

Programming Boot Camp

Adalo Basics

Tokyo Institute of Technology 2022/11/5

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What is Adalo?

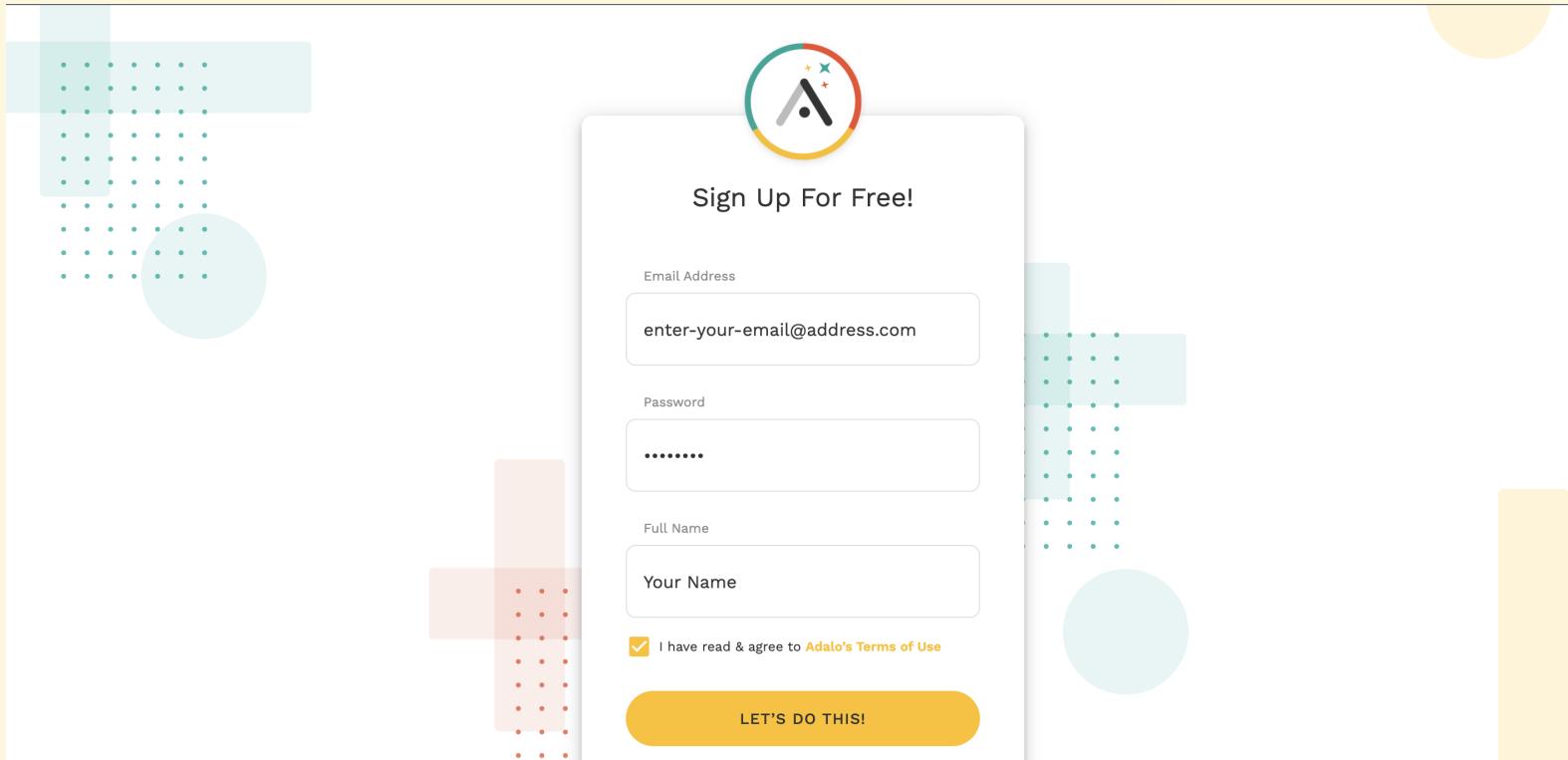
- Adalo is a no-code tool from the United States. It allows you to develop applications without programming.
- You can create an app by selecting the parts you want to use from those provided and dragging and dropping them onto the screen.
- You can develop not only web apps(to be displayed in a browser), but also smartphone apps for Android and iOS. It is also possible to publish the developed application on Google Play and AppStore.

Example of apps created with Adalo

- Union: <https://union-jp.site/>
 - A social networking service limited to undergraduates, graduate students, university faculty and university staff developed by university students.
 - Funding of 10 million yen was raised in 2021.
 - <https://prtimes.jp/main/html/rd/p/00000001.00007669.html>
- More examples on #MadeInAdalo
 - <https://www.adalo.com/made-in-adalo>

Adalo account registration

- Go to Adalo's SignUp page.
 - <https://app.adalo.com/signup>



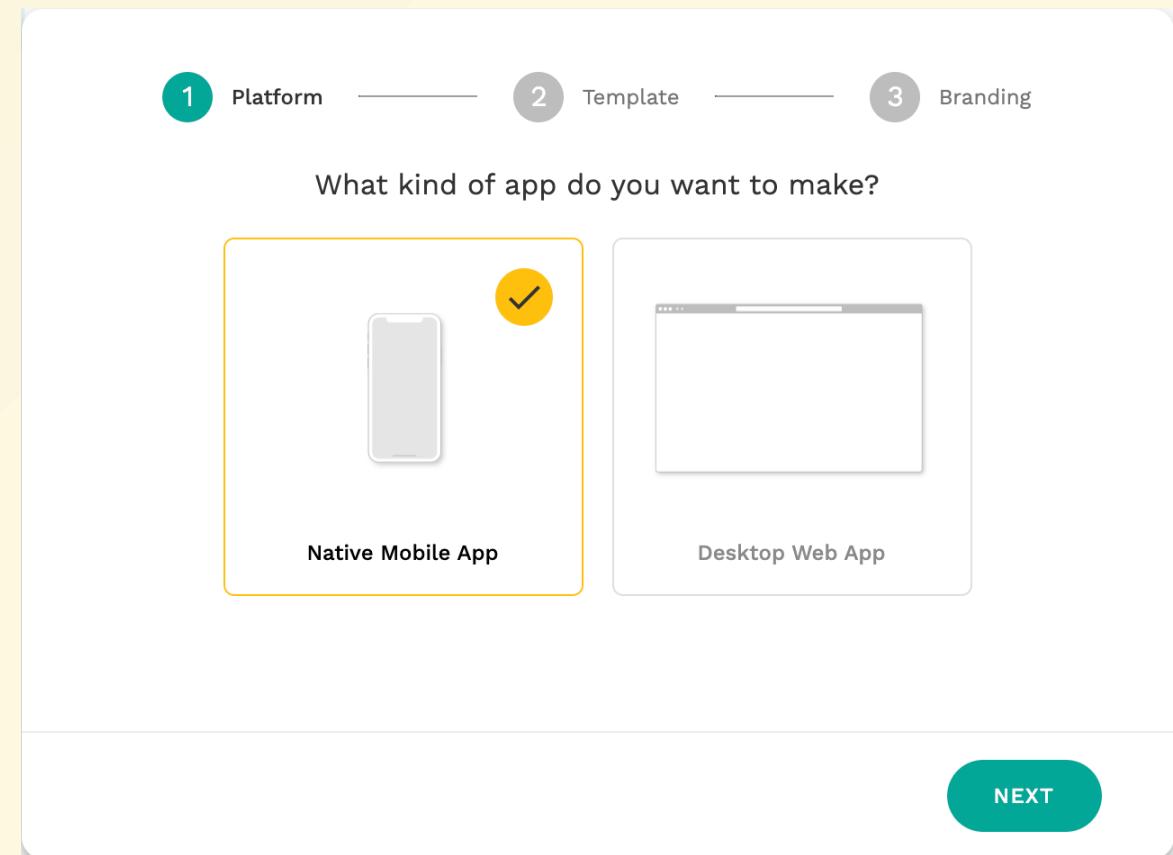
- You can register for free!
- Enter your email address, password and full name.
- Check the box to agree to the Terms of Use.
- Click the DO THIS! button to proceed.

Reference: Limitations of the Free Plan

- Cannot use external integration with other applications.
 - However, trial use is available for 14 days
 - The maximum number of database records is 200.
 - App actions are limited to 1,000 times per month.
-  Consider using a Paid Plan when you actually launch your app.

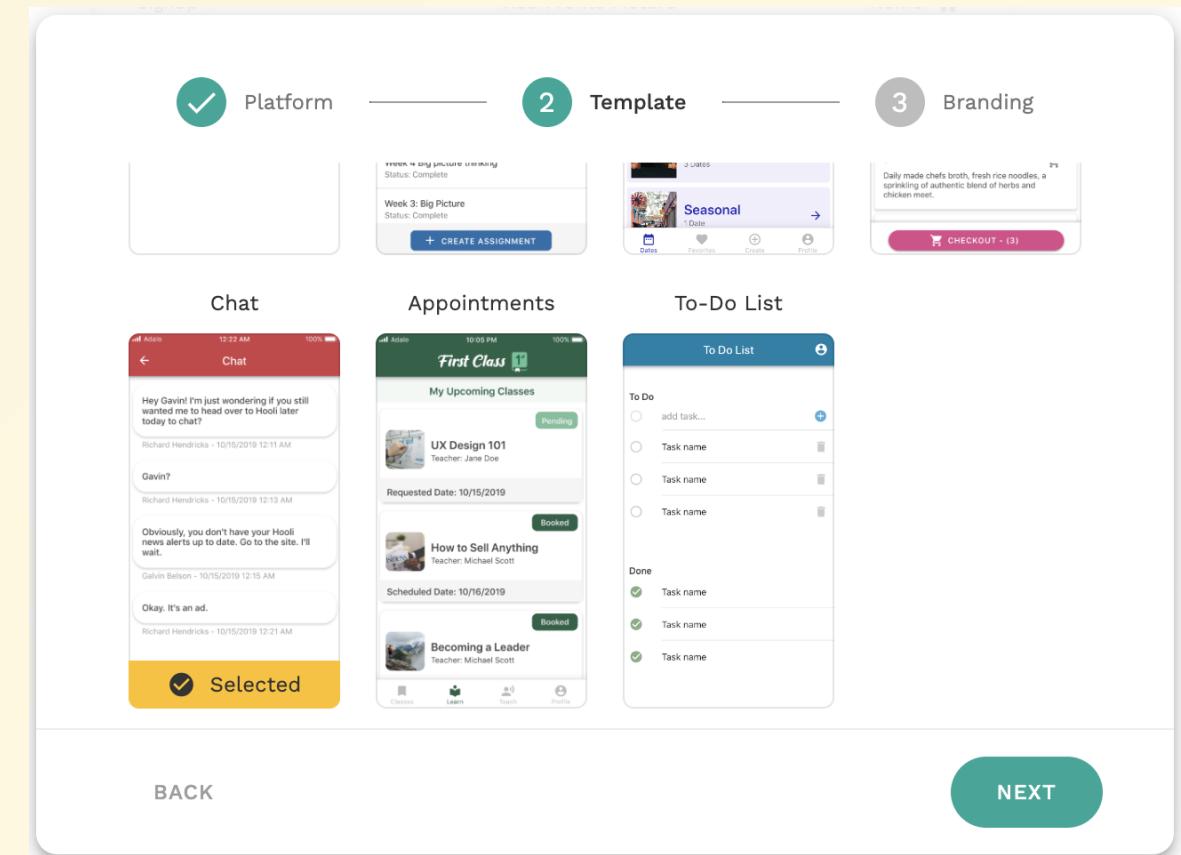
Platform Selection

- You can select Native Mobile App or Desktop Web App.
- This time, select Native Mobile App.



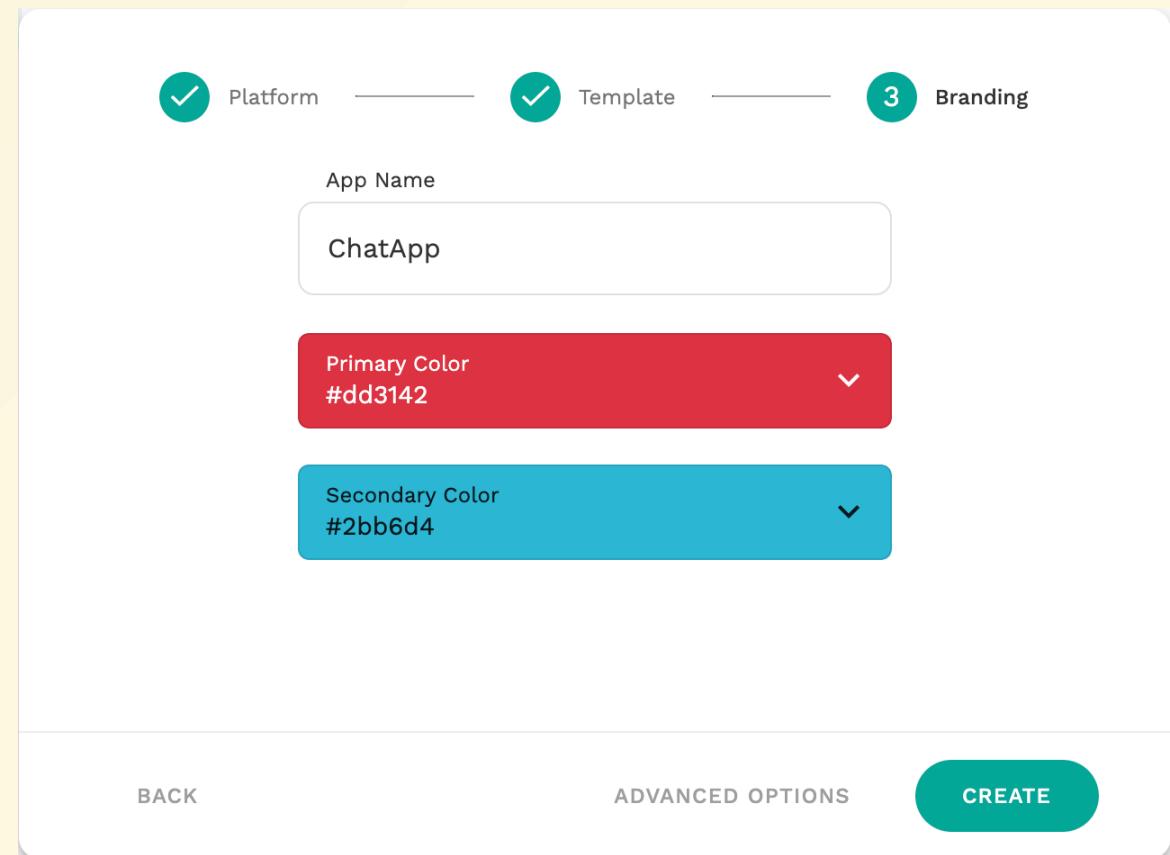
Selecting a template

- Finished apps are provided as templates.
- This time, select Chat template.



Branding

- Enter the App Name, Primary Color, and Secondary Color.
 - Primary Color is the base color that will be used most in your app.
 - Secondary Color is the color for important parts (e.g. register button)

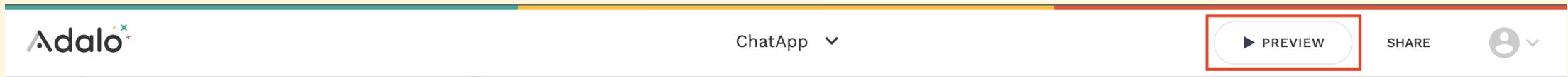


- When you see Adalo's admin panel like this, you are good to go!
- From now on, we will use this admin panel to develop our application.

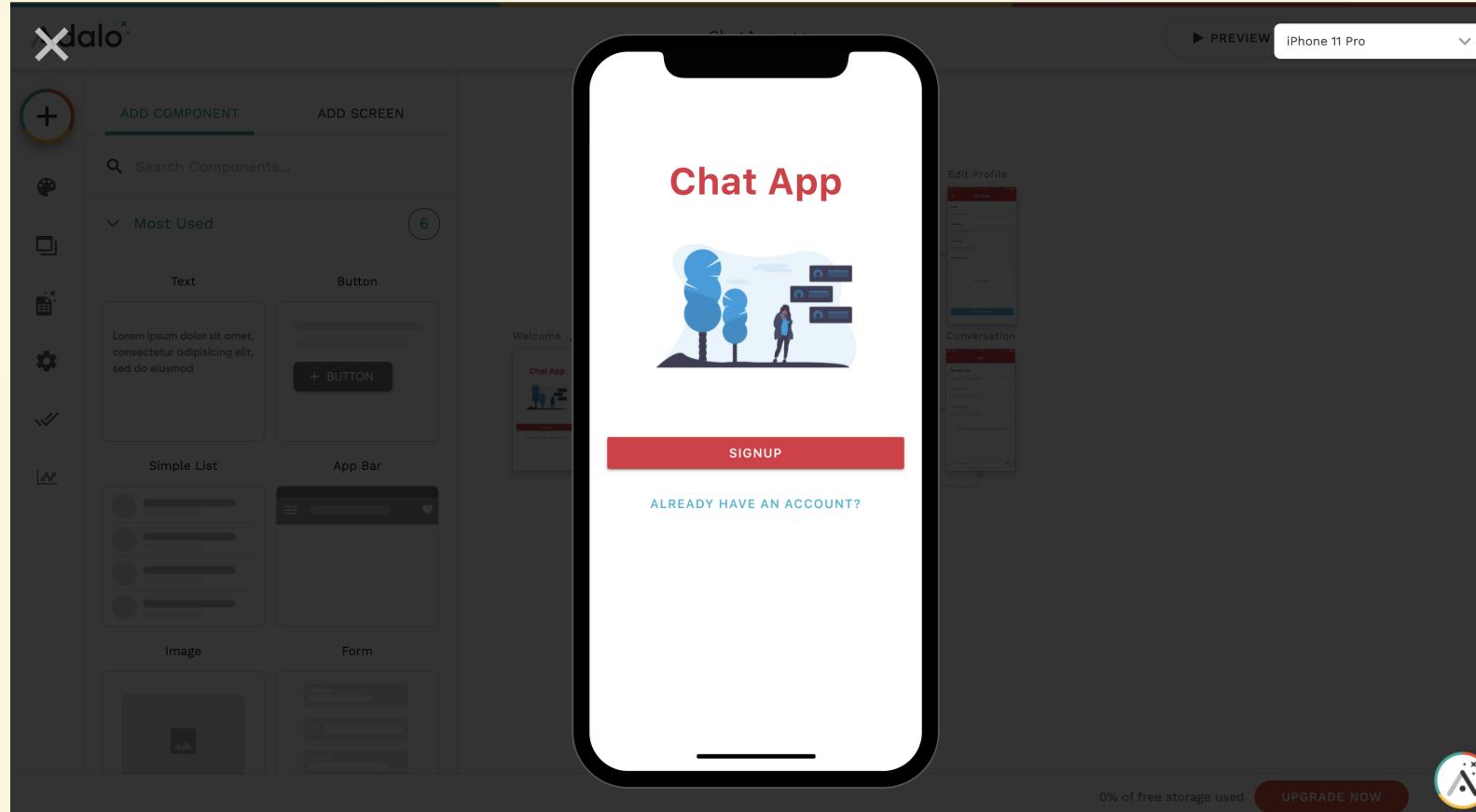
The screenshot shows the Adalo admin panel interface for a project named "ChatApp". The left sidebar contains a toolbar with icons for adding components, screens, and other tools, along with sections for "ADD COMPONENT" and "ADD SCREEN". A search bar is present above the component library. The "Most Used" section displays various UI components: Text (with placeholder text), Button (with a "BUTTON" button), Simple List (with four items), App Bar (with a navigation bar), Image (with a placeholder image), and Form (with a form card). The main workspace displays the app's flowchart. It starts with a "Welcome" screen, followed by a "Login" screen, then a "Signup" screen. After Signup, it leads to an "Add Profile Picture" screen, which then leads to a "Home" screen. From the Home screen, it branches to a "Conversation" screen and a "Start Conversation" screen. The "Conversation" screen shows a message list. The "Start Conversation" screen shows a search bar and a list of users. The top right of the workspace shows "PREVIEW" and "SHARE" buttons, along with a user profile icon. The bottom right corner features the Adalo logo with the number "18" and a storage usage indicator: "0% of free storage used" and "UPGRADE NOW".

Try template application

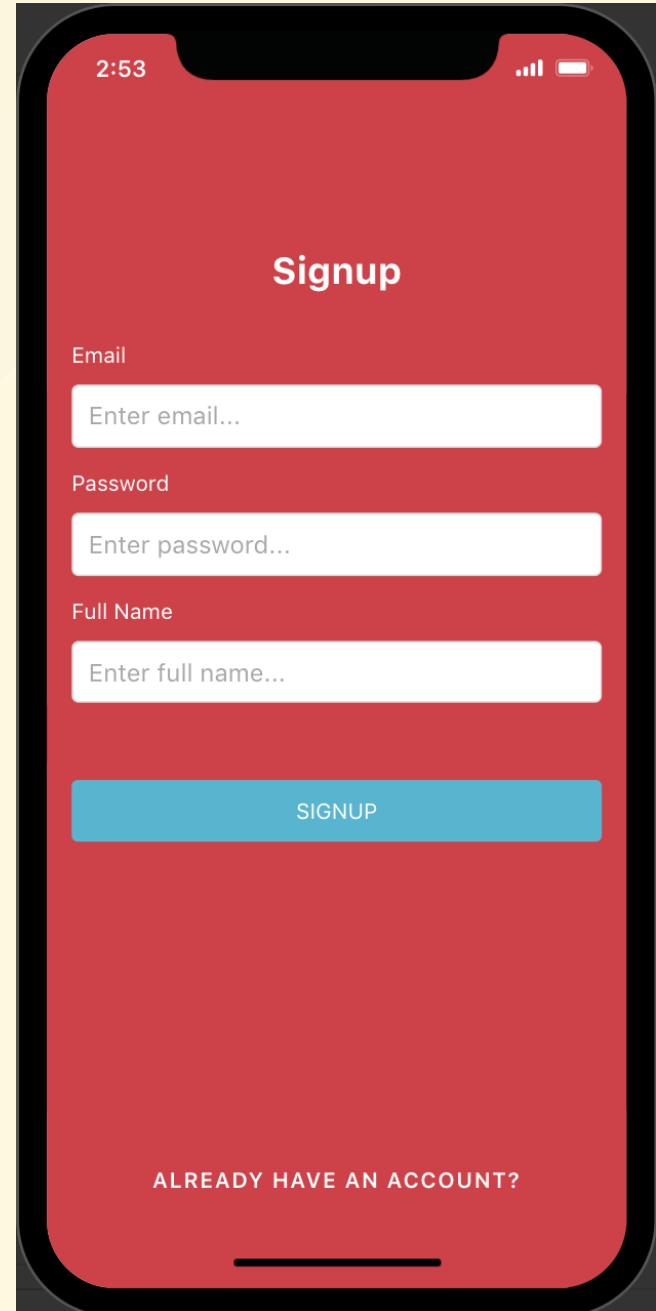
- First of all, try to operate the Chat app template to see how the application created by Adalo works.
- Click the Preview button in the upper right corner of the screen



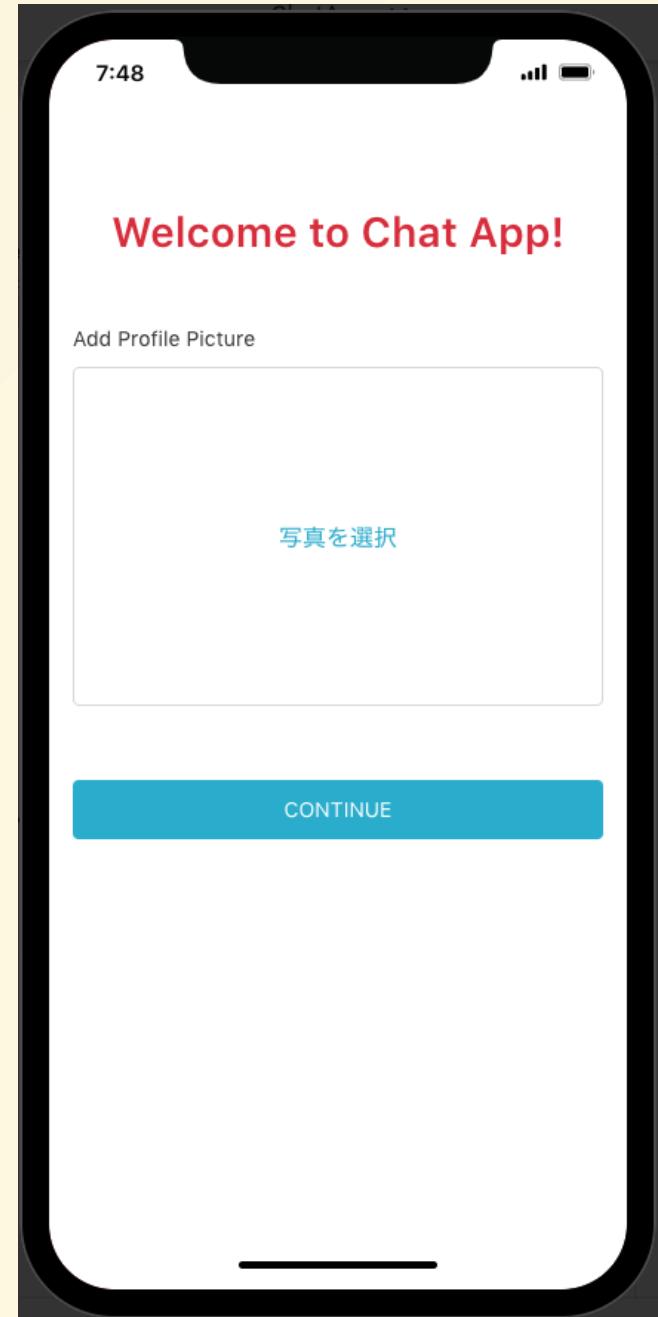
- The preview screen will be launched.
- Let's operate the Chat application together!



