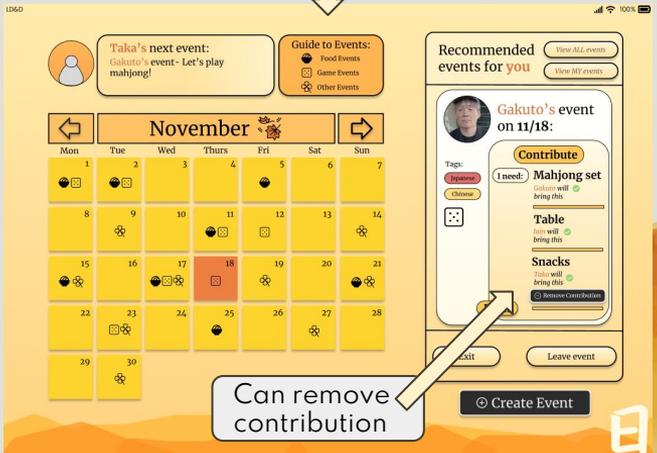
Task Flow: Moderate task



Will ask to confirm contribution, and will include contribution in updated sidebar



Confirm contribution



Can remove contribution

Can go back and return to general event information

Sign up for contribution

Task Flow: Moderate task

Contribution is confirmed and made, moderate task complete

LD&D

Taka's next event:
Gakuto's event - Let's play mahjong!

Guide to Events:
● Food Events
□ Game Events
⊗ Other Events

Recommended events for you [View ALL events](#) [View MY events](#)

Gakuto's event on 11/18:

Tags: Japanese Chinese

Contribute

I need: Mahjong set
Gakuto will bring this

Table
Iain will bring this

Snacks
Taka will bring this

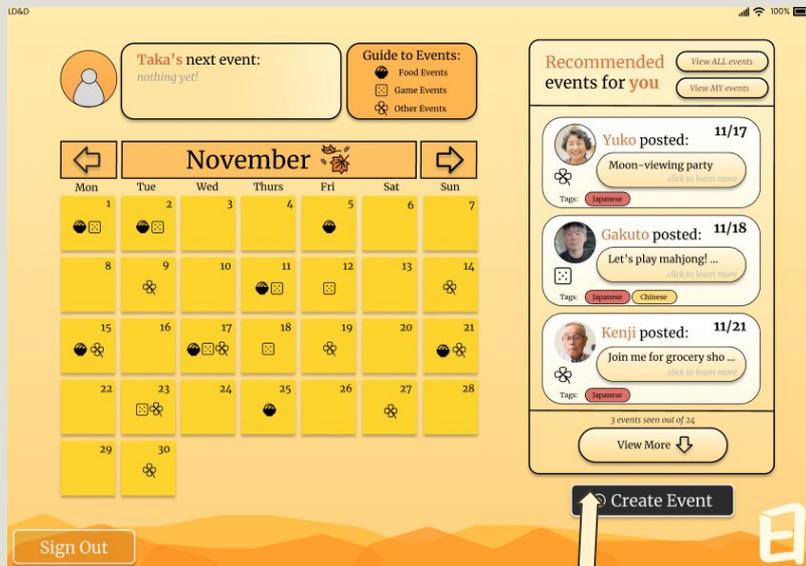
Exit Leave event

+ Create Event

Mon	Tue	Wed	Thurs	Fri	Sat	Sun
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					

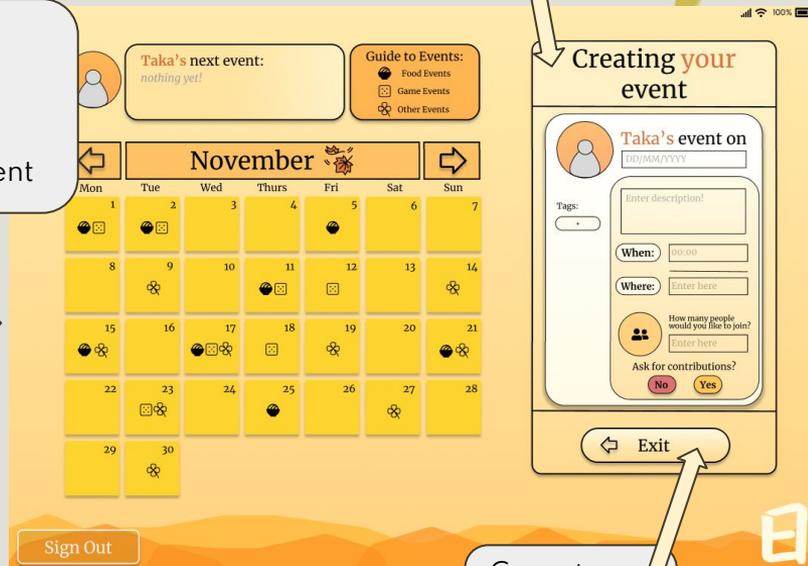
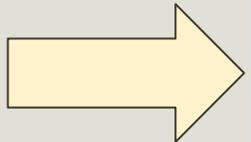
Can remove contribution