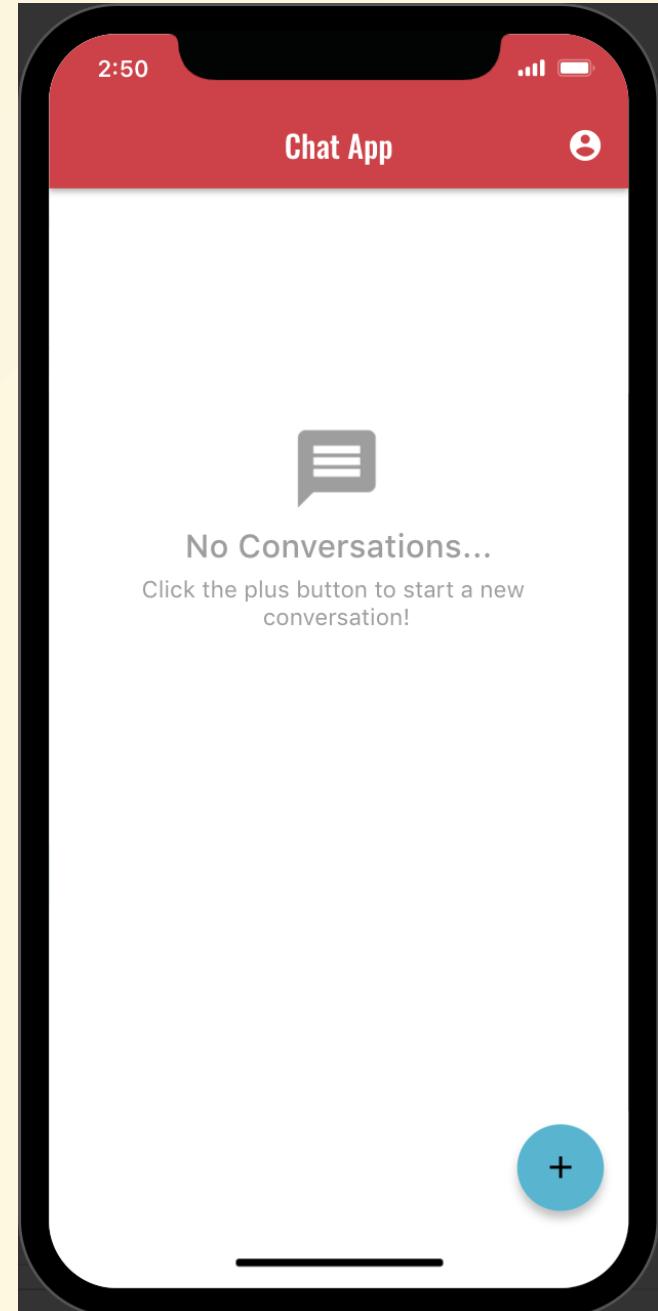
- Sign up.
 - Enter your Email and Password (remember them so that you can use again later).



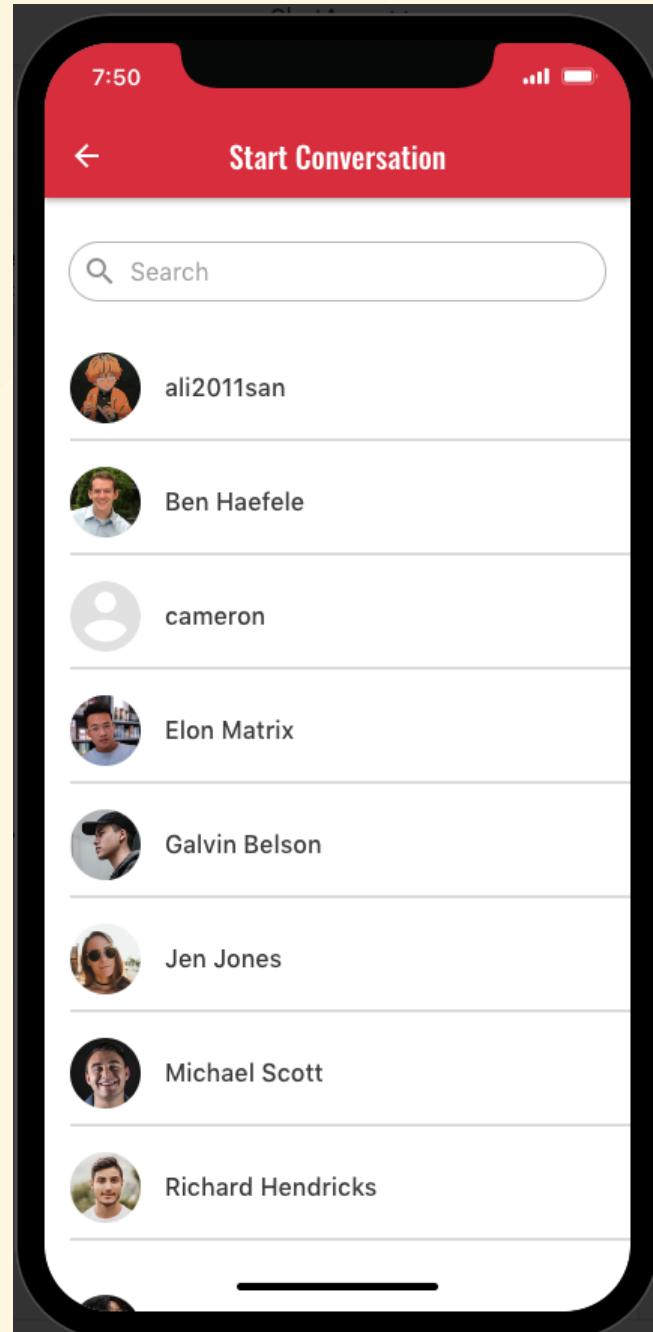
- Add profile picture.



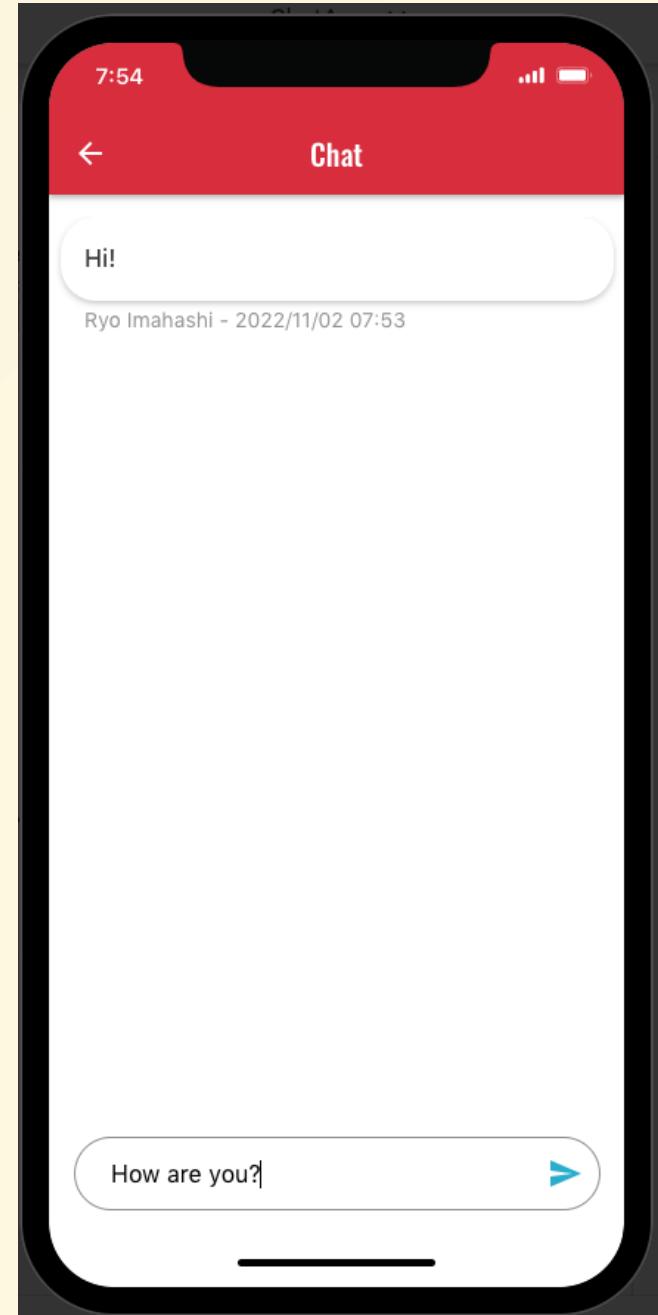
- The list is empty because no conversation has taken place yet
- Press the + button at the bottom right of the screen.



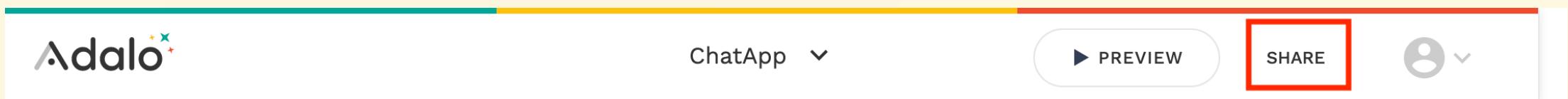
- You can see the list of sample users.
- Click anyone.



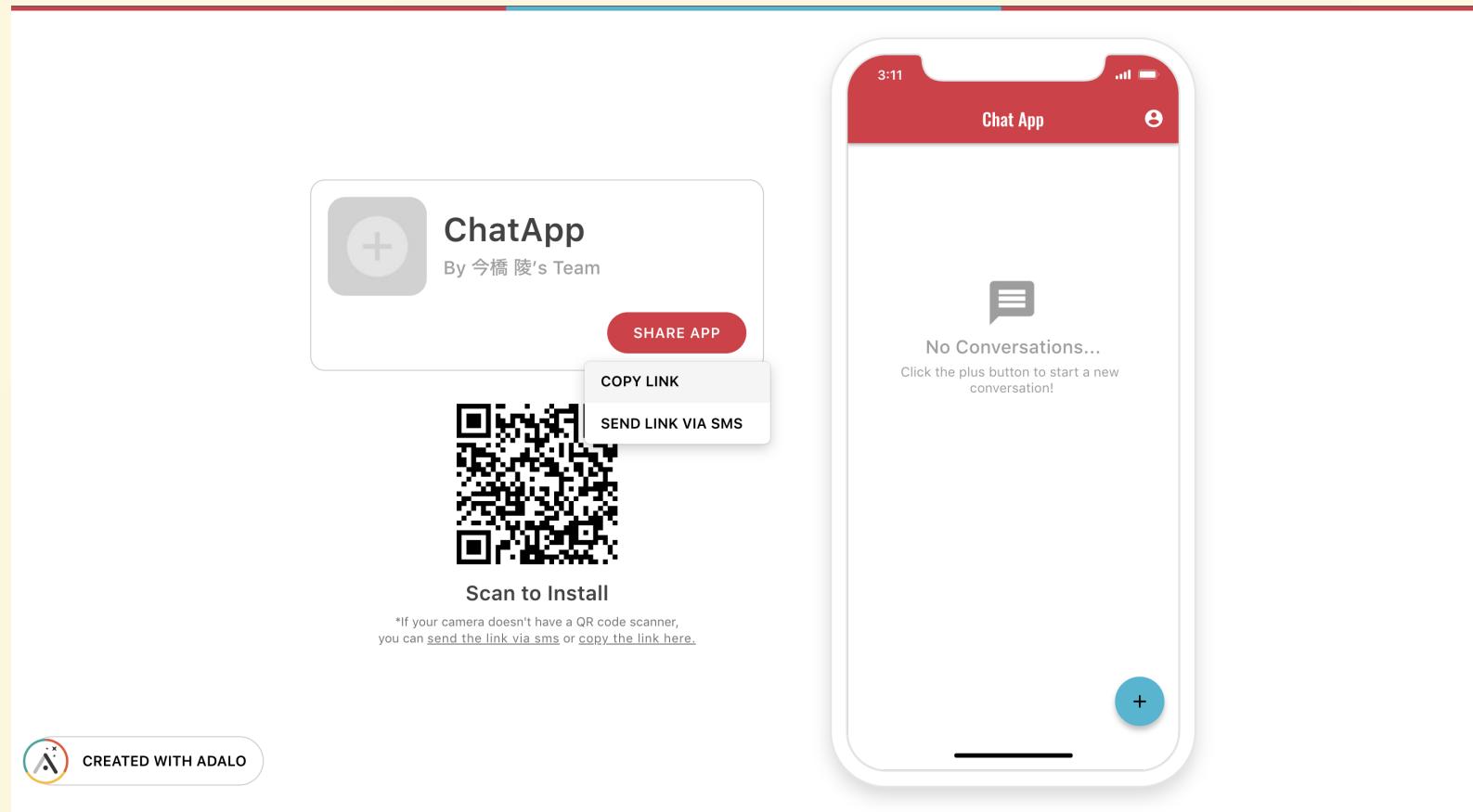
- You can send messages.



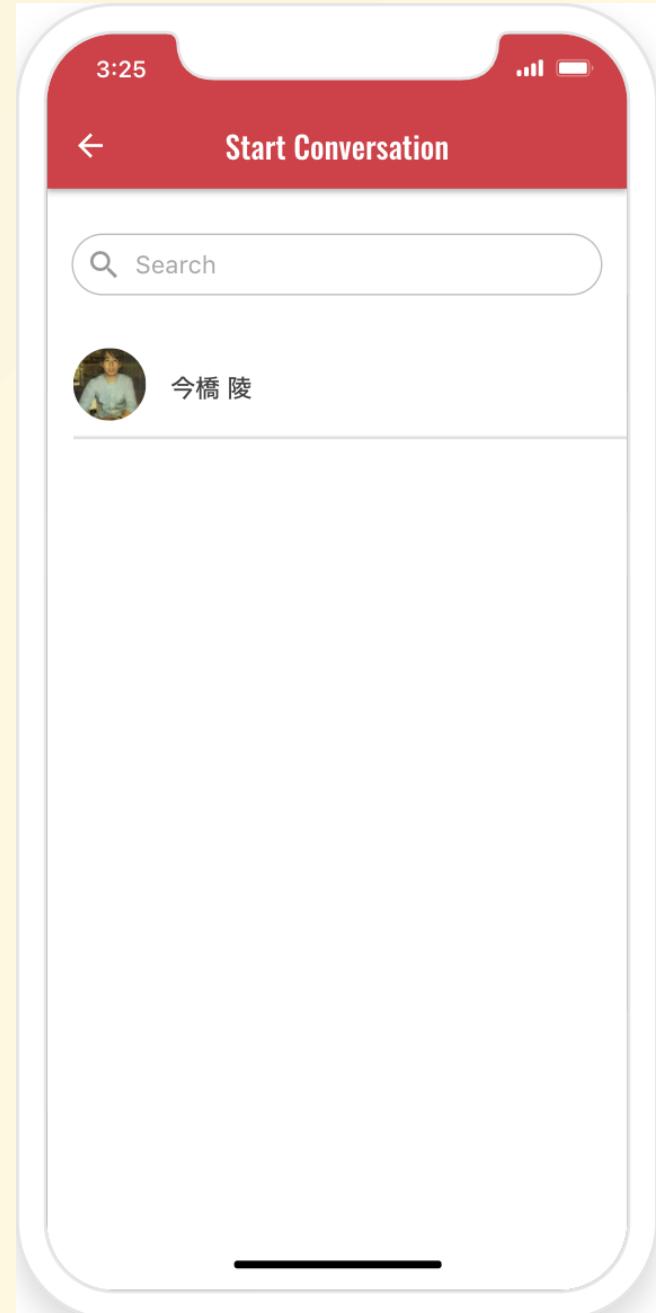
- Let's share the app you created with others and have a conversation with them.
- Close Preview mode with the x button in the upper left corner, and click SHARE in the menu.



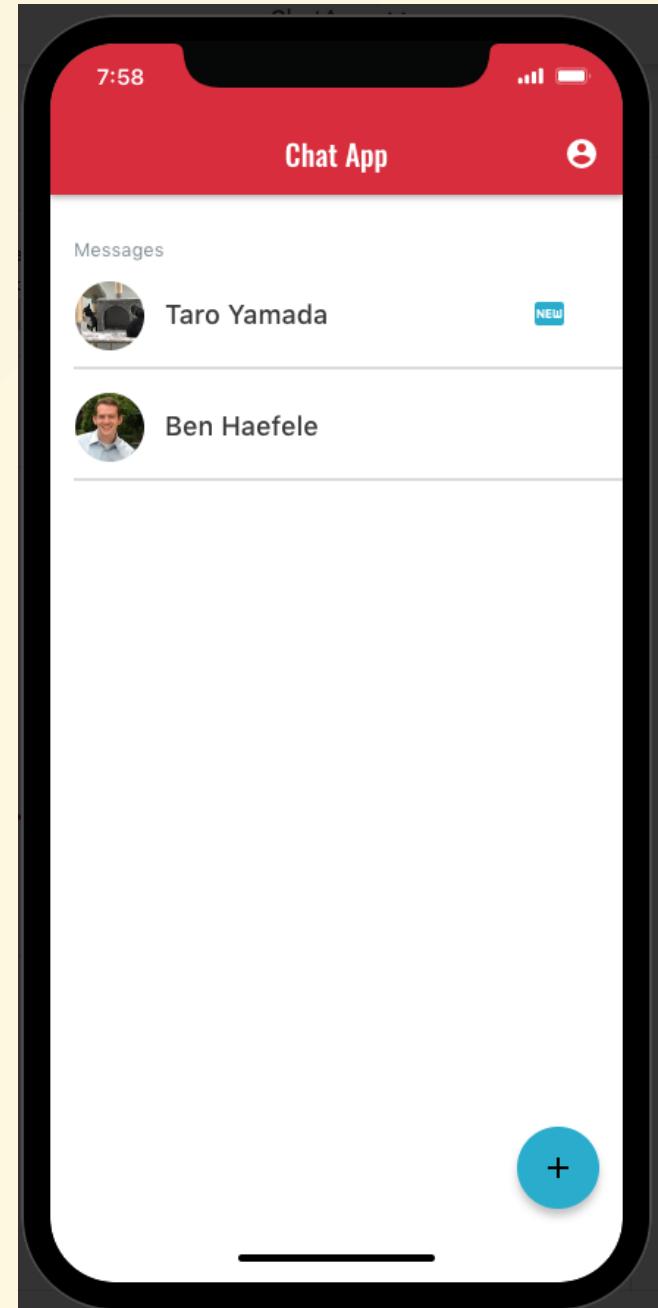
- Click on the SHARE APP button and select COPY LINK.
- Post the copied link to Slack so that all students can see it.



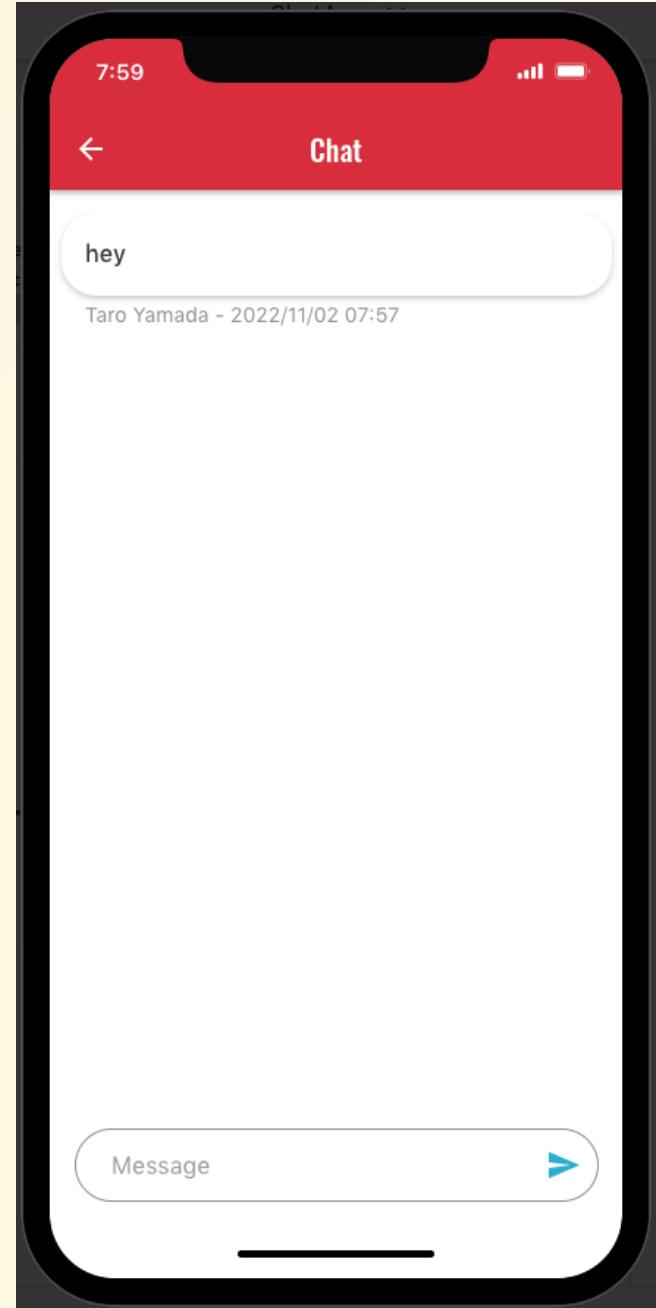
- Click on a links posted in slack to signup for their app and send them a message.
 - You'll see the creator of the app (and other students) in the list of users!