Task Flow: Complex task



Click "create event" (will work for any given page)

Sidebar now displays information needed to create an event



Can return to main screen at any time

Structure is same as viewing an event, but with left blanks

Task Flow: Complex task

Add your own language / cultural tags

Sidebar now displays guide on how to request a contribution

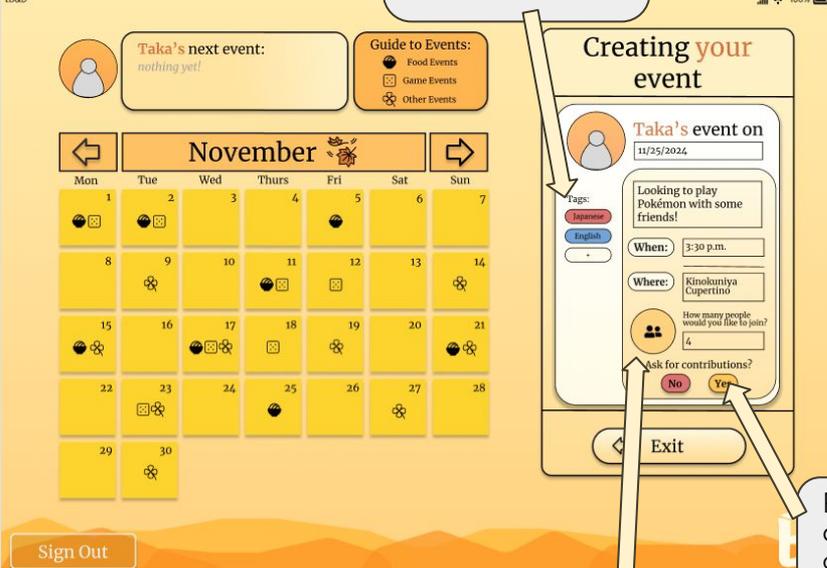
Empty blanks left for user to populate

Populate blanks with information on time, location, etc.

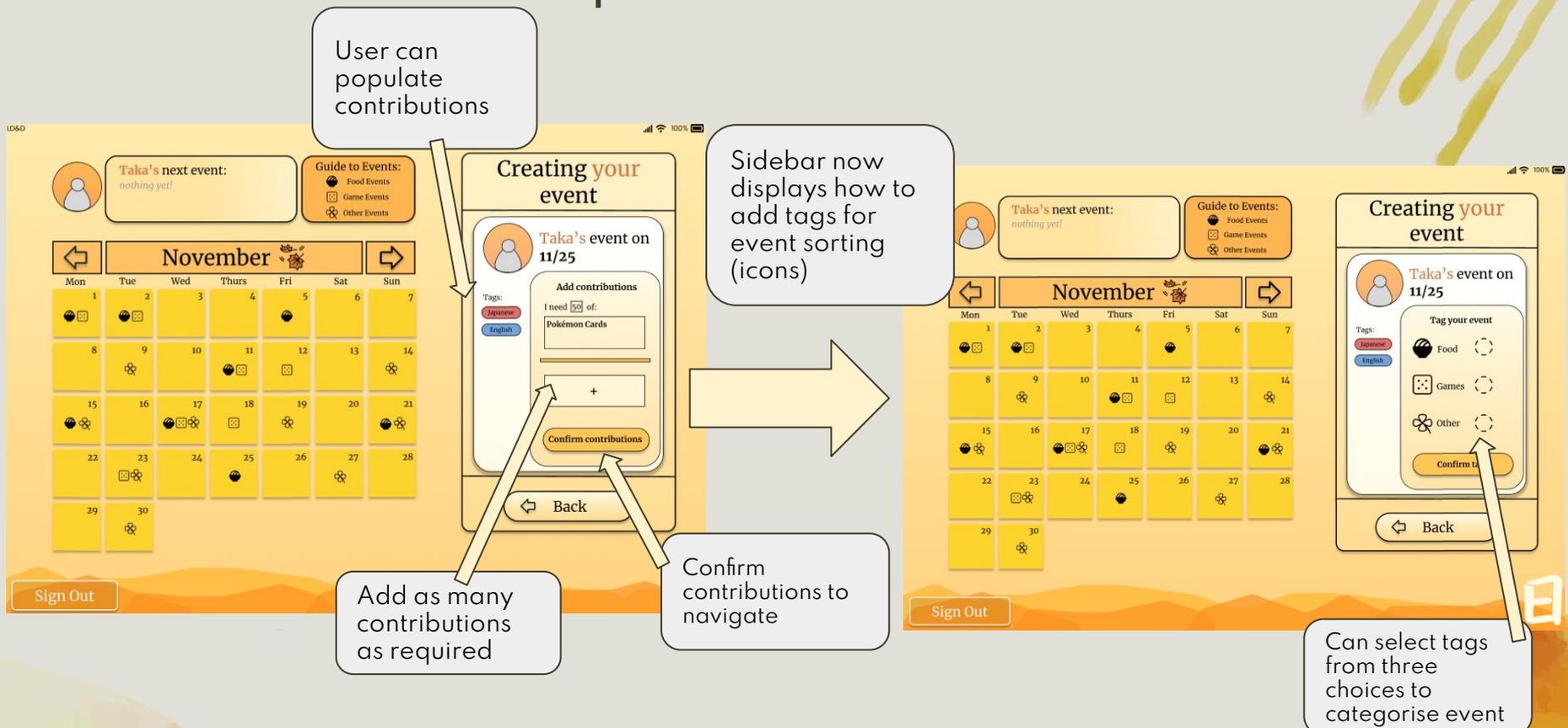
Request (or don't) contributions for navigation