- (Around the time when the message would have been sent to everyone's apps,) Display the Preview screen of your app again.
 - You should have received a message, so click on it to check it!



- Message received 🎉



- In addition to the Chat we tried this time, there are several other templates available.
- If there is one that is similar to the application you want to build, you may be able to use that template to boost your development. When you have time, try out other templates.

Overview of application development with Adalo

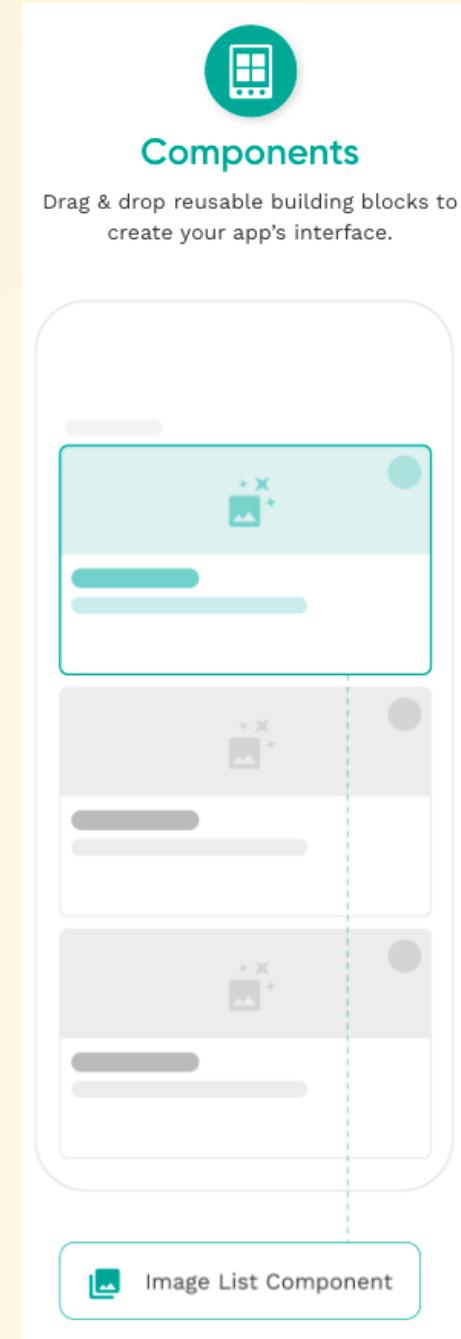
Next, take a look at how to develop an app with Adalo.

Three basic concepts

- Let's learn the following three basic concepts of Adalo.
 - Components
 - Database
 - Actions

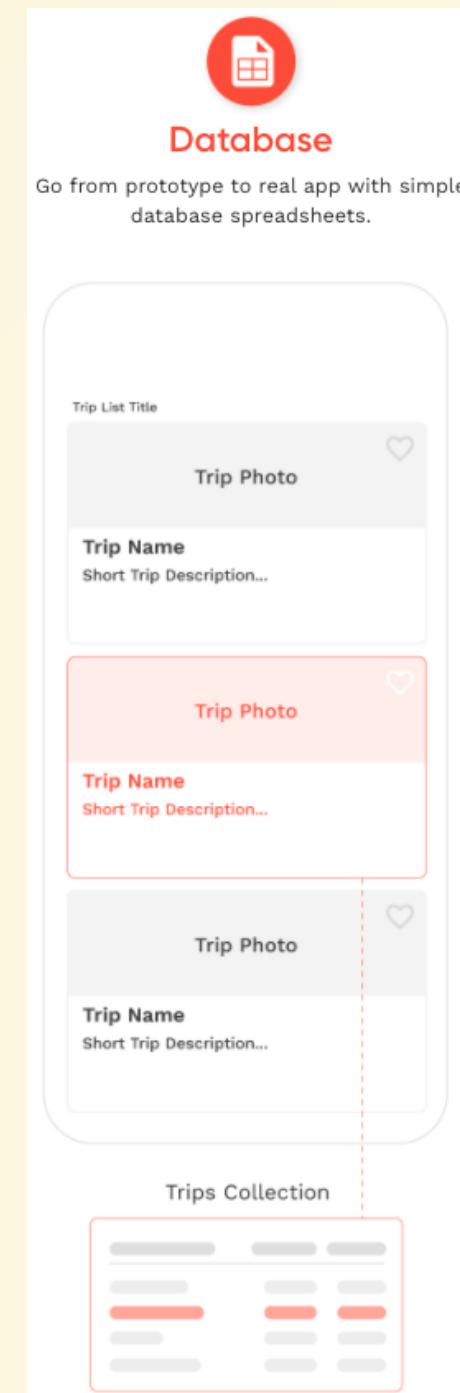
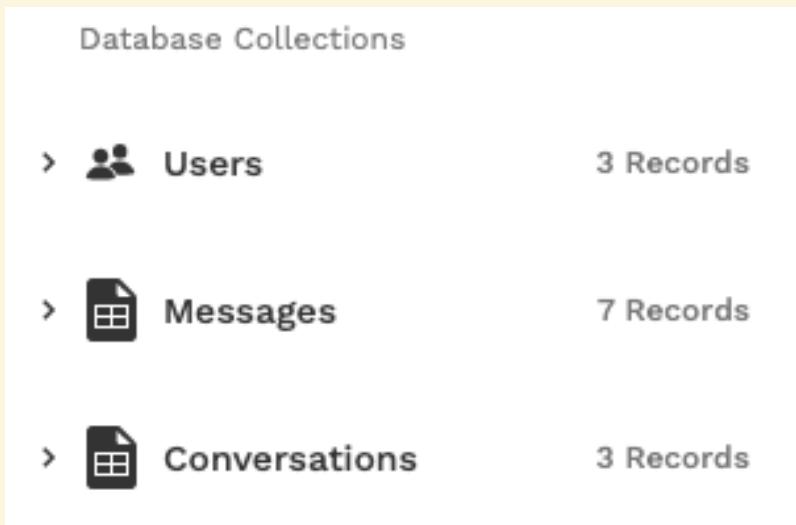
Components

- Elements that are placed on the screen to create a user interface.
- Examples:
 - Lists
 - Buttons
 - Text
 - Image



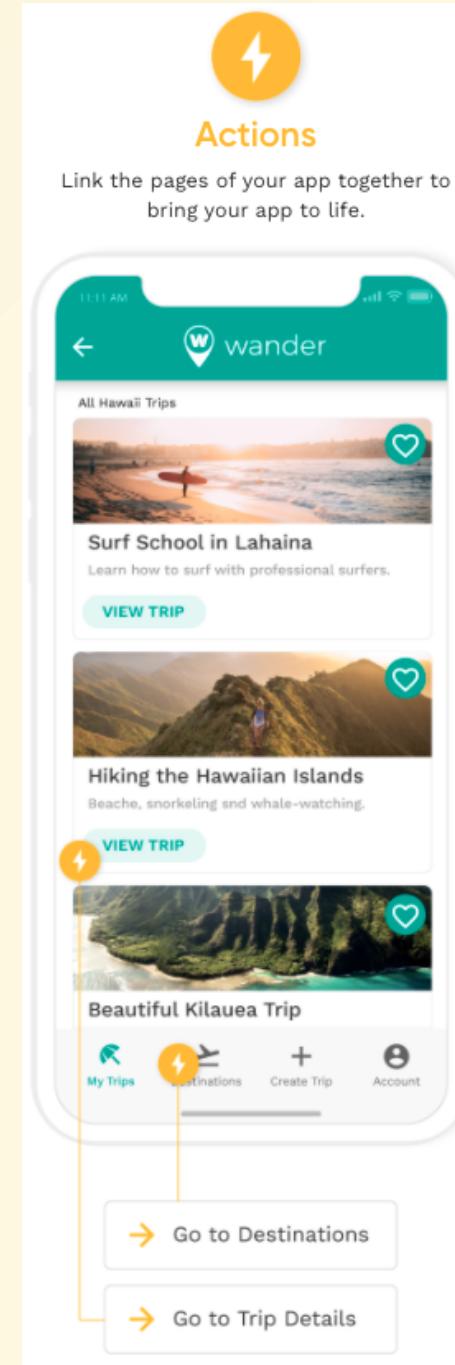
Database

- A set of organized data.
- Data can be registered, read (displayed), updated, and deleted.
- Example: In the case of a Chat application



Actions

- This is used to specify what to do when a specific component is clicked.
- Example :
 - Transition to another screen.
 - Registering, updating, and deleting data in the database.



Explanation of Adalo's functions

Next, take a look at the features available in Adalo's admin panel.

The screenshot shows the Adalo admin panel interface for a project named "ChatApp".

Left Sidebar:

- ADD COMPONENT**: A button to add new components.
- ADD SCREEN**: A button to add new screens.
- Search Components...**: A search bar.
- Most Used**: A section showing recently used components: Text, Button, Simple List, App Bar, Image, and Form. The Text component has a placeholder: "Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod".
- Components List:** Icons for Text, Button, Simple List, App Bar, Image, and Form.

Project Overview:

The project "ChatApp" contains the following screens:

- Welcome
- Login
- Signup
- Add Profile Picture
- Home
- Conversation
- Start Conversation

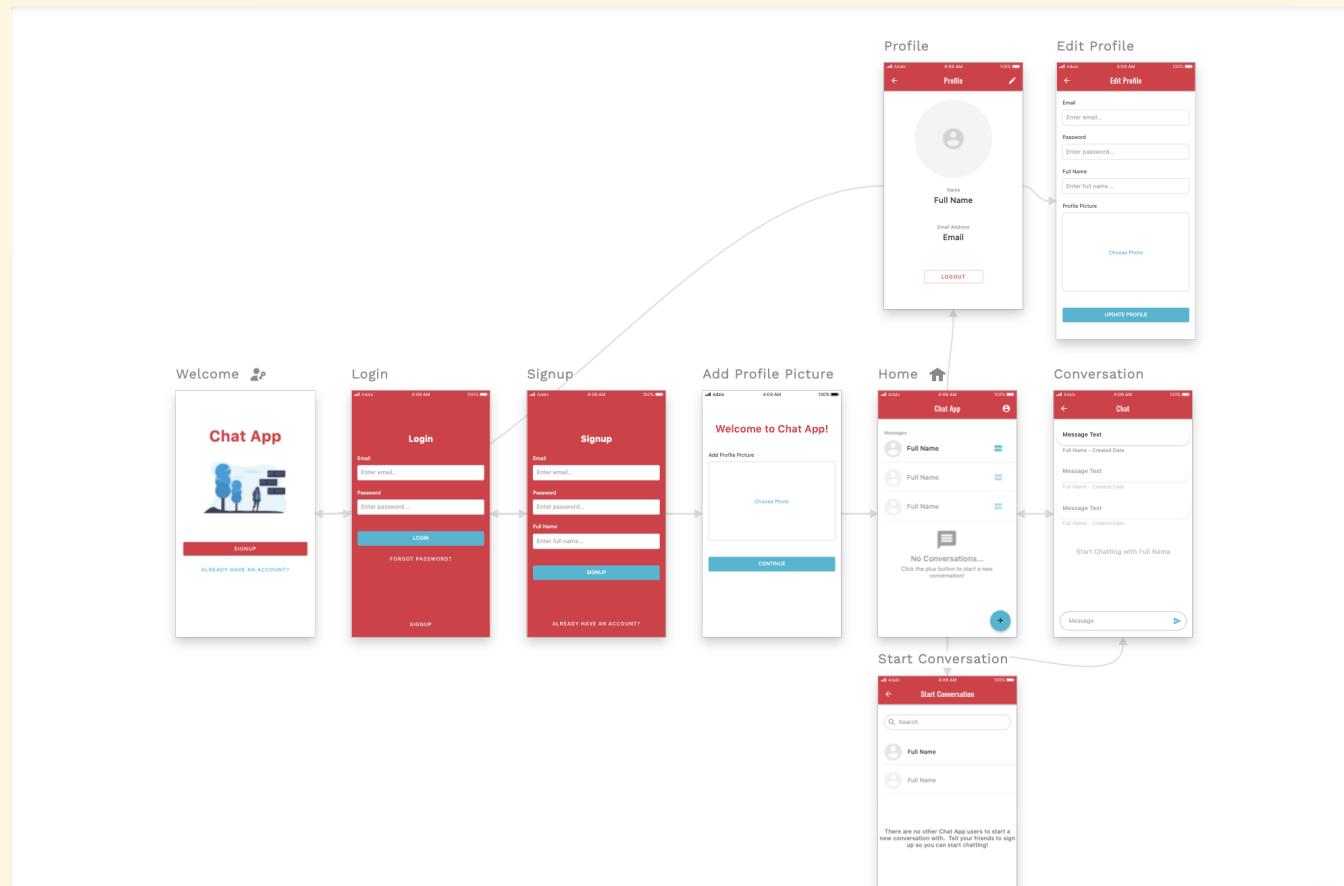
Arrows indicate the flow between these screens. The "Profile" and "Edit Profile" screens are also shown, connected by a curved arrow.

Bottom Right:

- 18 Adalo Points
- 0% of free storage used
- UPGRADE NOW

Canvas

- A work area for creating screens.
- Elements can be selected and moved by dragging and dropping.



Left Toolbar

Let's learn each function of the left toolbar.





Add Panel

- This allows you to select a component or screen to add to your app.

The screenshot shows the Figma Add Panel open, divided into two main sections: "ADD COMPONENT" (top) and "ADD SCREEN" (bottom). On the left, there's a vertical toolbar with icons for Add Component, Paint, Selection, Undo, Redo, and Checkmark. The "ADD COMPONENT" section has a search bar ("Search Components...") and a "Most Used" section with cards for Text, Button, Simple List, App Bar, Image, and Form. Below these are "Navigation" and "Lists" sections. The "ADD SCREEN" section has a search bar ("Search Screens...") and a "Simple" section with cards for Blank Screen and App Bar. To the right of the cards are preview images of each screen type. A yellow vertical bar on the left side of the panel indicates its position within the Figma interface.



Branding

- You can change colors and fonts.

The screenshot shows the Branding settings panel from a web editor. On the left, there's a vertical toolbar with icons for adding (+), branding (paintbrush), pages (document), media (image), settings (gear), and checkmarks. The main area is titled "Branding". It has two sections: "Colors" and "Fonts".

Colors:

- Primary Color: #dd3142 (red box)
- Secondary Color: #2bb6d4 (teal box)
- Default Background Color: #FFFFFF (white box)
- Default Text Color: #424242 (dark gray box)

Fonts:

- Heads: Oswald (dropdown menu)
- Body: Standard System Font (dropdown menu)

At the bottom right, there's a pink banner with the text "Need More Cool Fonts? We Got You!" and a "UPGRADE NOW" button.



Screens

- List of screens and their configurations.

The screenshot shows a user interface for managing application screens and components. On the left, there's a sidebar with icons for adding a screen, painting, deleting, settings, and a 'Login' button. The main area lists various screens: 'Screens', 'Add Profile Picture', 'Conversation', 'Edit Profile', 'Hoge', 'Home', 'Login' (which is selected and highlighted in grey), 'Profile', 'Signup', 'Start Conversation', and 'Welcome'. At the bottom of this list is a '+ ADD SCREEN' button. To the right of the screen list is a detailed view of the 'Login' screen. It includes sections for 'Components' (with items like 'Button', 'Form', 'Group 21', and 'Text'), 'Actions', and 'Available Data'. There are also 'EDIT STYLES' and '+ ADD COMPONENT' buttons. A back arrow labeled 'ALL SCREENS' is at the top right of the detailed view.



Database

- Displays the structure of the database and the data stored in it.
- Collection: A collection of data that has the same properties.

The screenshot shows a database application interface. On the left, there's a sidebar with various icons and sections like 'Database Collections', 'Users' (selected), 'Email', 'Password', 'Username', 'Full Name', 'Profile Picture', 'Conversations (Creators)', 'Messages (Sender)', 'Read Statuses', 'Conversations (Members)', 'Friends', and 'Messages' and 'Conversations' at the bottom. The main area is titled 'Users' and contains a table with the following data:

	Email	Password	Username	Full Name	Profile Picture
<input type="checkbox"/>	fuga@hoge.com	[hidden]		三人目のユーザー	
<input type="checkbox"/>	hoge@fuga.com	[hidden]		東工大	
<input type="checkbox"/>	imahashi@example.com	[hidden]		今橋 陵	

At the top right of the main area, there are buttons for '+ ADD USER', a cloud icon, a download icon, a sync icon, and a search icon. At the bottom right, there's a large red 'DONE' button.



Settings

- You can configure app name, icon etc.
- You can configure display settings for the canvas.
- You can set access permissions to the app.
- You can copy or delete an app.
- You can set api key for geolocation feature.

The screenshot shows a mobile application's settings menu. At the top right is a 'Settings' icon (a gear). Below it is a vertical list of five items, each with an associated icon:

- > App Settings (Icon: Plus sign)
- > Display Settings (Icon: Paint palette)
- > App Access (Icon: Document with stars)
- > Copy / Delete (Icon: Gear)
- > API Keys (Icon: Checkmark)



Publish

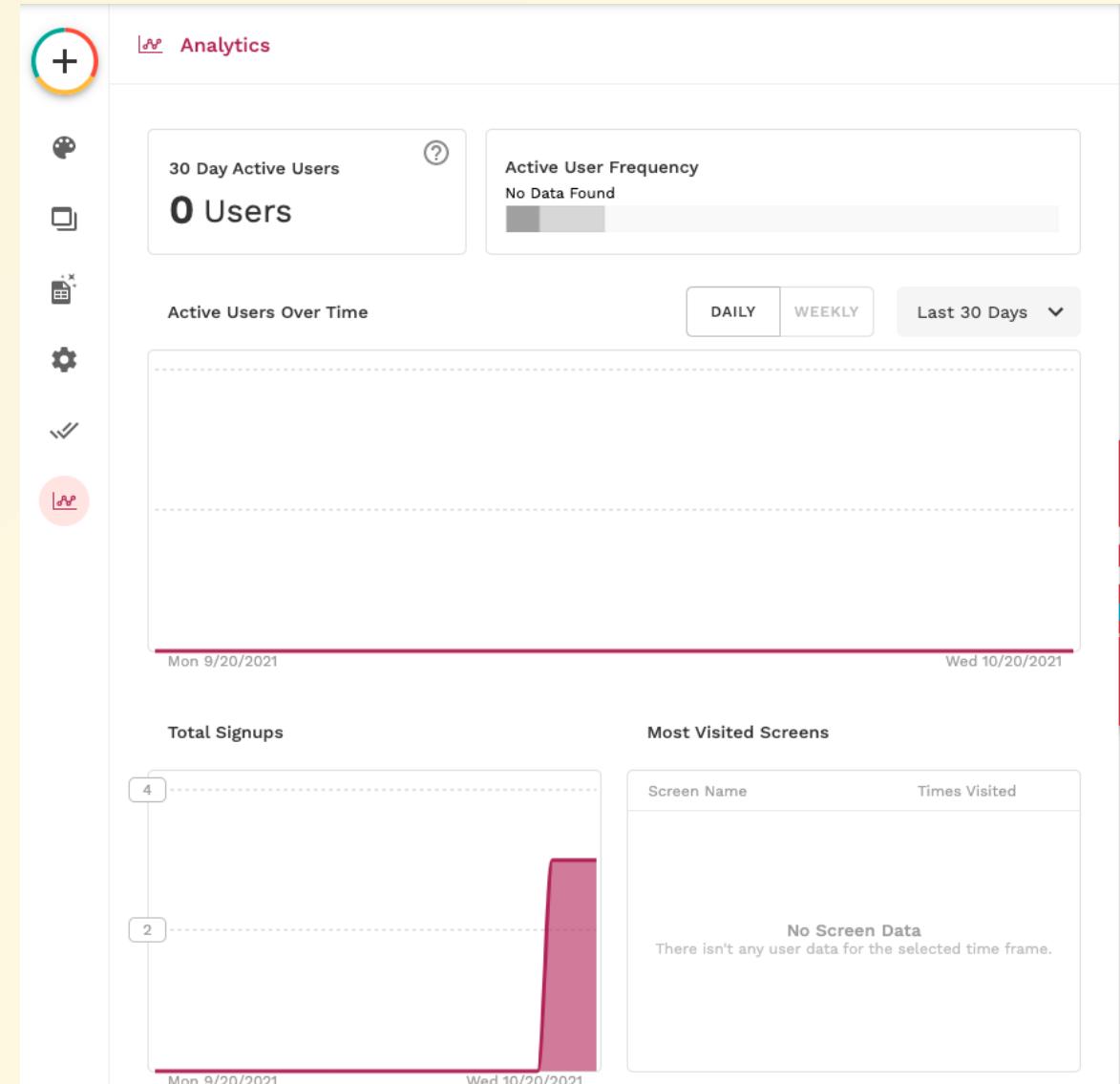
- You can publish your apps (paid plan required).

The screenshot shows a mobile application interface. On the left, there is a vertical sidebar with several icons: a red circle with a white plus sign, a paint palette, a document, a clipboard with a star, a gear, a green circle with a checkmark, and a bar chart. The main content area has a light gray header with a green checkmark icon and the word "Publish". Below this, there is a section titled "Android App" with a dropdown arrow. A message states: "In order to publish your app, you must upgrade to a paid plan." A large green button labeled "UPGRADE NOW" is centered below the message. Further down, there are sections for "iOS App" and "Progressive Web App", each with a right-pointing arrow.



Analytics

- Show usage analysis report.





Version History

- You can create version history and restore version (paid plan required).

The screenshot shows a user interface for managing app designs. On the left is a vertical sidebar with the following icons from top to bottom: a plus sign inside a circle, a paint palette, a square with rounded corners, a building with stars, a gear, a checkmark, a double arrow, and a document with a circular icon.

The main area has a header with a camera icon, the text "Version History", and a question mark icon. Below the header is a section titled "Design Versions" with a dropdown arrow and a count of "2/10".

A prominent callout box in the center says "Free Trial | 14 Days Left" and provides information: "Create and restore versions of your app's design without affecting your database, user data, or existing native builds." It includes a green "UPGRADE NOW" button.

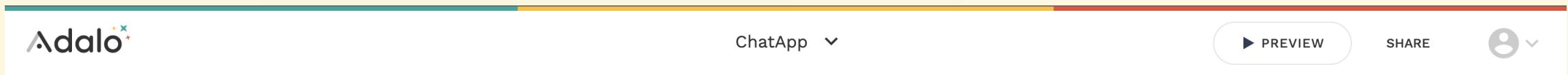
A large green button at the bottom of the main area says "+ CREATE DESIGN VERSION".