Can navigate back to main creation screen

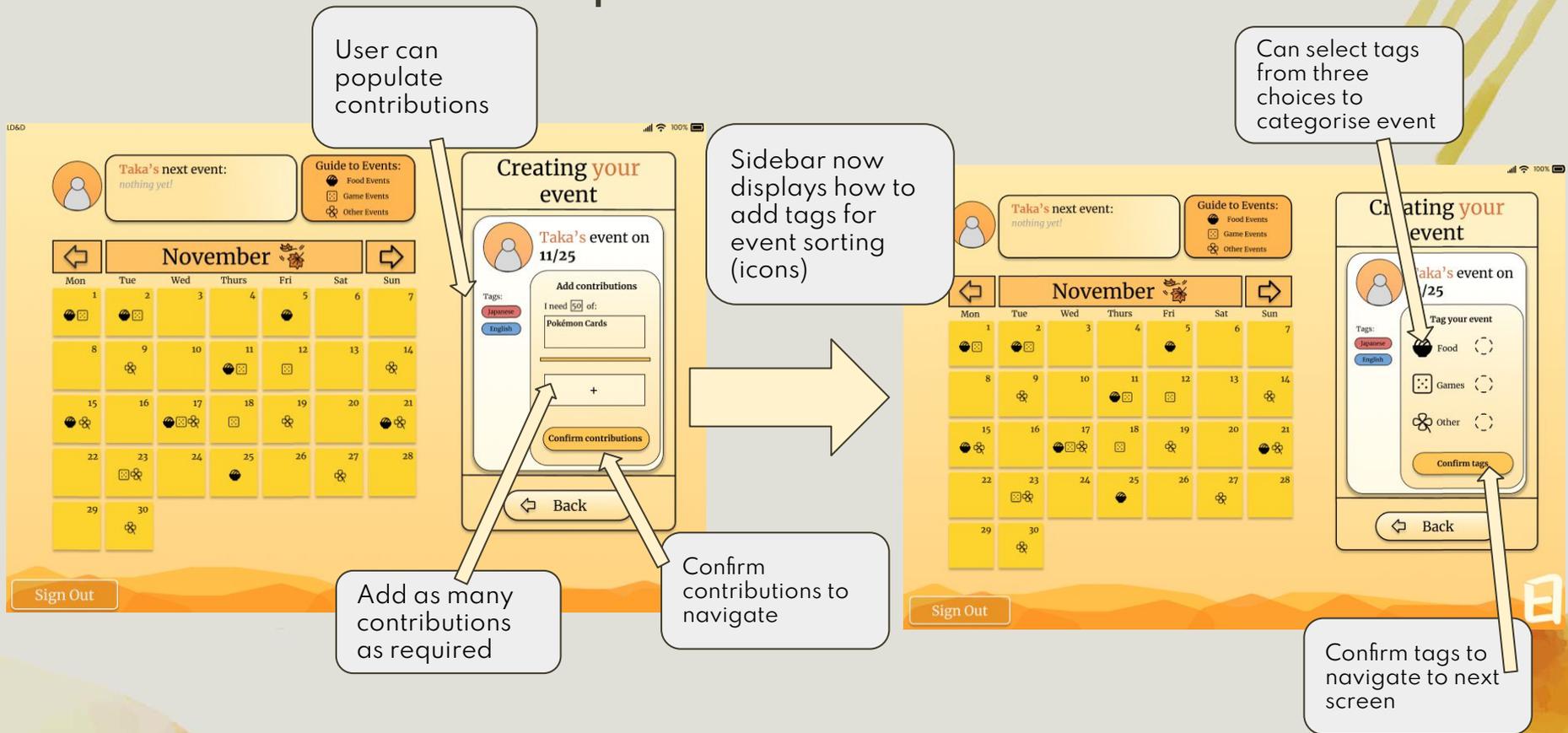
ID&O



Task Flow: Complex task

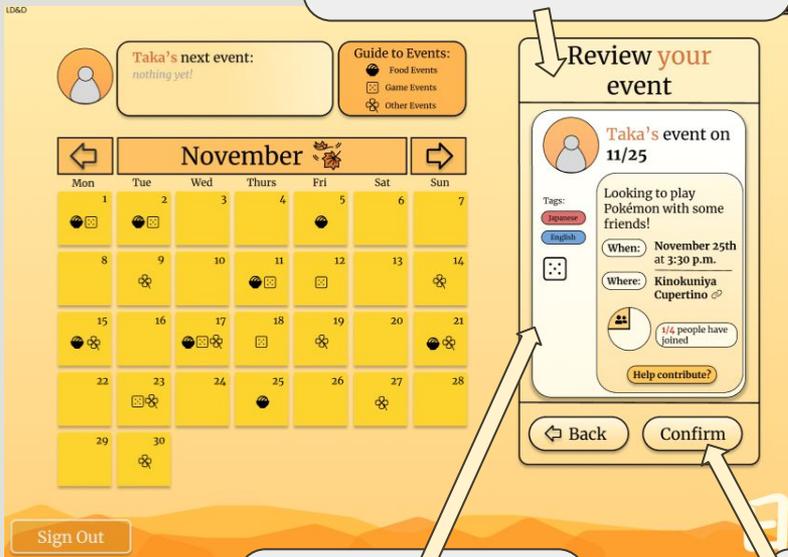


Task Flow: Complex task



Task Flow: Complex task

With all steps complete, can now review your event from the POV of another user!



My events now display your own created event, event is now published, complex task complete



Your own event

Tags and information entered are displayed in correct format

Confirm to complete creation of event

Highlighted on calendar alongside attending events

Tool Used: Figma

- Many built-in prototype functions, such as viewing/testing on iPad screen
- Ability to reuse screens/buttons
- Navigational ability to connect to different screens to provide a smooth user experience
- Can collaborate in real time with team

pros

- Inability to simulate many user paths (takes too many transitions)
- User can't provide typed input
- Animations/transitions are difficult to include or difficult to smooth out
- Difficult to track user status for prototype testing

cons



Limitations

Difficult to create unique user paths for every event listed



Force the user to navigate one path, notably joining one specific event

General app continuity, notably with the “updating” of certain screens or navigations



Information like “your next event”, or “my events”, are dependent on user path (view slides about hard-coding)

No translate feature for those that can't speak English (to come in high-fi!)