The "Design Versions" list contains two items:

- Second Version**
Created by Ryo on Nov 4 11:29 pm
something changed. ⋮
- Initial Version**
Created by Ryo on Nov 4 11:28 pm
Nothing changed. ⋮

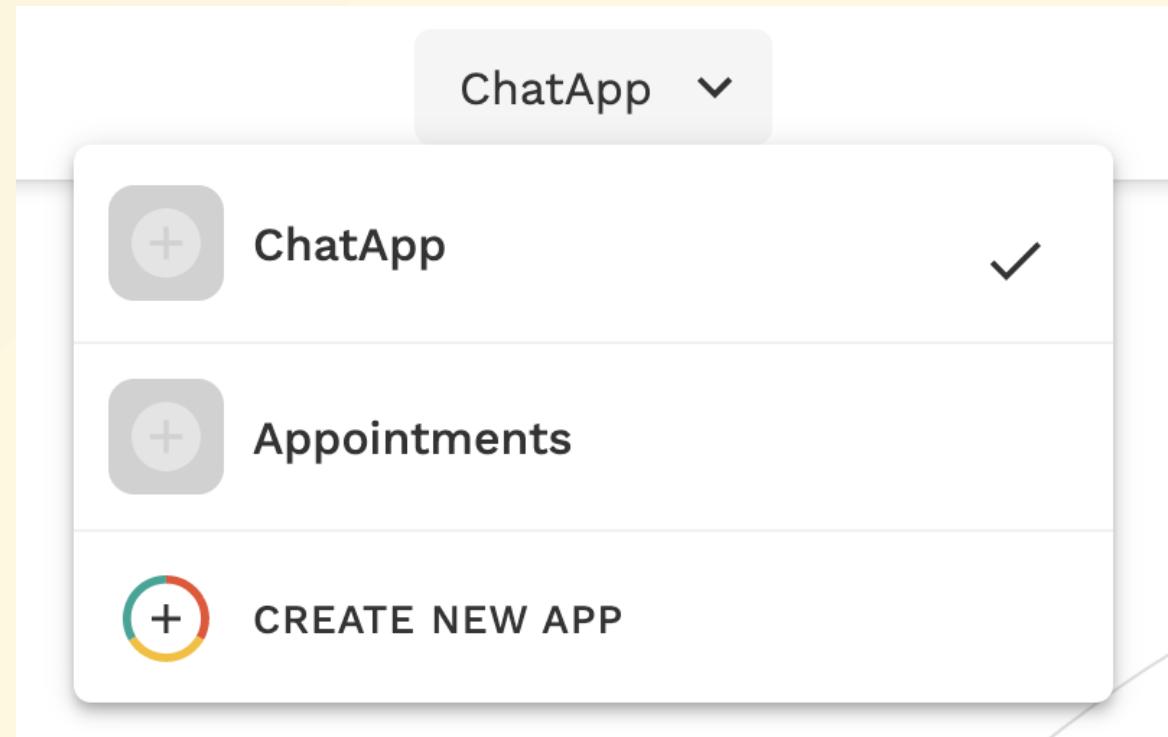
Top Bar

Let's learn each function of the top toolbar.



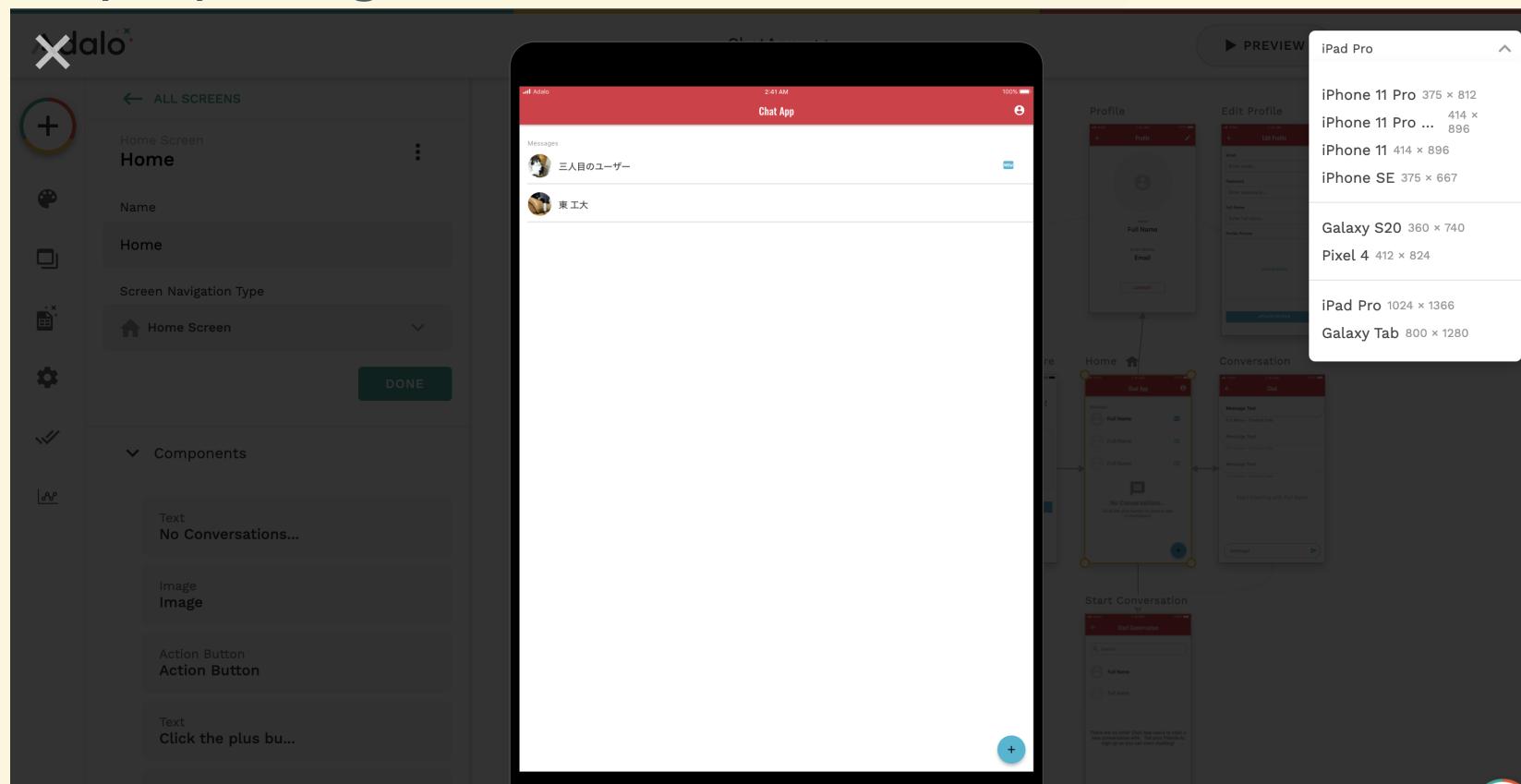
App Switcher

- Displays the name of the opened app.
- You can switch to other app.
- New apps can be added.



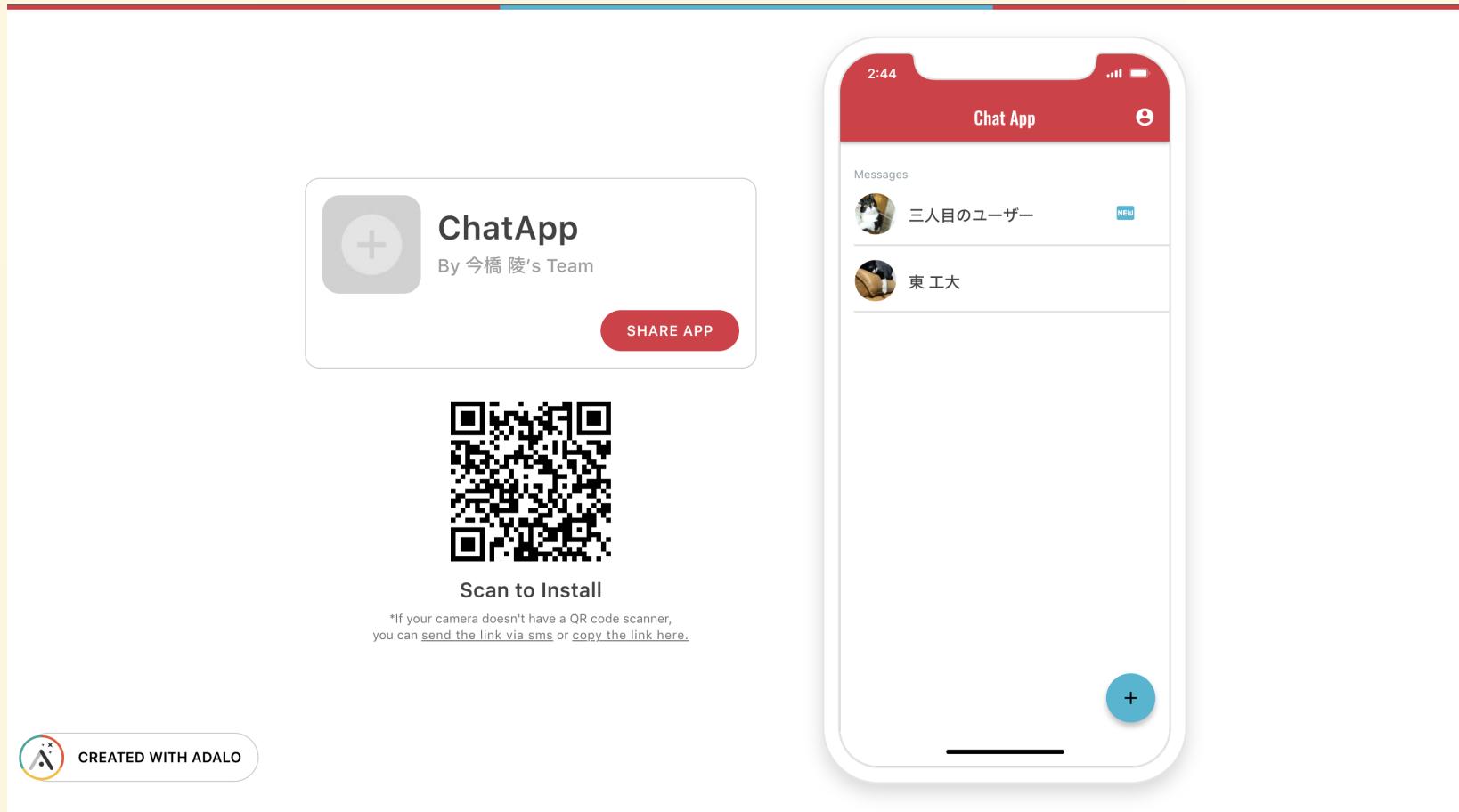
Preview

- You can run the app and try it out.
- You can switch to devices with different screen sizes to check the display image.



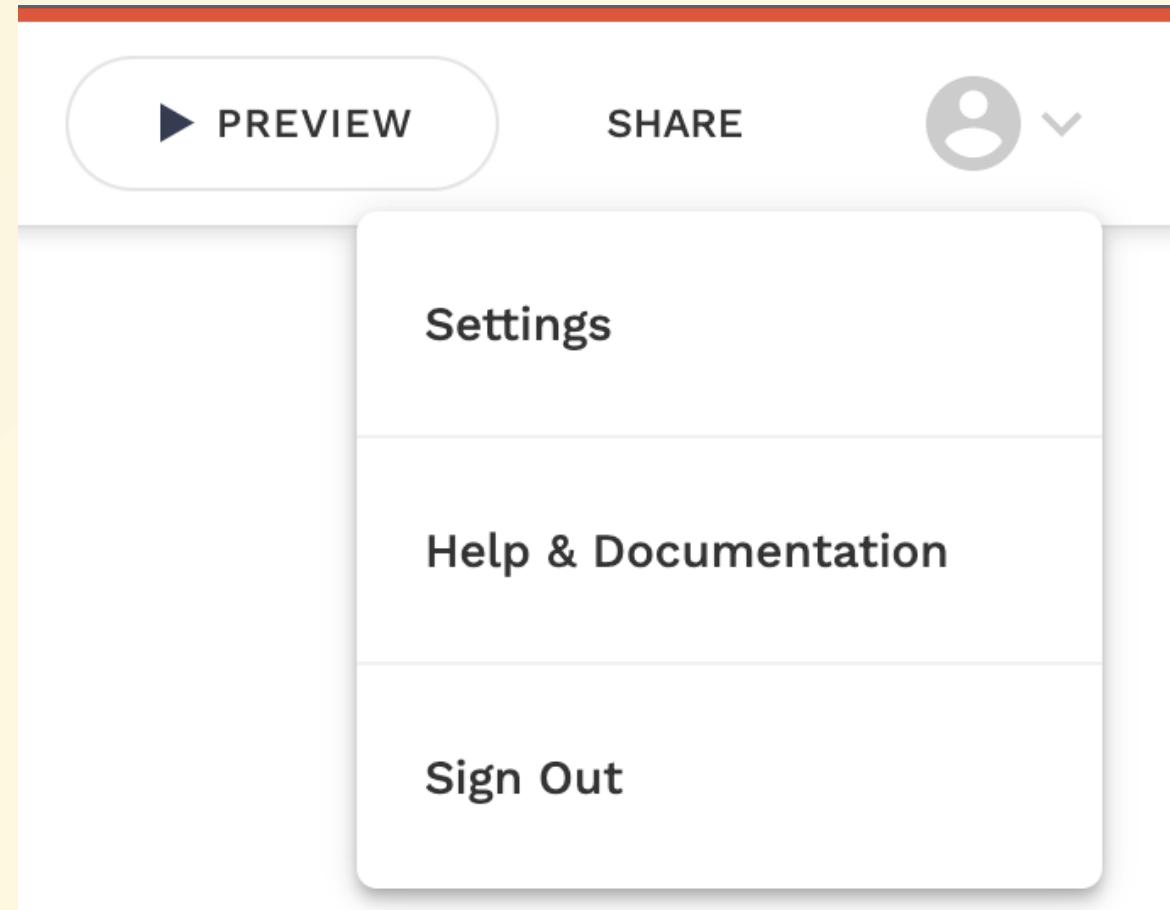
Share

- You can share the app to get others to use it.
No Adalo account required to use shared app.



Account Menu

- Allows you to configure various settings.
- Link to help and documentation.
- Sign Out.



Tips

- If you edit something by mistake, you can undo it with `Ctrl + Z` on Windows or `Command + Z` on Mac!
- Entering Japanese text may not work well with Adalo's development tools. Use copy and paste instead.

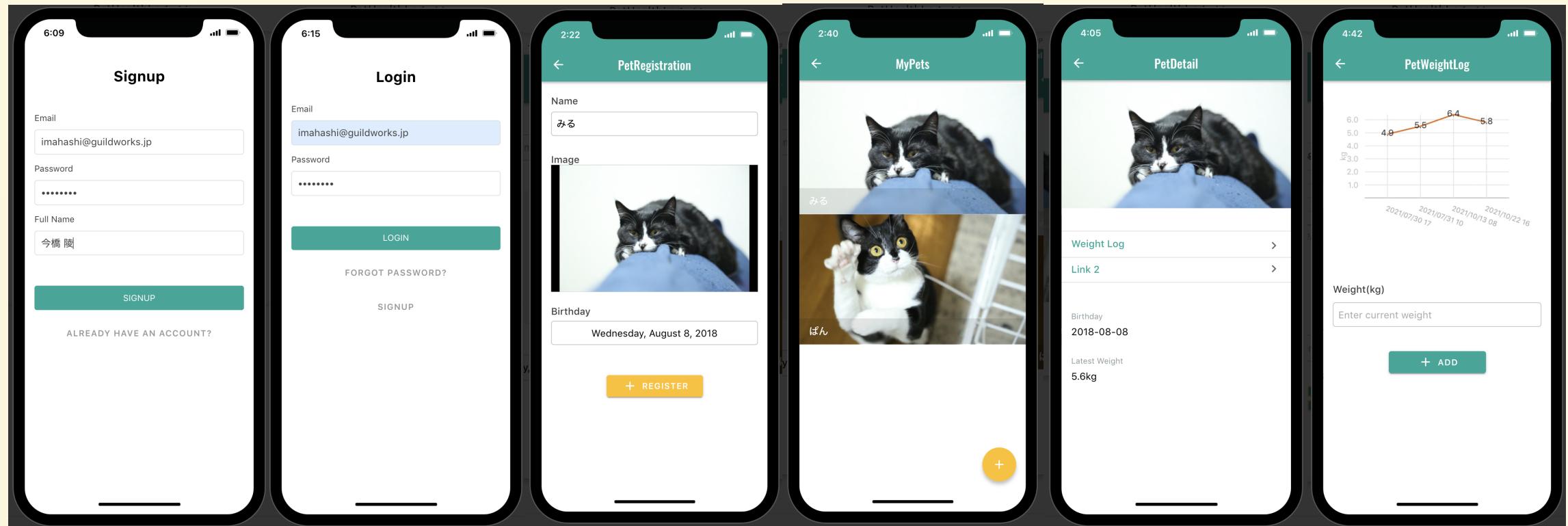
Sample application development

Let's create a new application.

- In this lecture, we will create a static site without using a database (the content displayed will remain the same no matter which user accesses the site).
- In the next lecture, we will create a dynamic app using a database (the content displayed will change for each user).

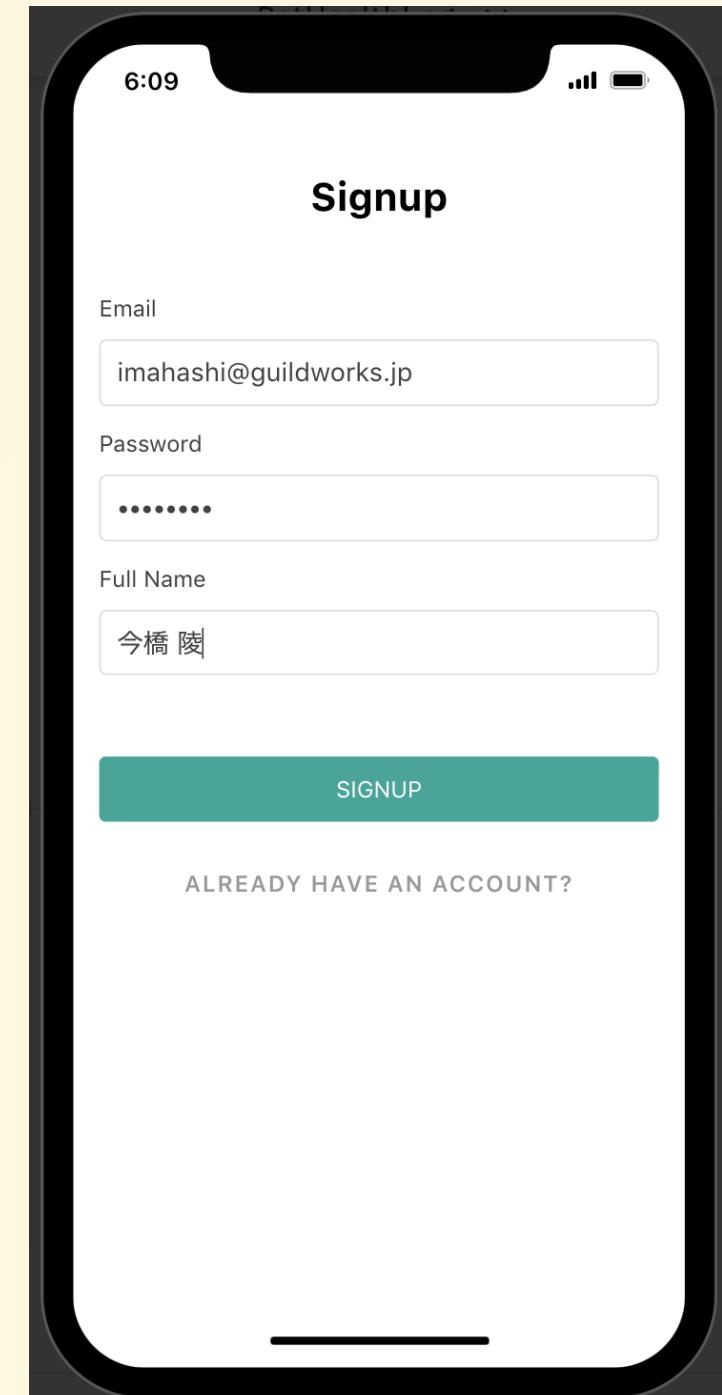
UI of the sample application

This is a health management application for your pet.
First, check the UI.



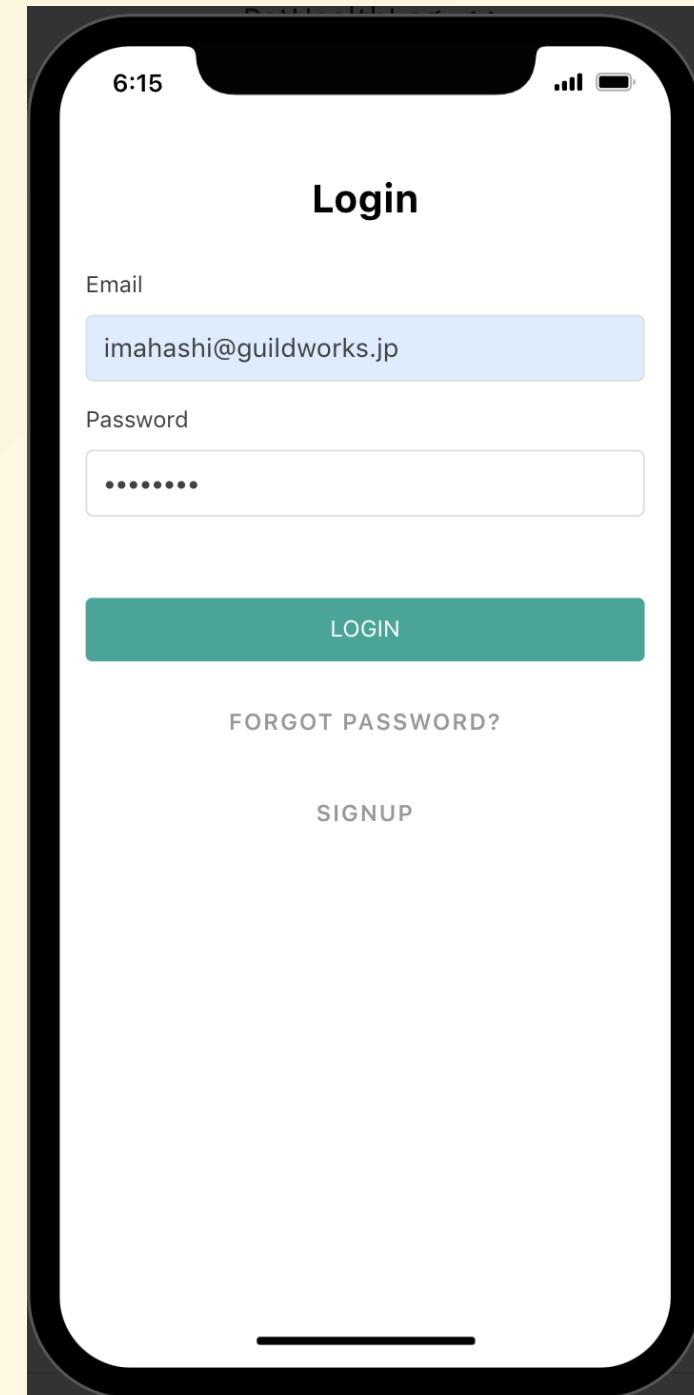
User Registration Screen

- You can register as a user by entering the following information
 - Email
 - Password
 - Full Name
- For those who have already registered, there is a link to the login screen.



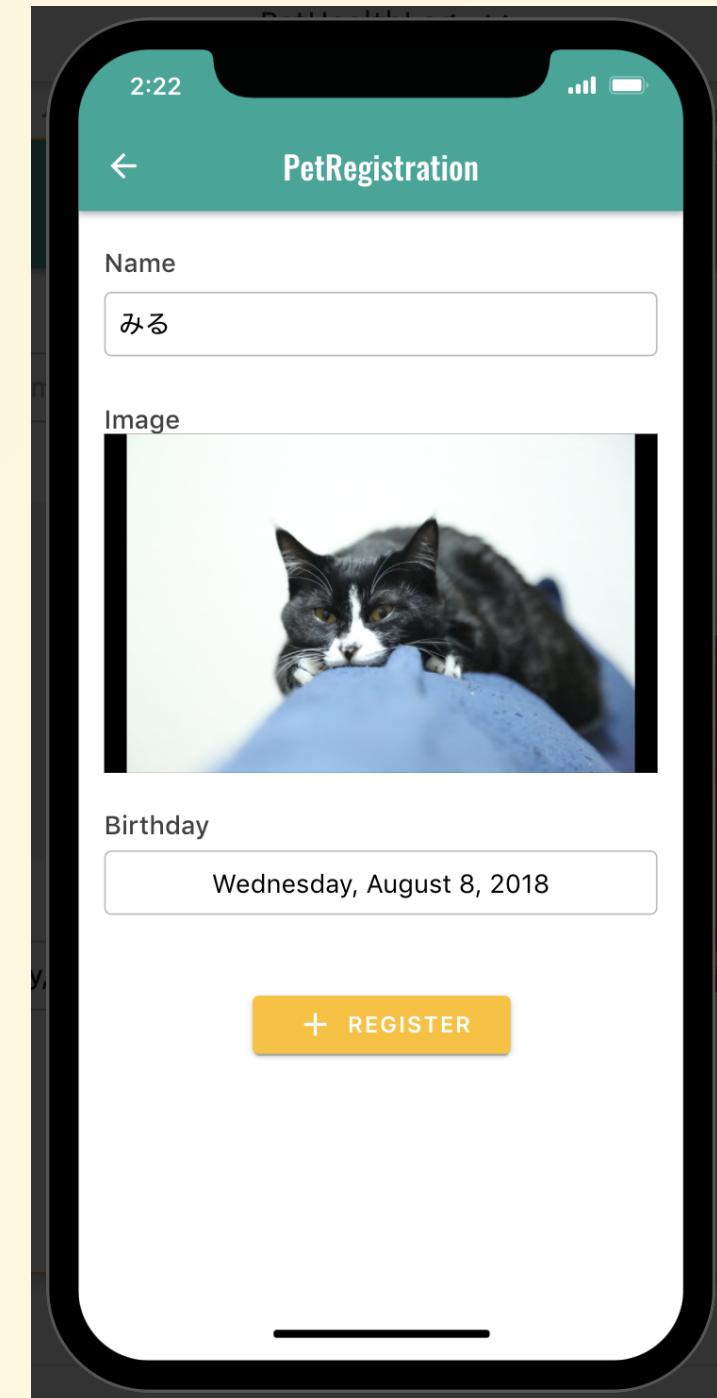
Login screen

- You can log in by entering the following information
 - Email
 - Password
- There is a link for those who have forgotten their password.
- There is a link to the user registration page.



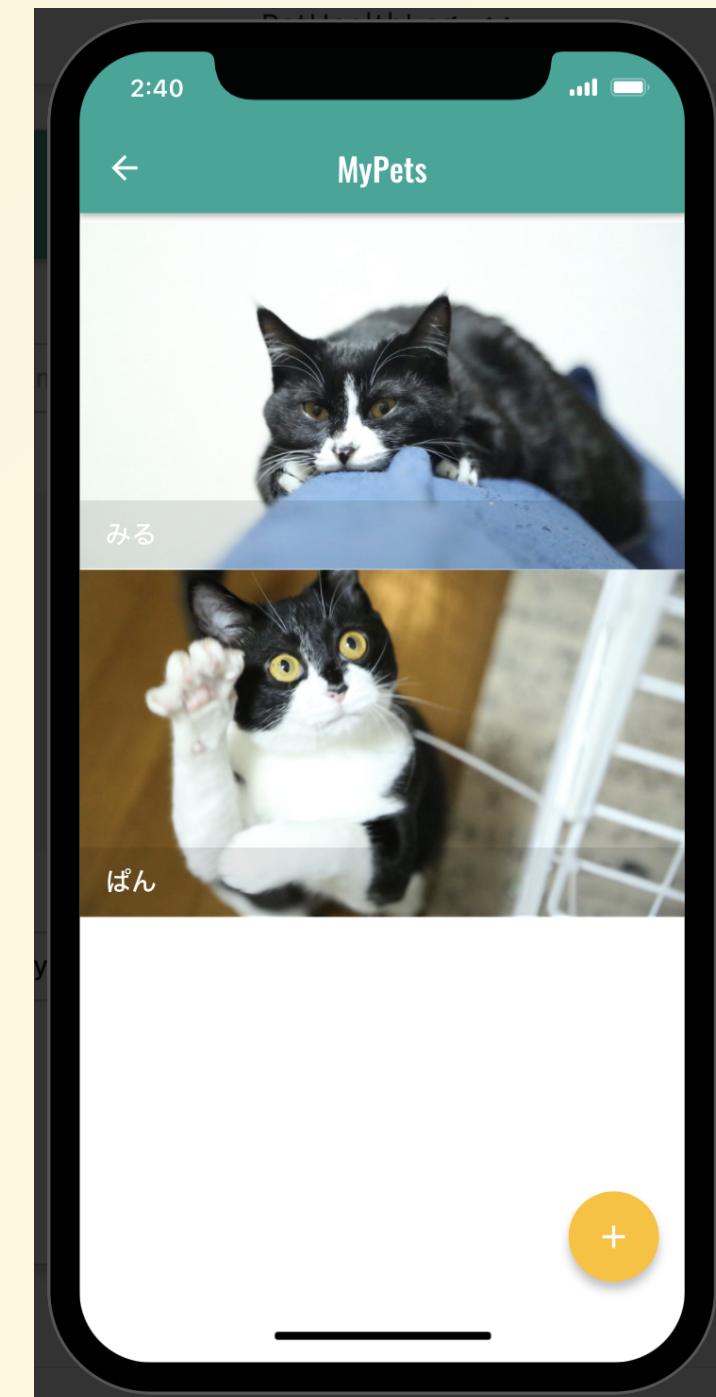
Pet Registration Screen

- You can enter your pet's name.
- You can select your pet's photo.
- You can enter your pet's birthday.
- You can click the "Register" button to register your pet and move to the pet list screen.



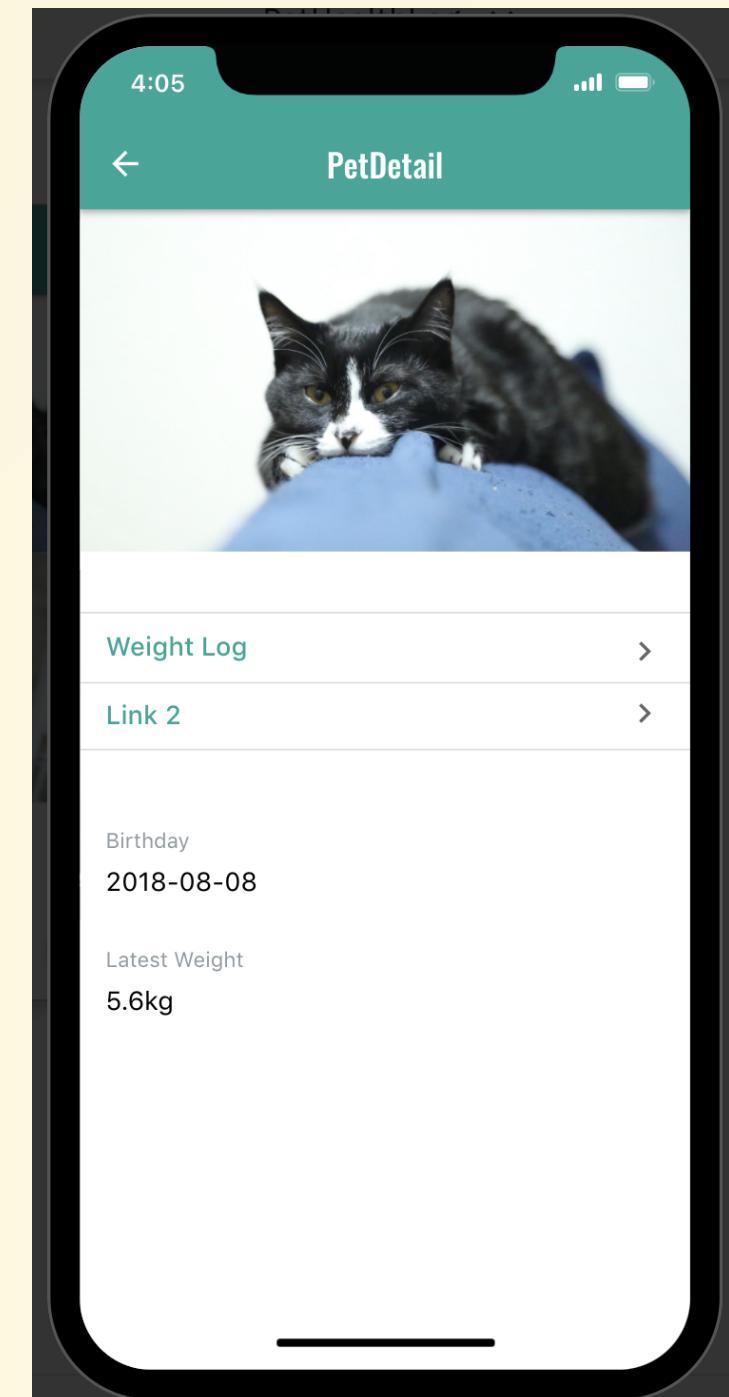
Pet List screen

- Registered pets can be displayed in a list.
- Clicking on a pet will take you to the pet details screen for that pet.
- Clicking the icon at the bottom right take you to the Pet Registration screen.



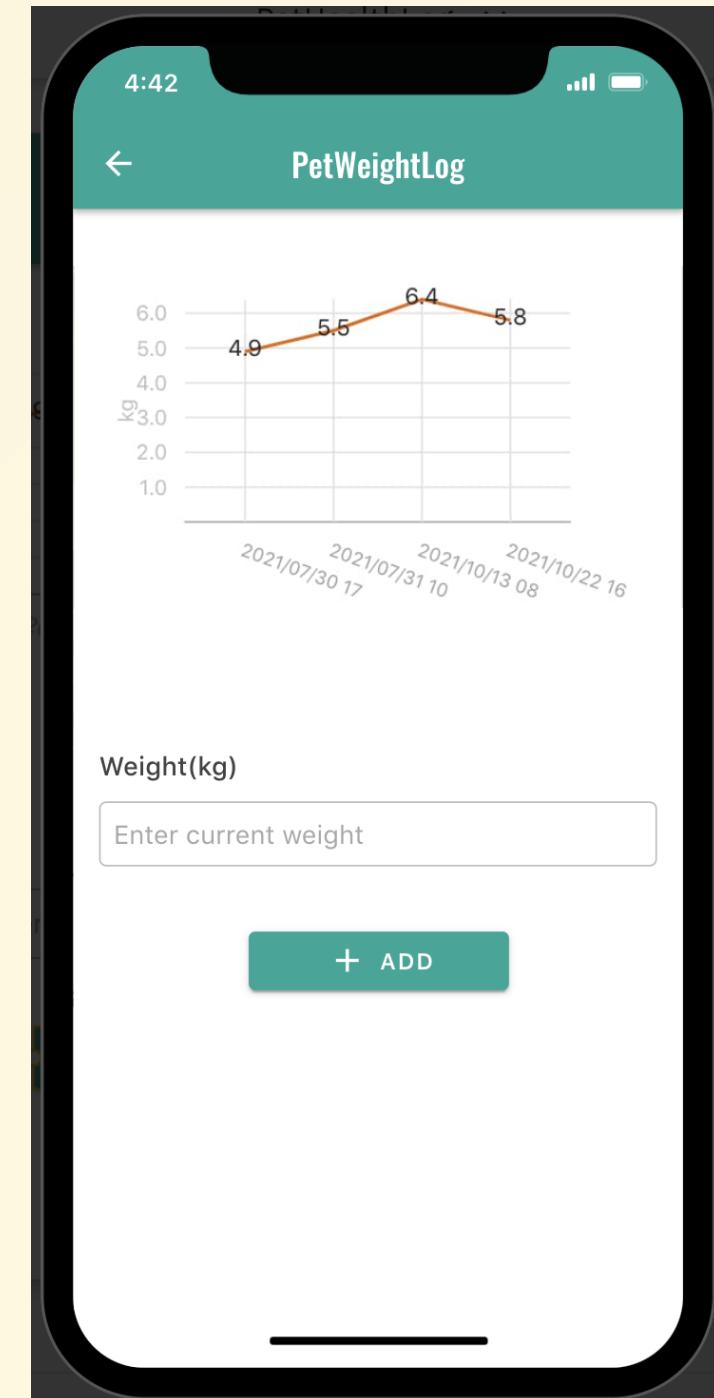
Pet Detail Screen

- There is a link to the weight Record screen.
(Link2 is for exercise)
- Birthday is displayed.
- The latest weight is displayed.



Weight Record screen

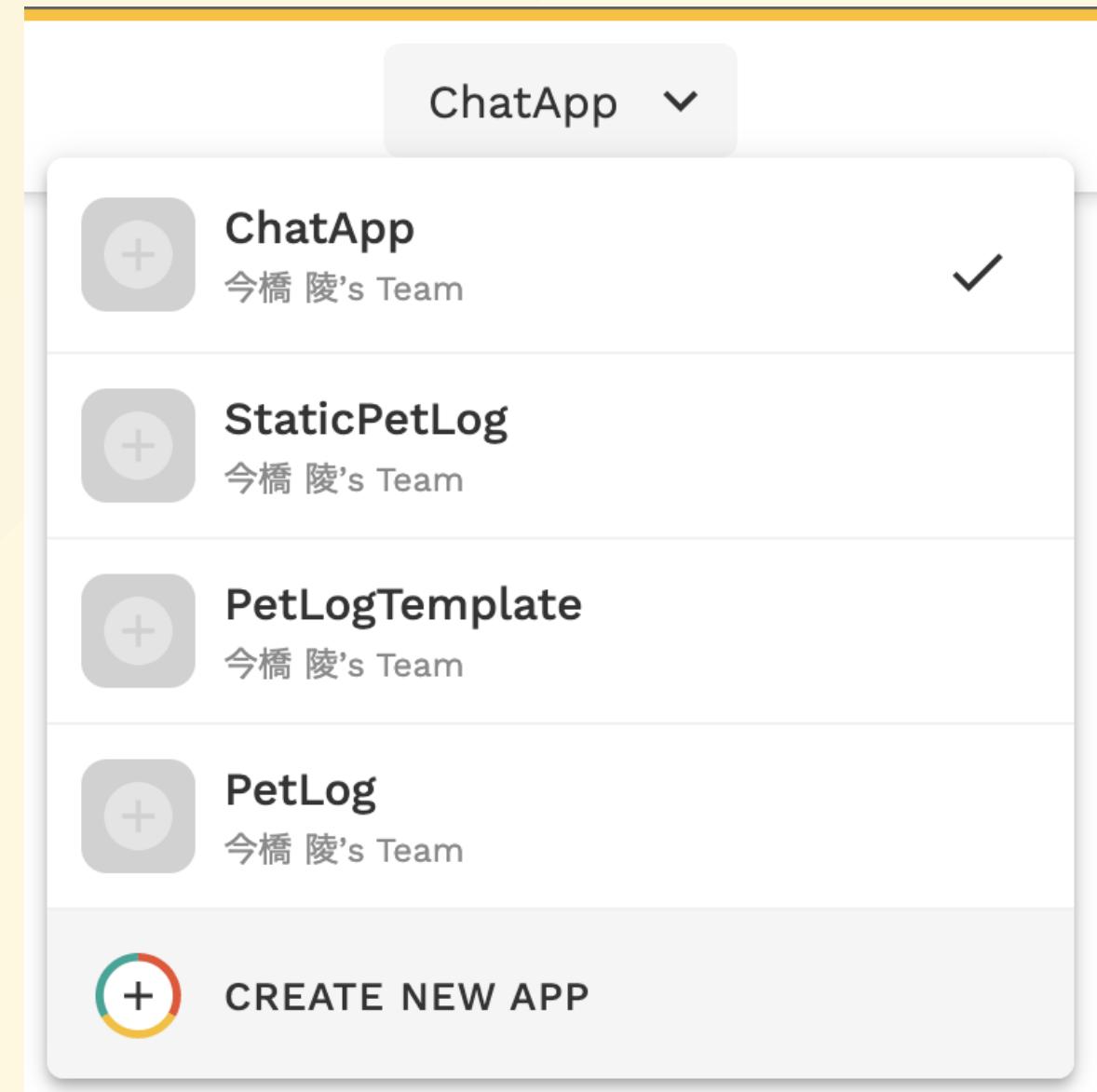
- A graph showing the transition in weight is displayed.
- You can enter your pet's current weight.
- You can add your pet's weight by pressing the button



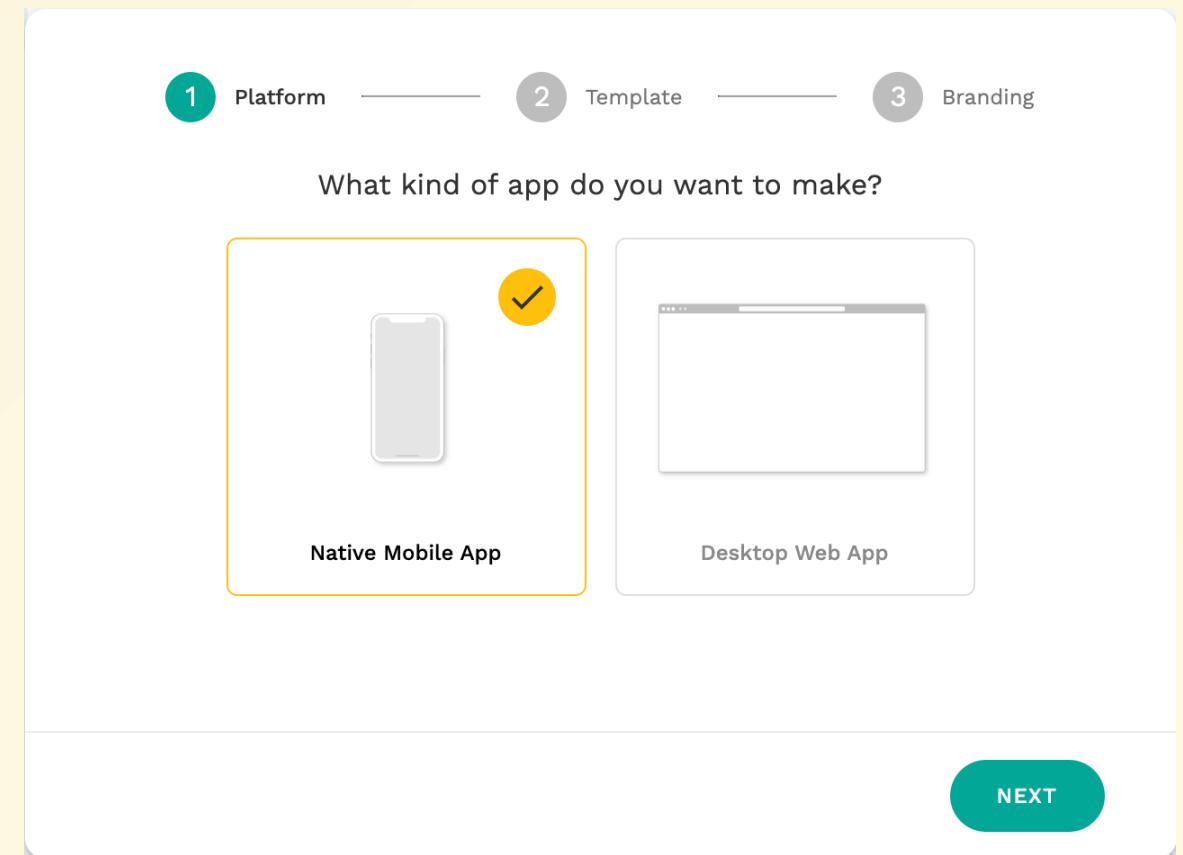
Creating the application

Now, let's start creating the application.

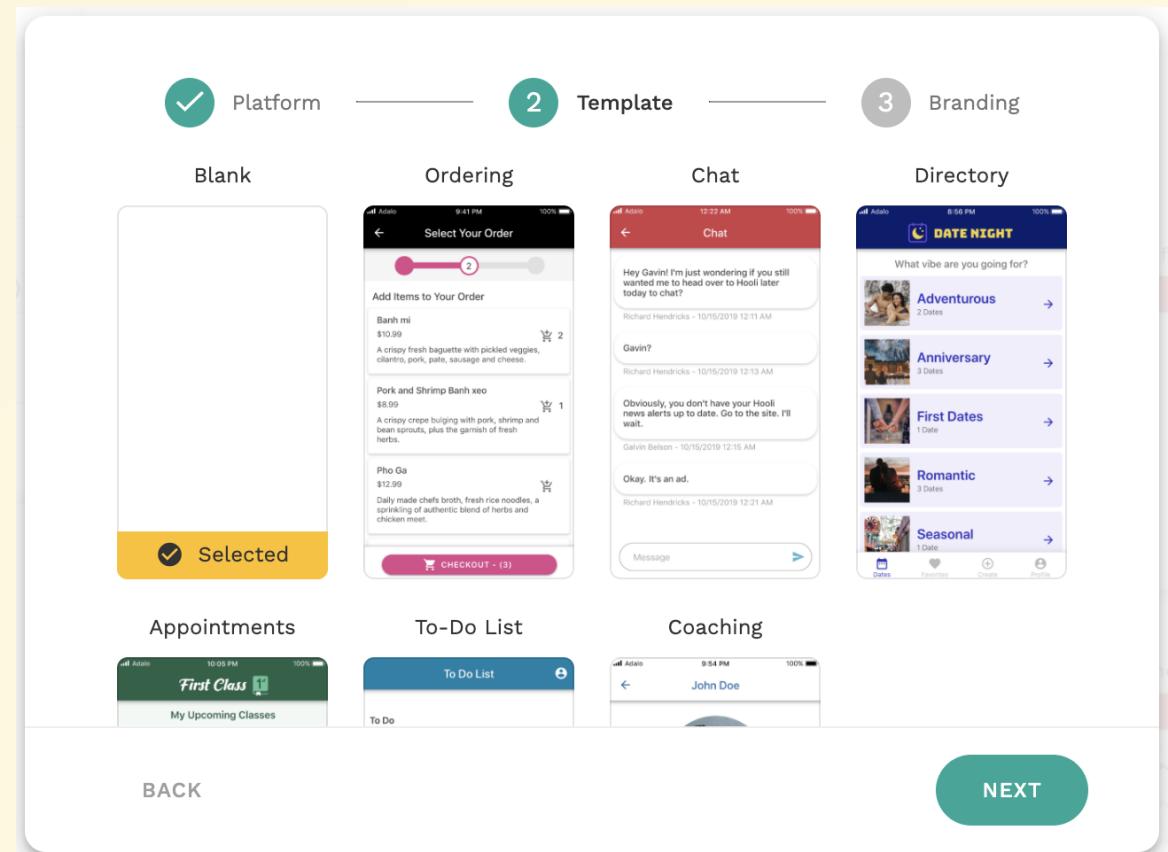
- select CREATE NEW APP



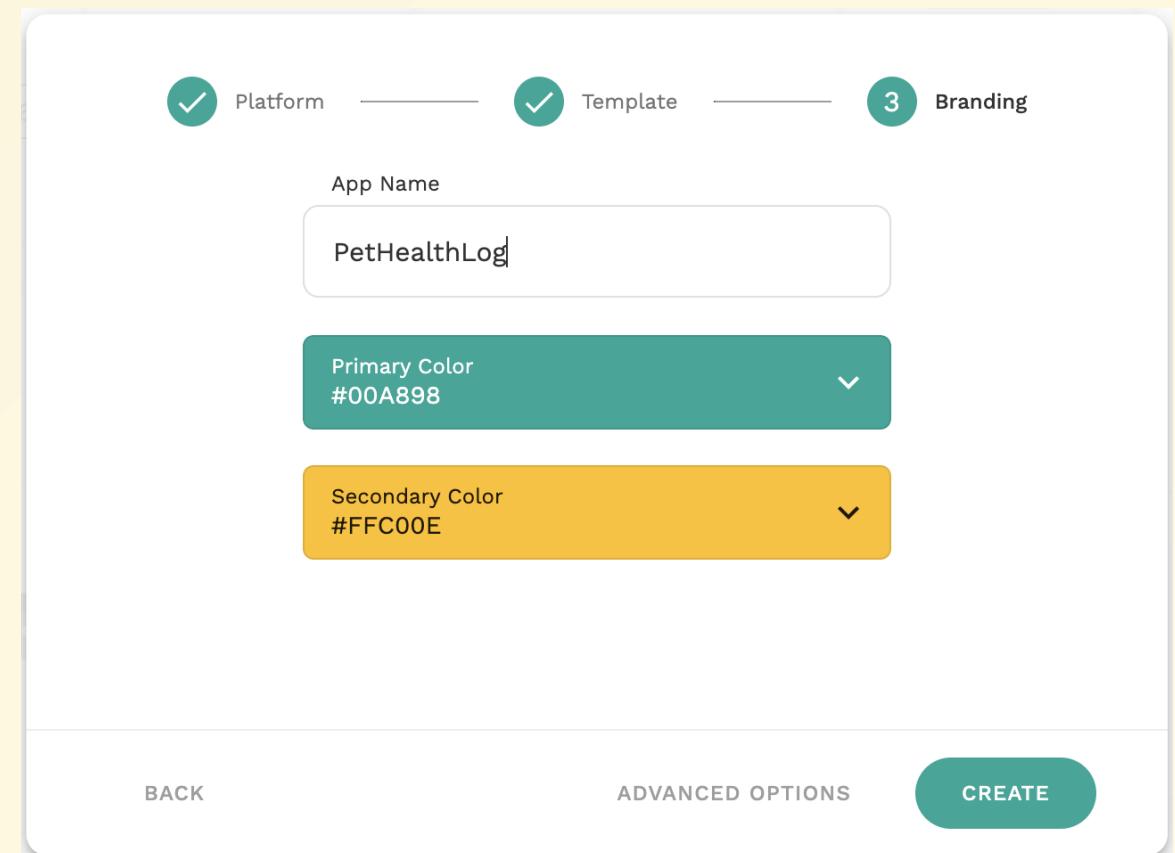
- Select Native Mobile App !