Many links go to “under construction” page since we can't simulate ever possible user path yet

Hard-coded Features

The navigable day on the calendar (Nov 18th) - User may only explore events on this day

Force users to undergo a pre-set path

User information: name, email, phone number, cultural interests, language spoken

The functional event (Gakuto's) - User may only explore details of this event

Wizard-of-Oz Features

“Compiling Events” page
for a pre-set user



Provides the illusion of a
backend system that is
analysing input to create a
set of recommended
events for the given user

Error messages

“Please add an option from the
dropdown menu before adding
another!”

“Please fill in your name before
clicking next!”

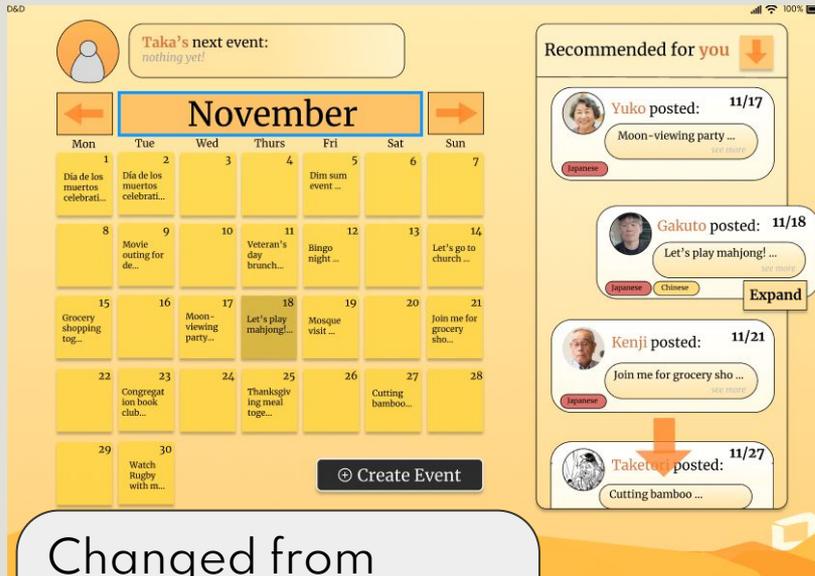
“For the purpose of this demo,
the max number of languages
that can be added is two.
Please press next.”