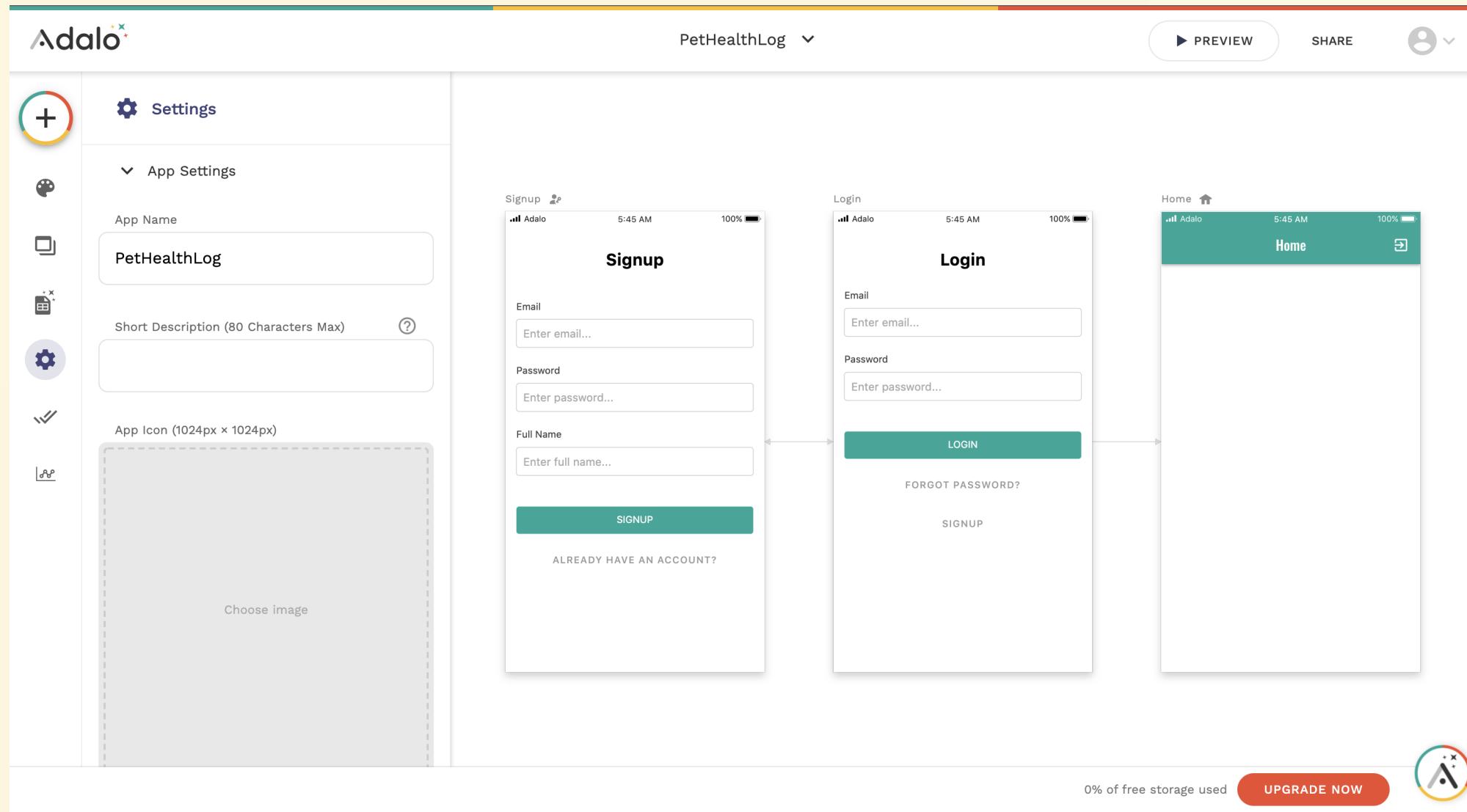
- select Template: Blank



- Enter App Name and Color as you like.

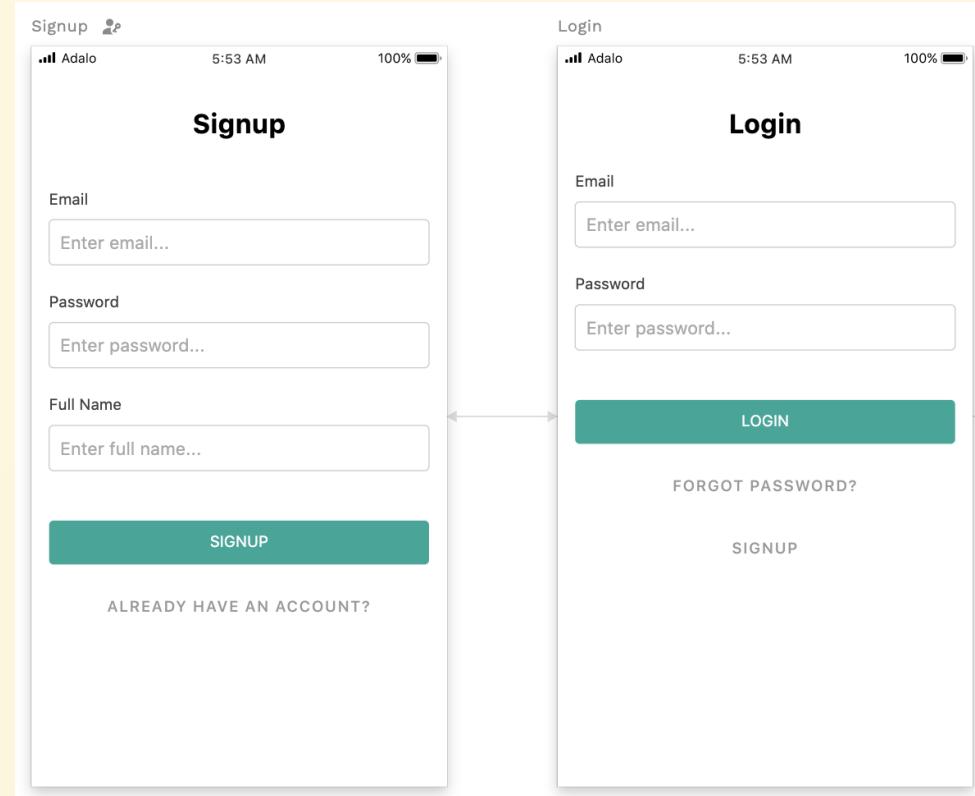


- The application is ready!



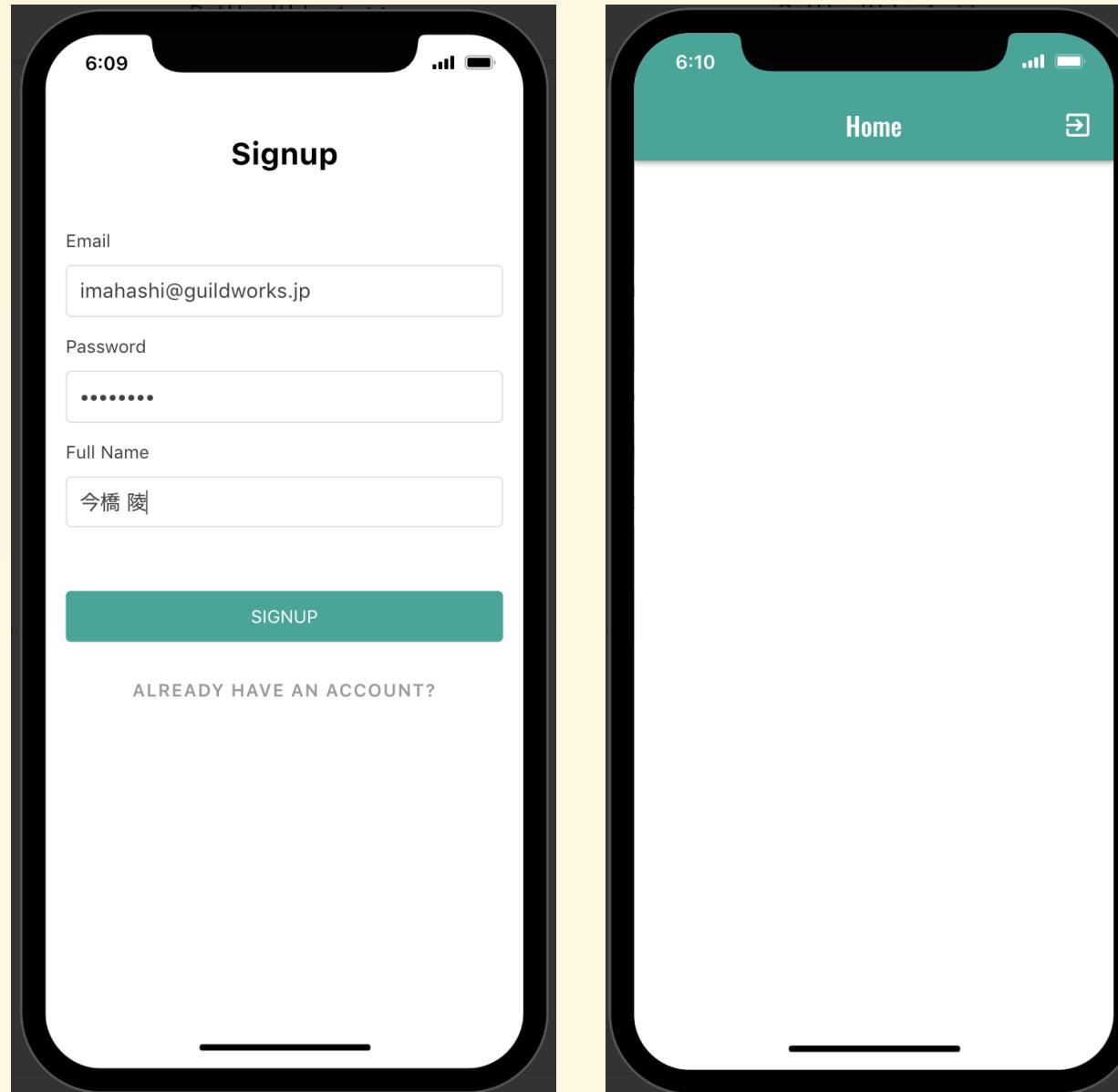
User registration screen, login screen

User registration screen and login screen are generated by default.

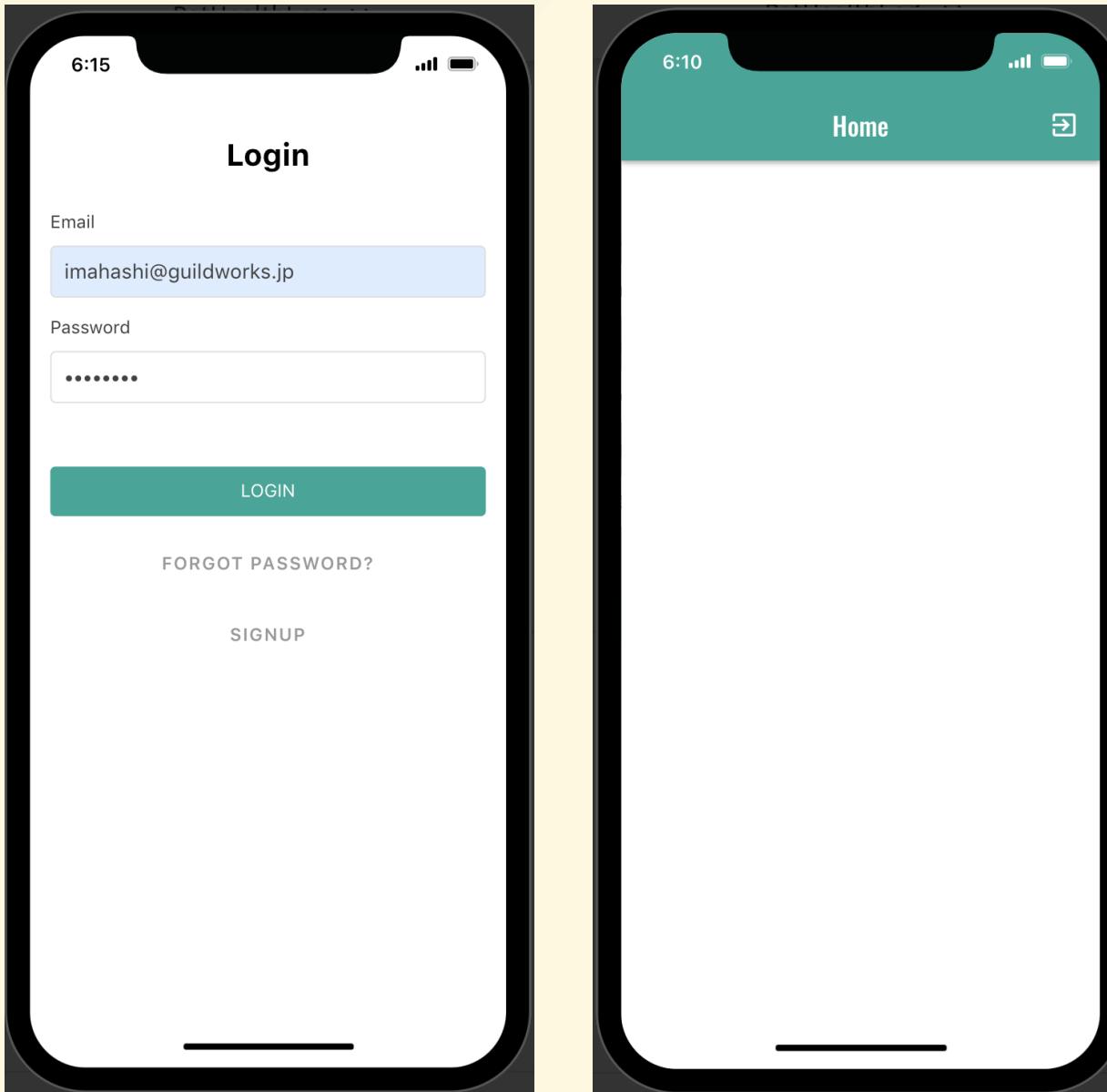


Check the preview function to see how they works.

- User Registration Screen
 - When you signup, you will be redirected to the Home screen.
 - You can log out from the icon in the upper right corner of the Home screen.



- Login screen
 - Log in with the same Email and Password that you used to register earlier, then you will be redirected to the Home screen.



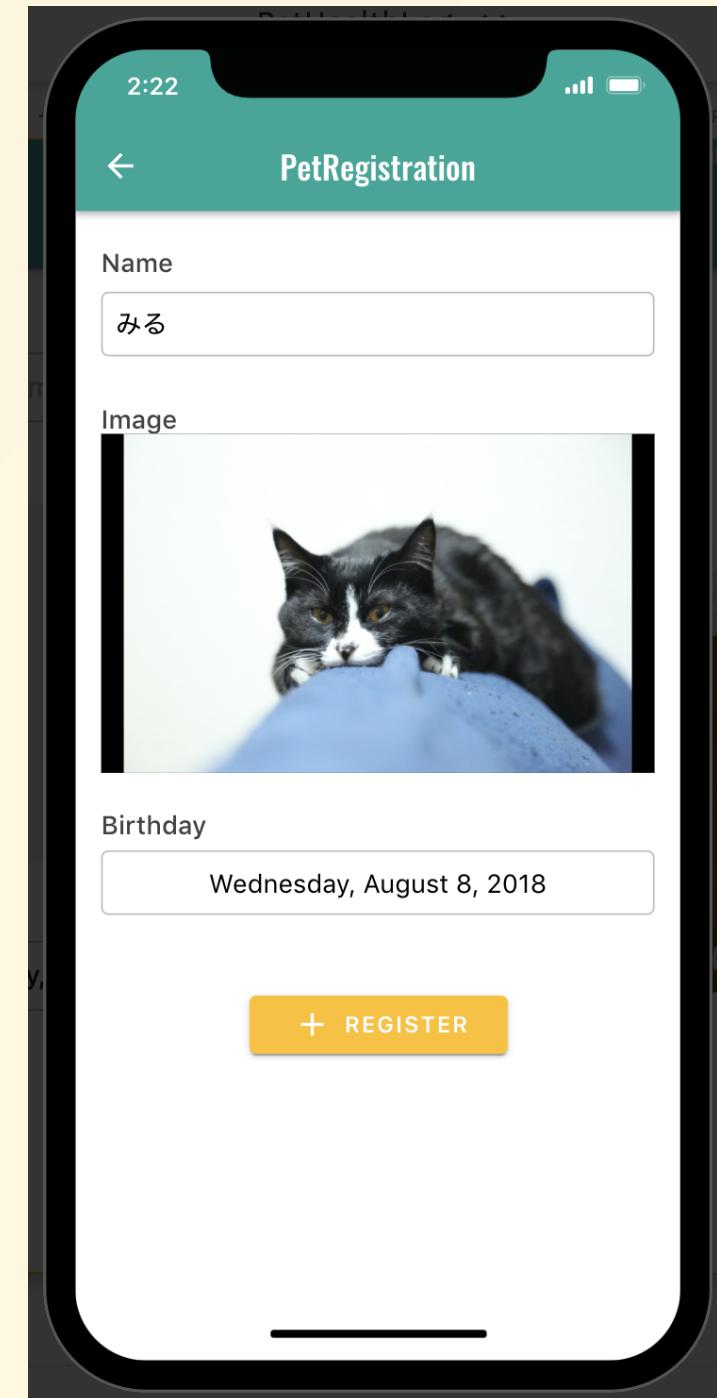
It seems like the registration screen and login screen are fine as they are.

Let's create the other four screens.

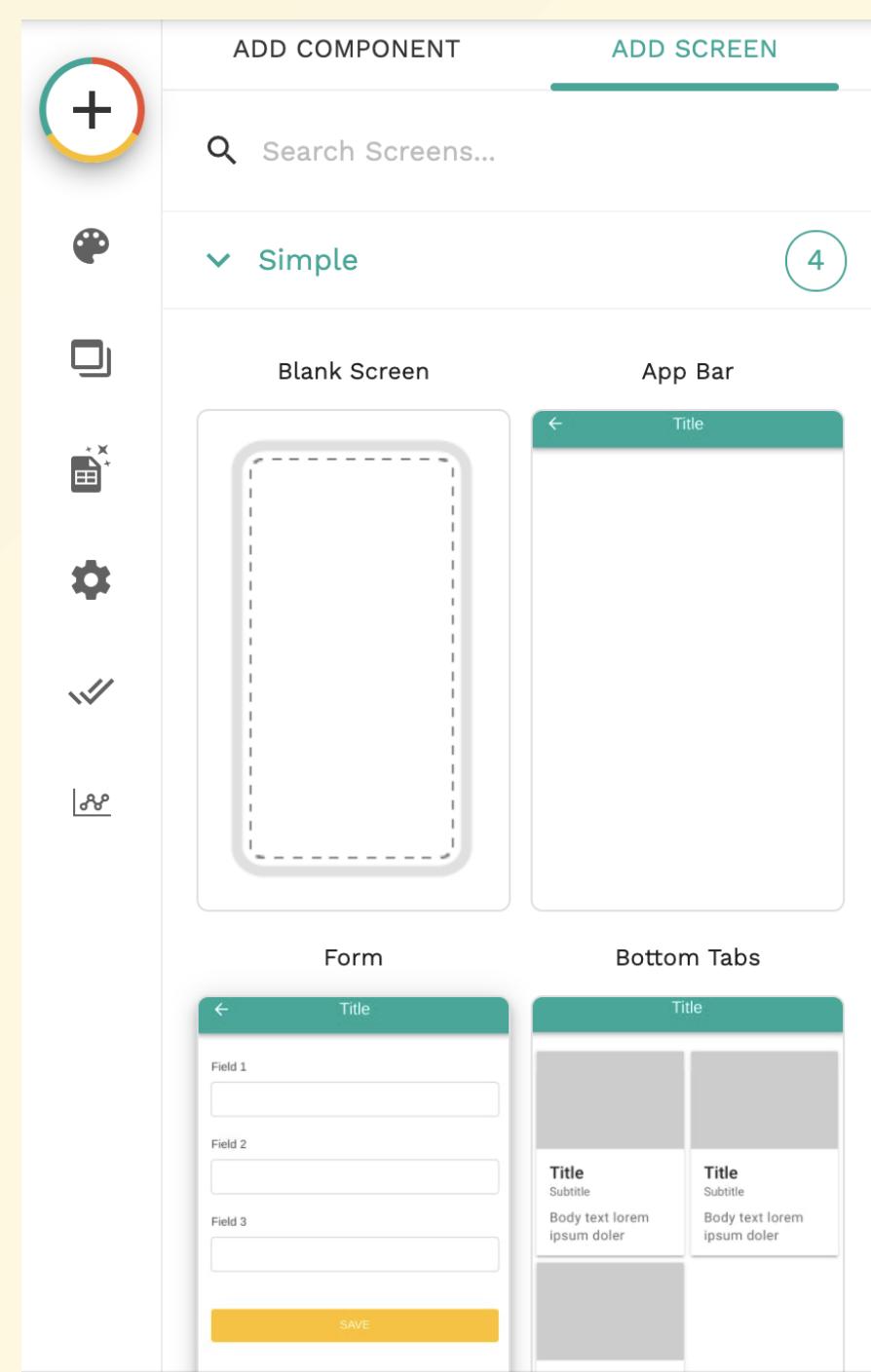
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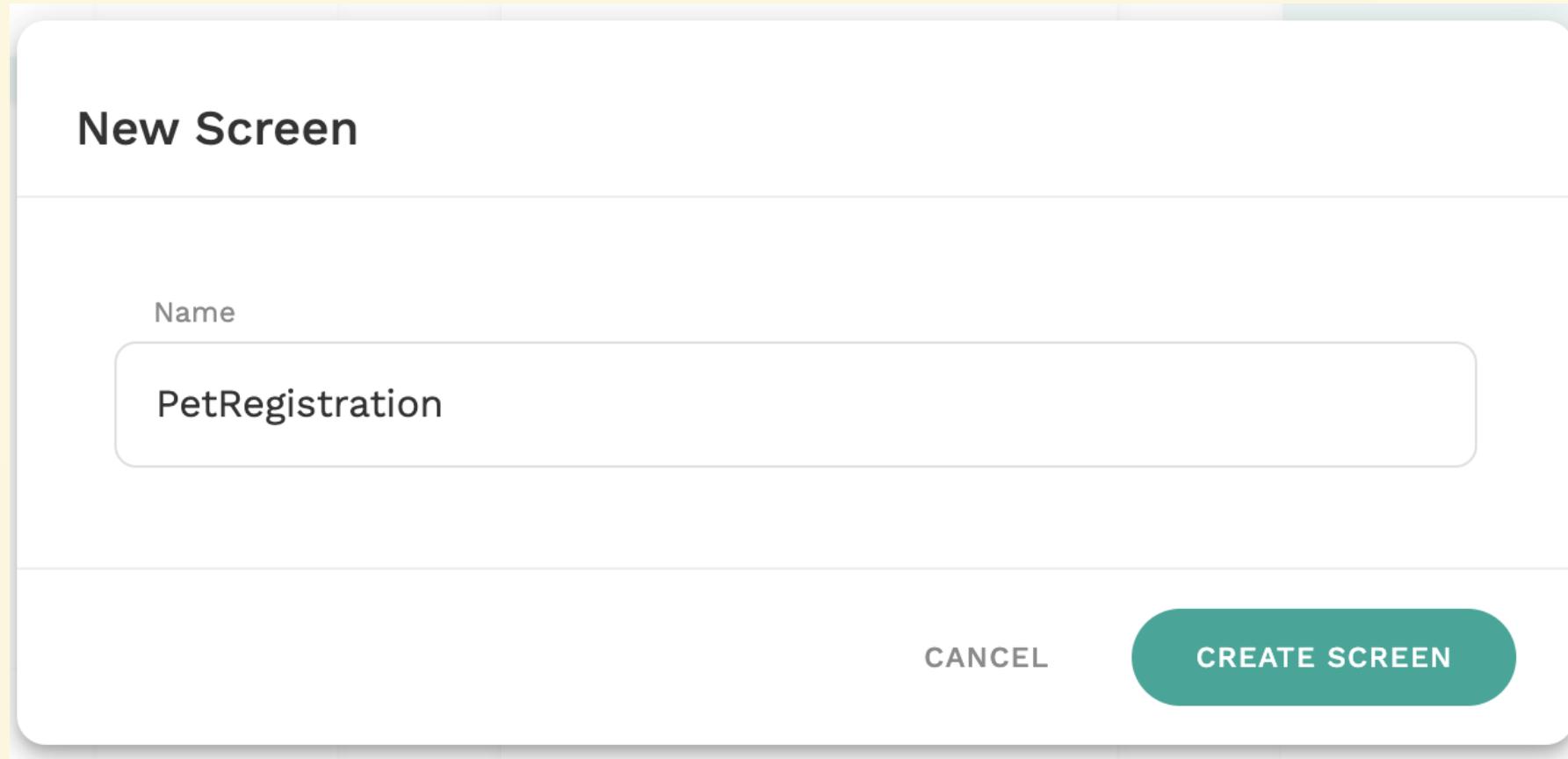
Let's create this screen!



- Select "App Bar" from ADD SCREEN.

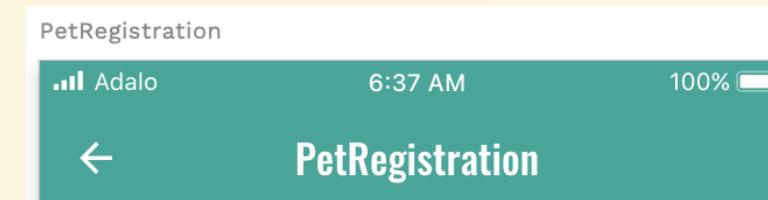


- Enter the Screen Name.

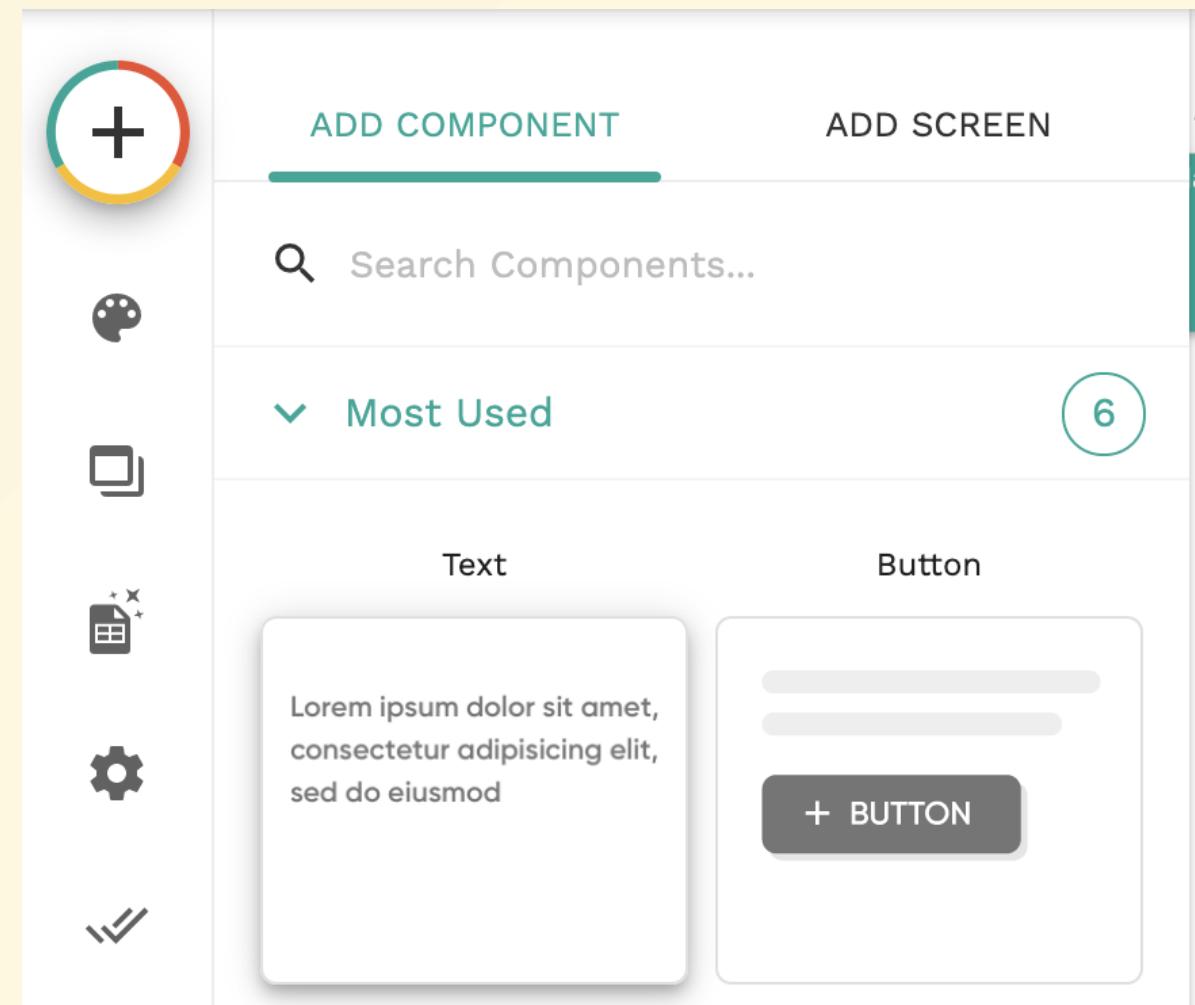


The Screen has been added.

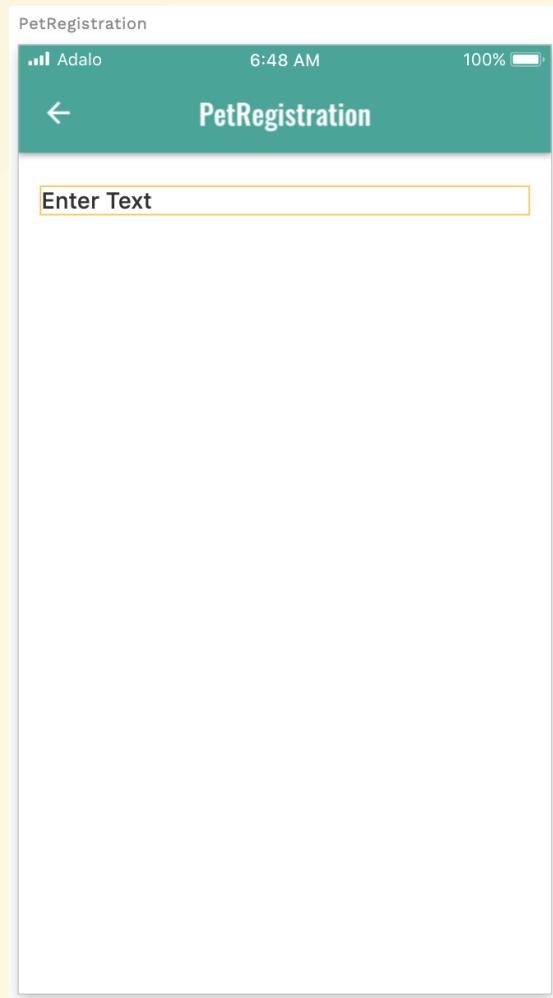
Let's add components on this screen.



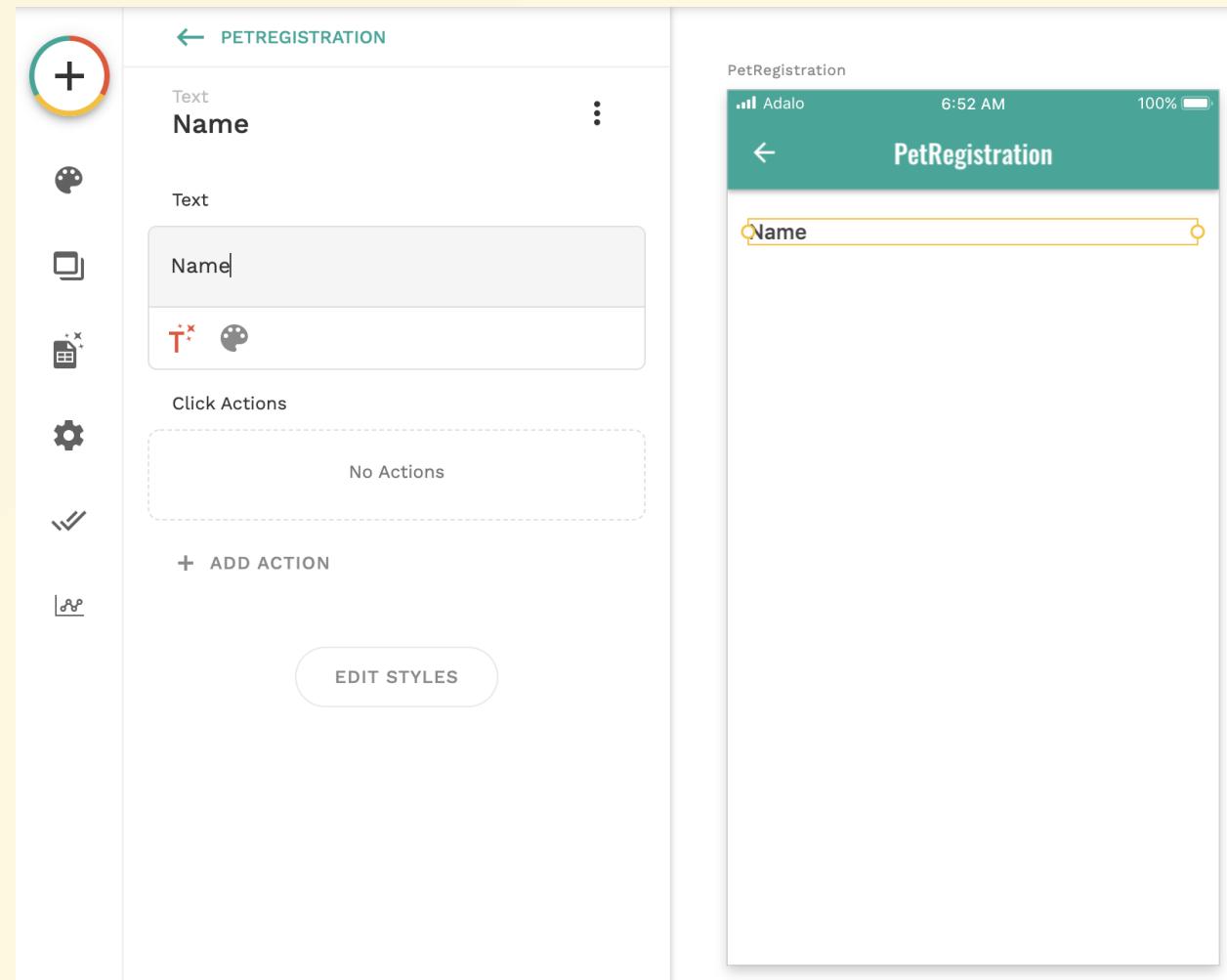
- Select "Text" from ADD COMPONENT.



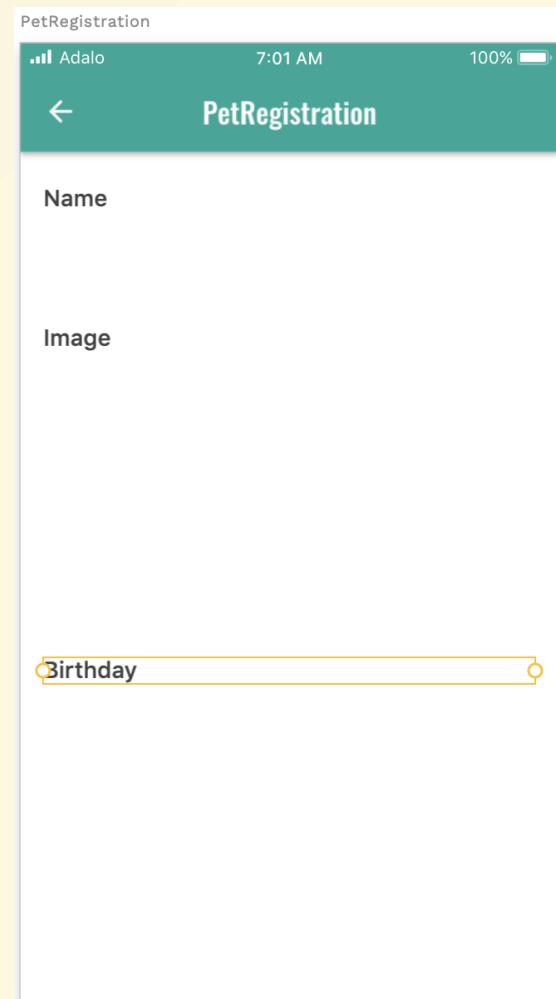
- Place it on the screen.



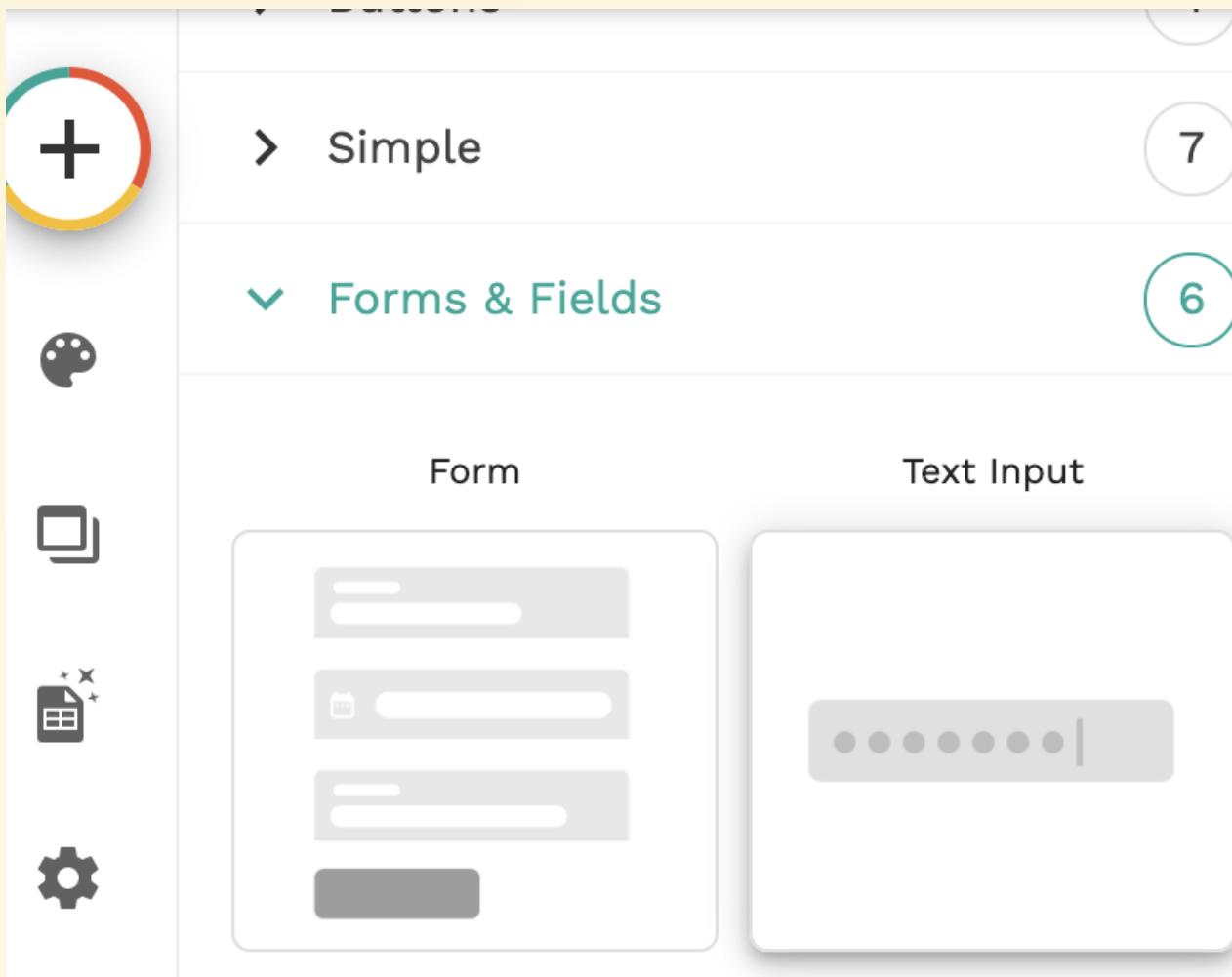
- Change the value of "Text" to Name.



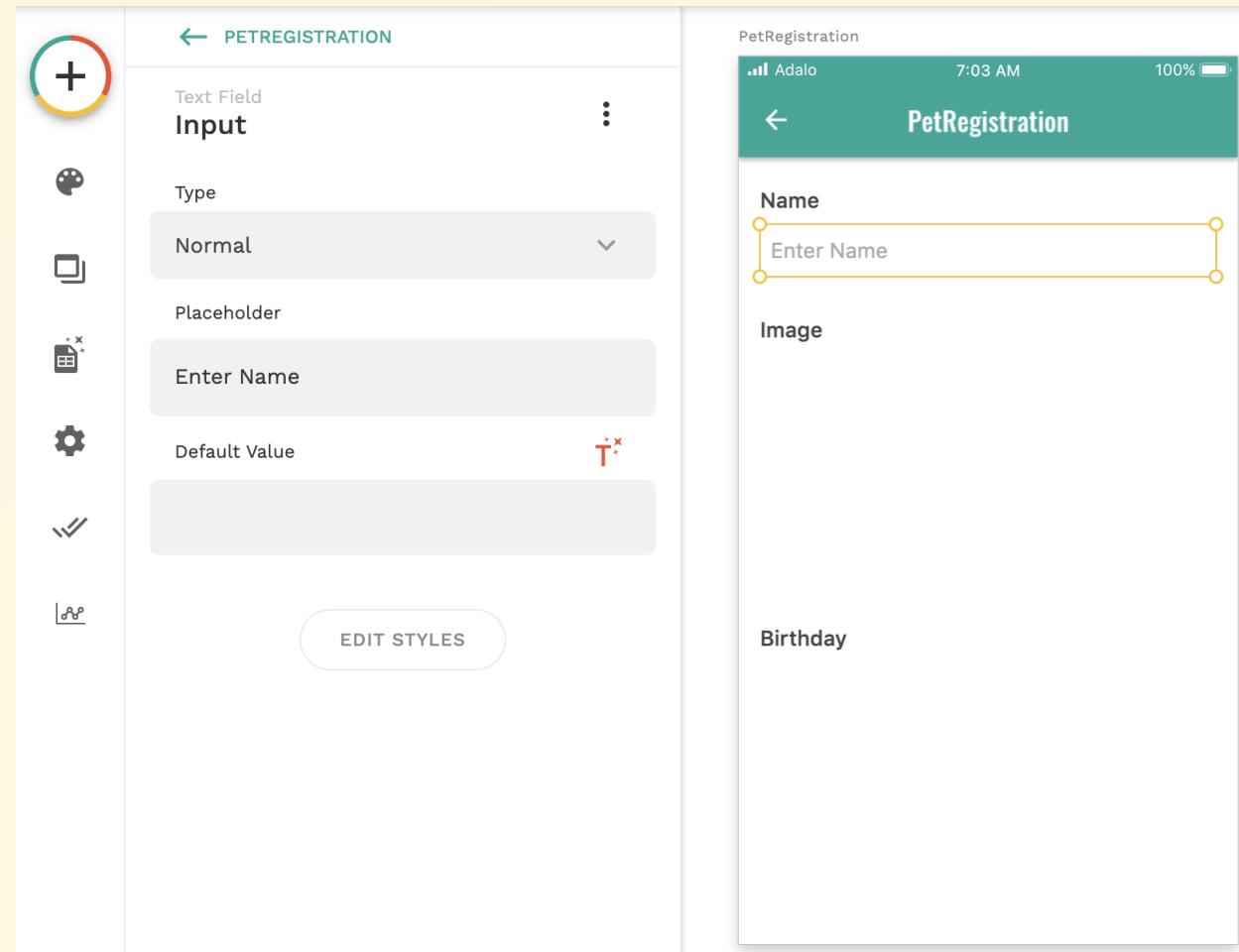
- Let's put text "Image" and "Birthday" in the same way.