Appendix

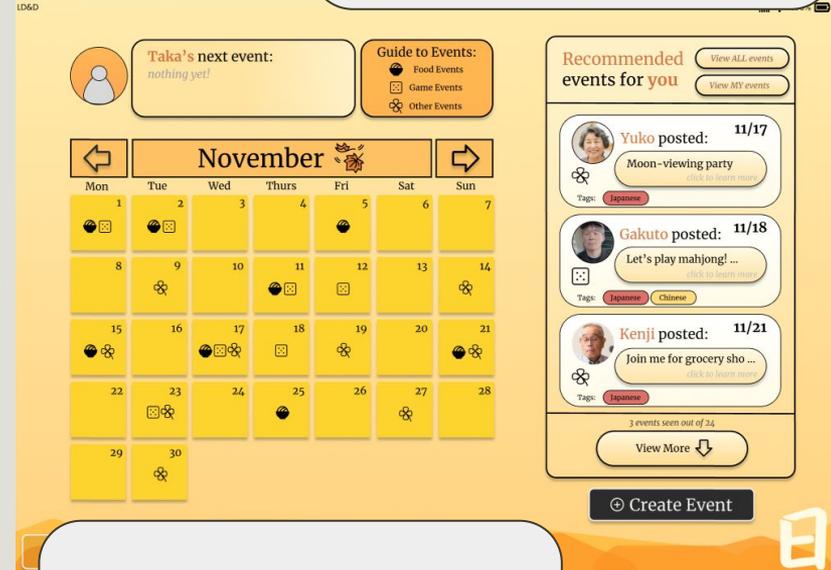


Interface sketches

Kept events within the sidebar to save space and improve readability

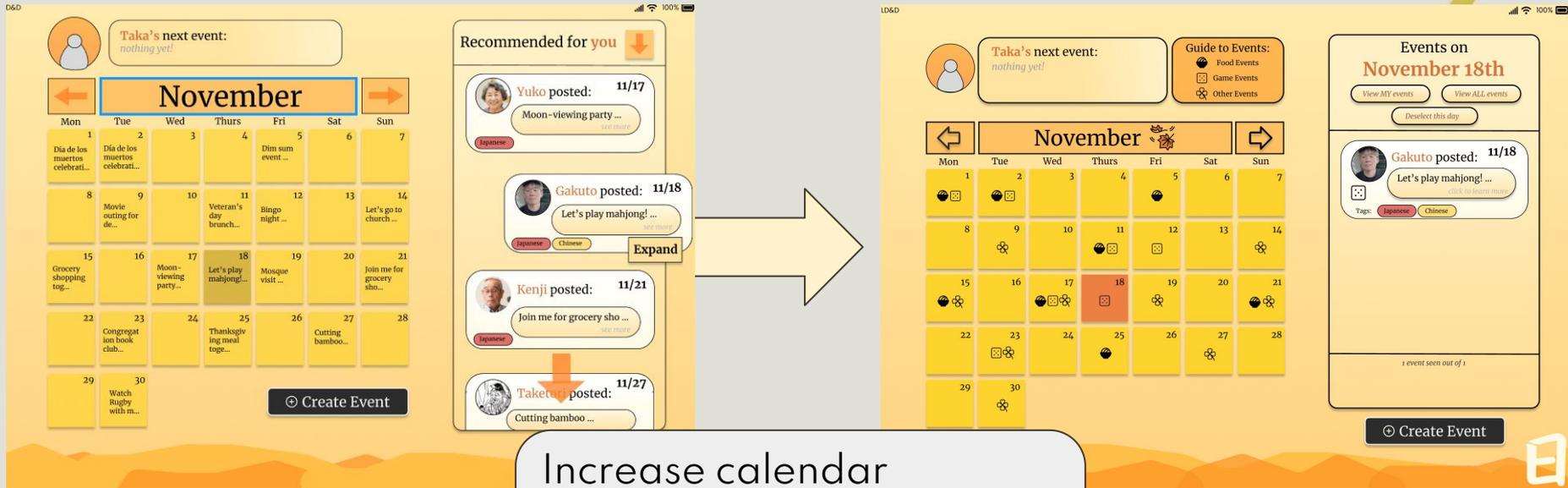


Changed from words to icons on calendar for simpler view



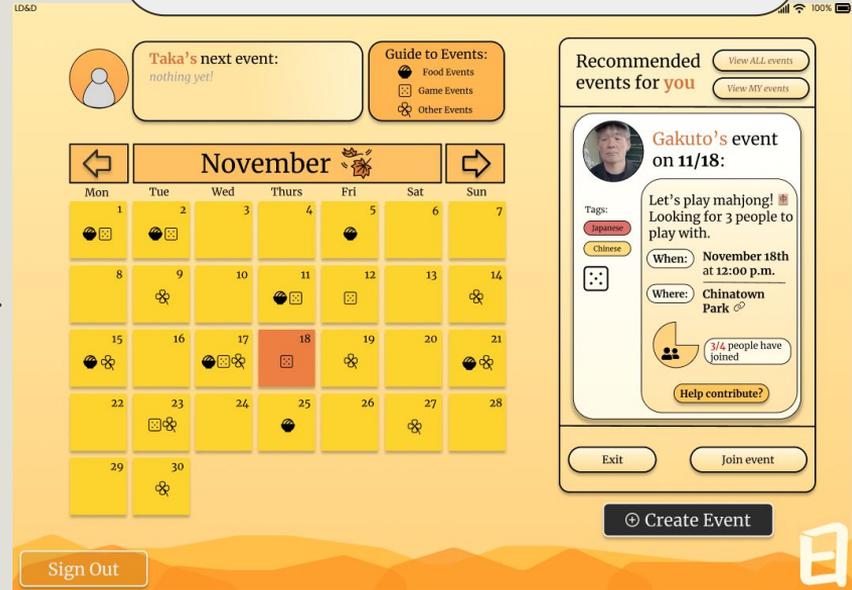
Text consistency and more obvious buttons / scrolling

Interface sketches



Interface sketches

Buttons are same size and more obvious- critique from class



Changed to keep event within the sidebar, more readable and digestible interface



Link to Figma

<https://www.figma.com/proto/d4G9IO108N2zY6Y4NtvP9m/Lucky-Day?node-id=72-1035&t=iQ4SPLhYBb7tVlfo-1>