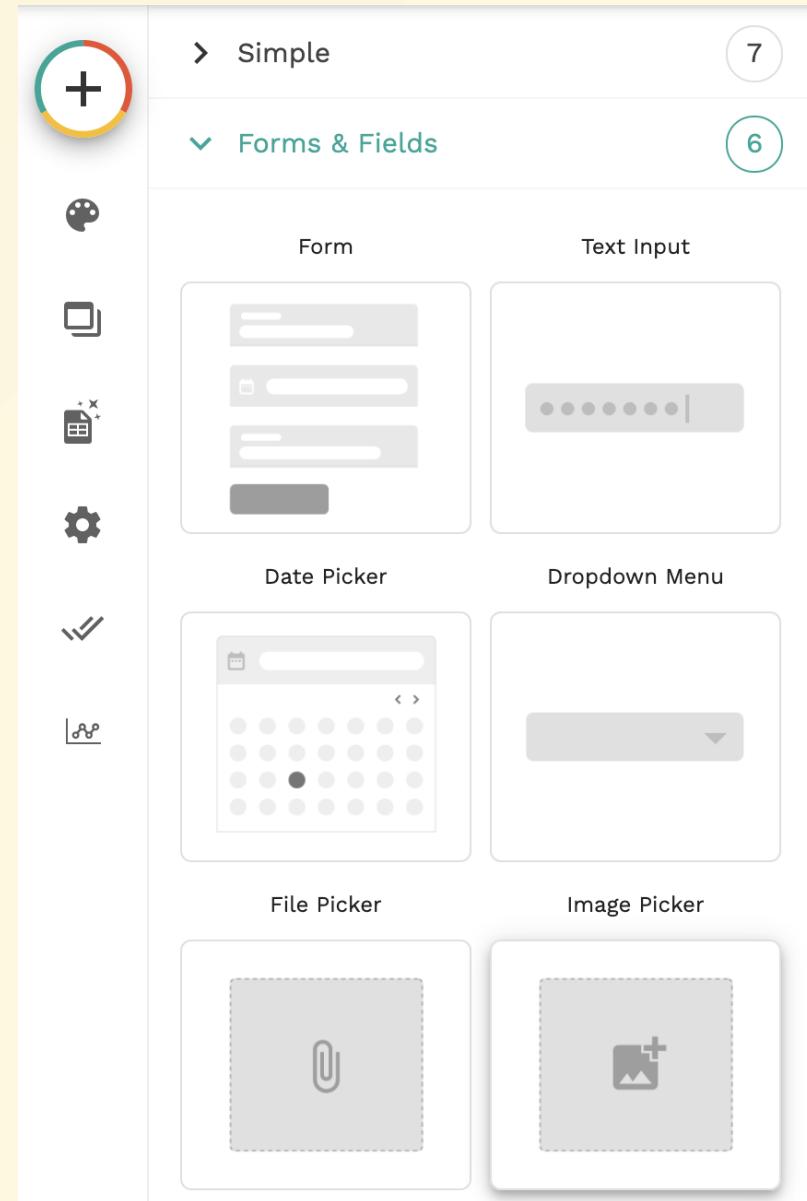
- Select "Text Input" from ADD COMPONENT



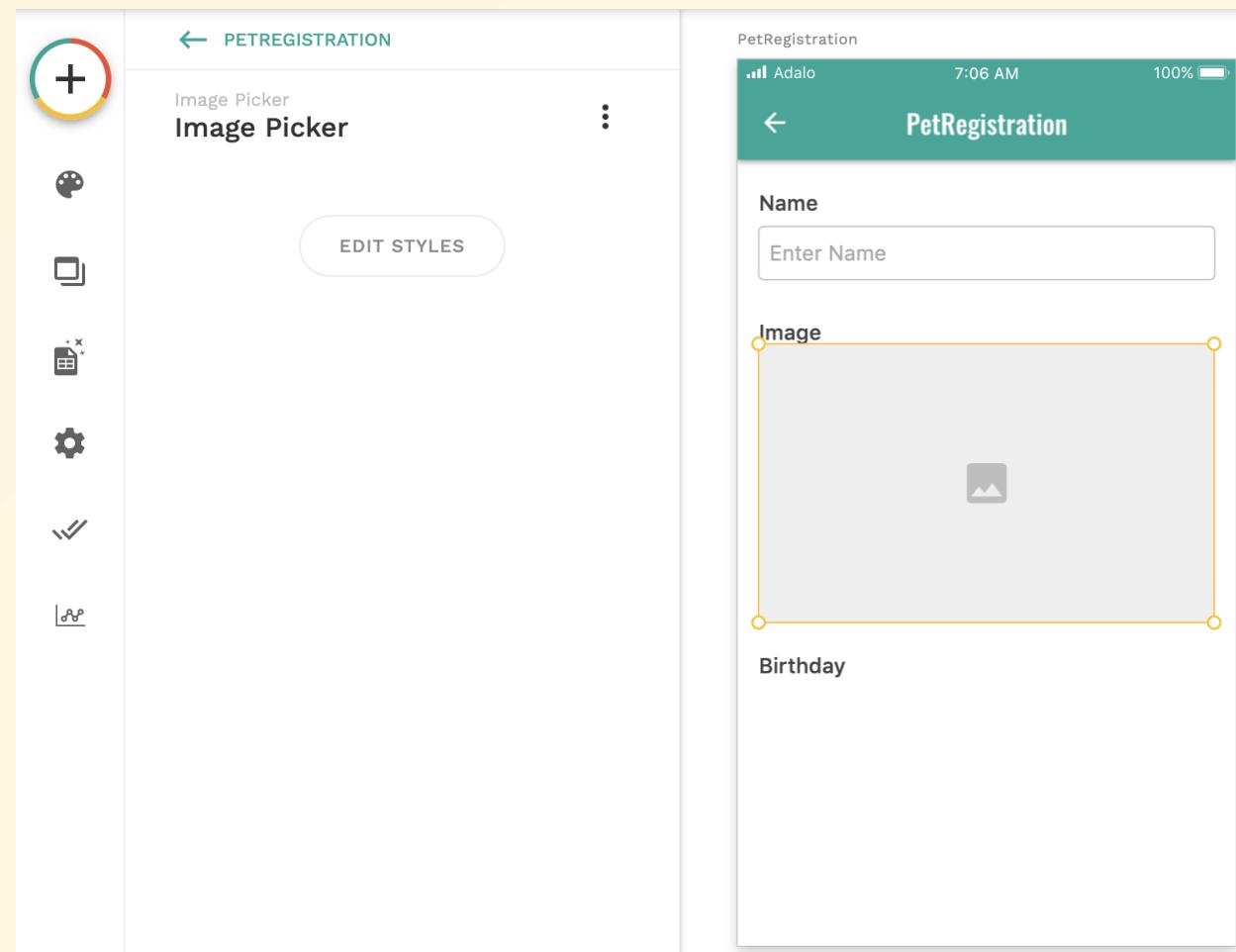
- Place it on the screen and change the "Placeholder" value to "Enter Name"



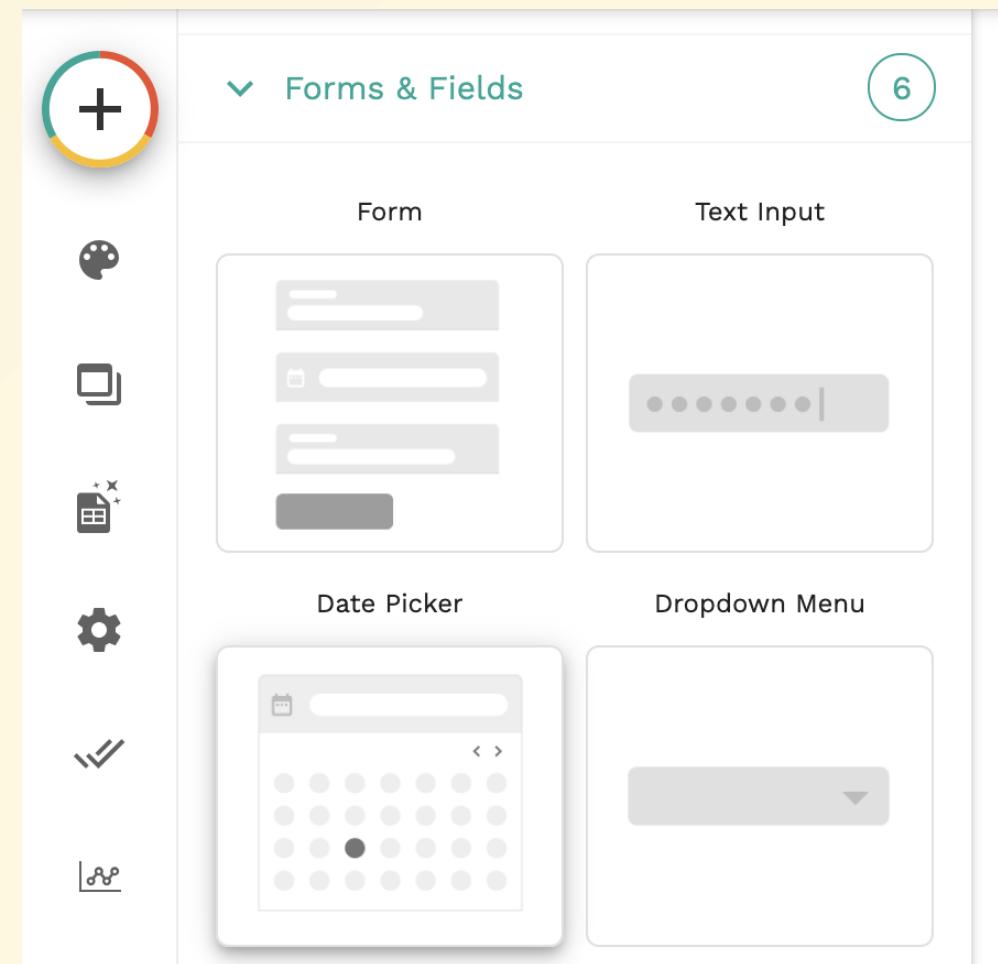
- Select "Image Picker" from ADD COMPONENT.



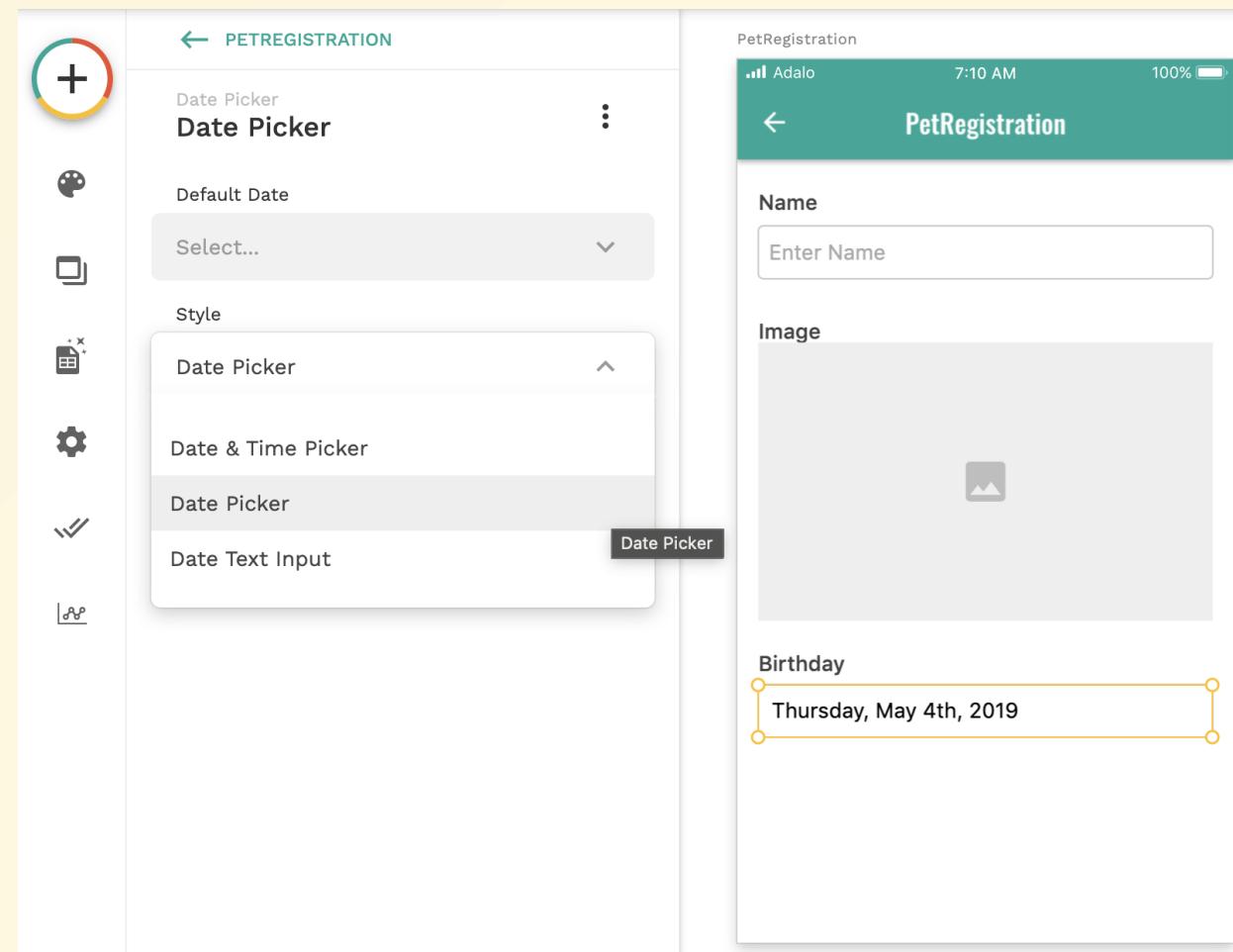
- Place it on the screen.



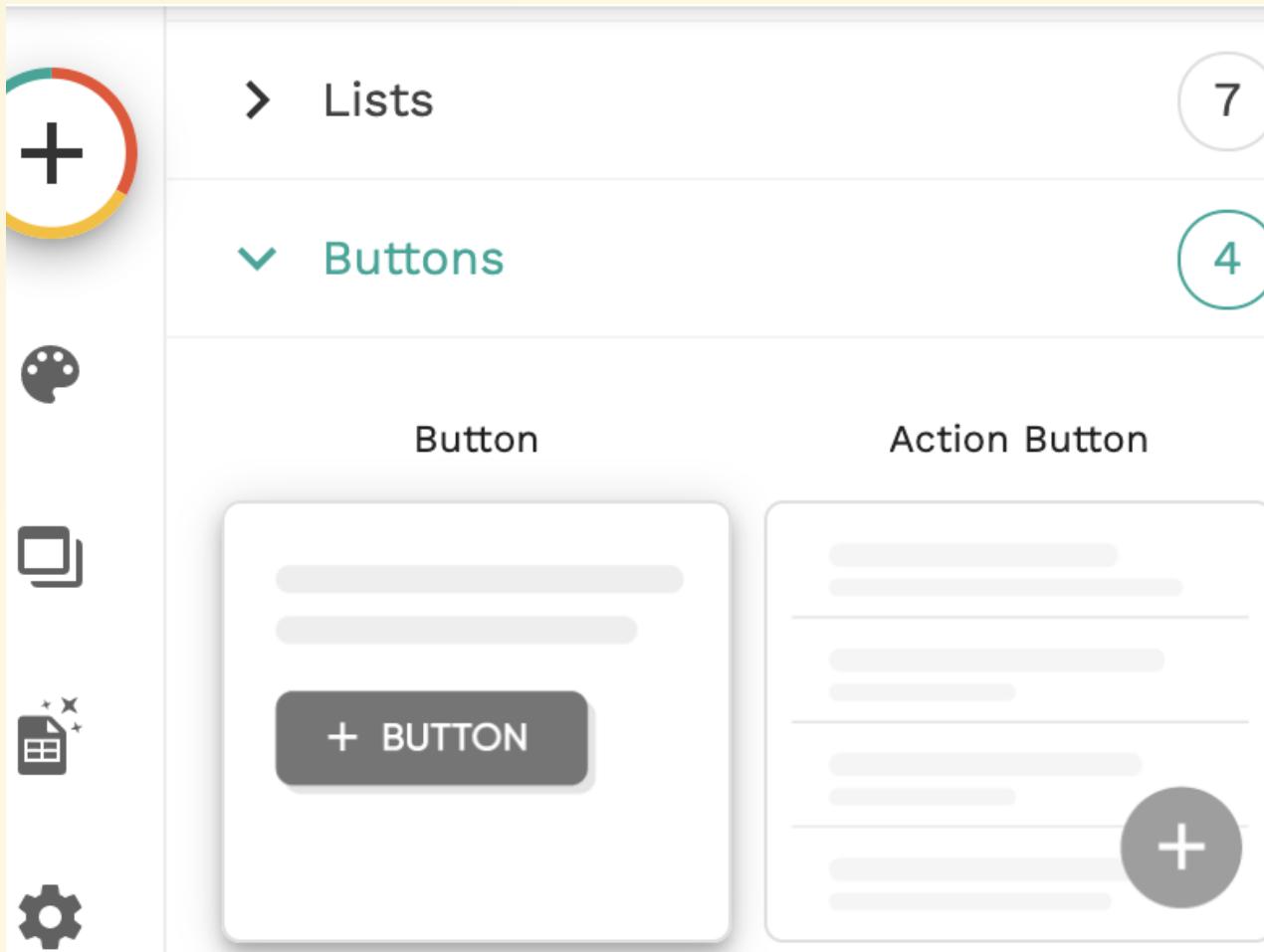
- Select "Date Picker" from ADD COMPONENT.



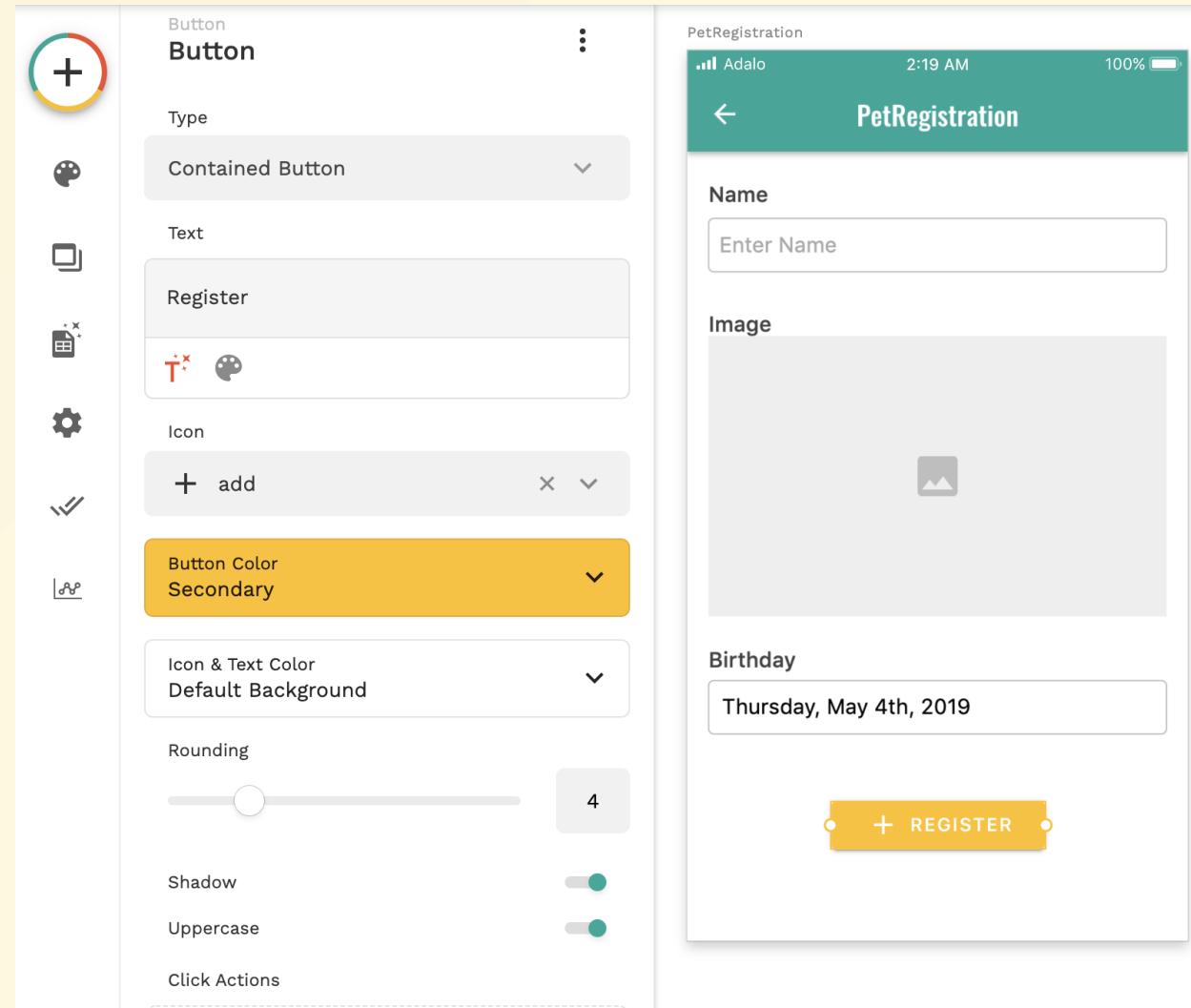
- Place it on the screen and change the Style to "Date Picker".



- Select "Button" from ADD COMPONENT.

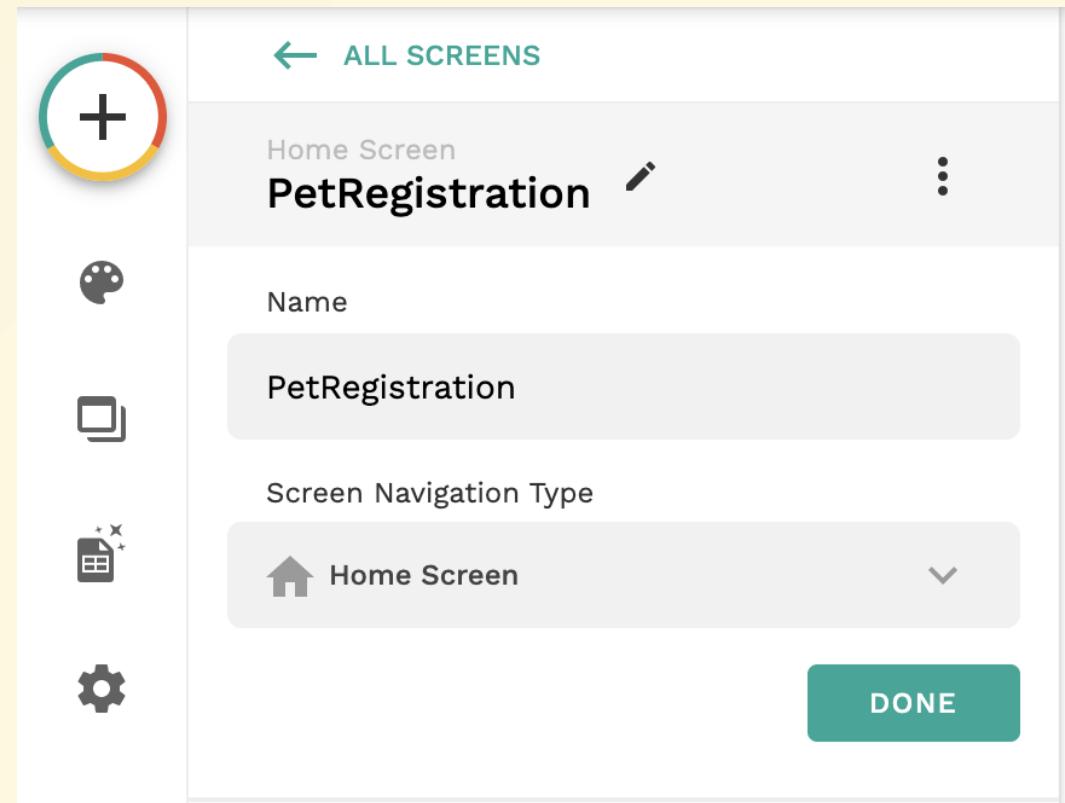


- Place it on the screen.
- Change the "Text" value to Register.
- Change "Button Color" to "Secondary".
- Change the "Icon & Text Color" to "Default Background"(White)



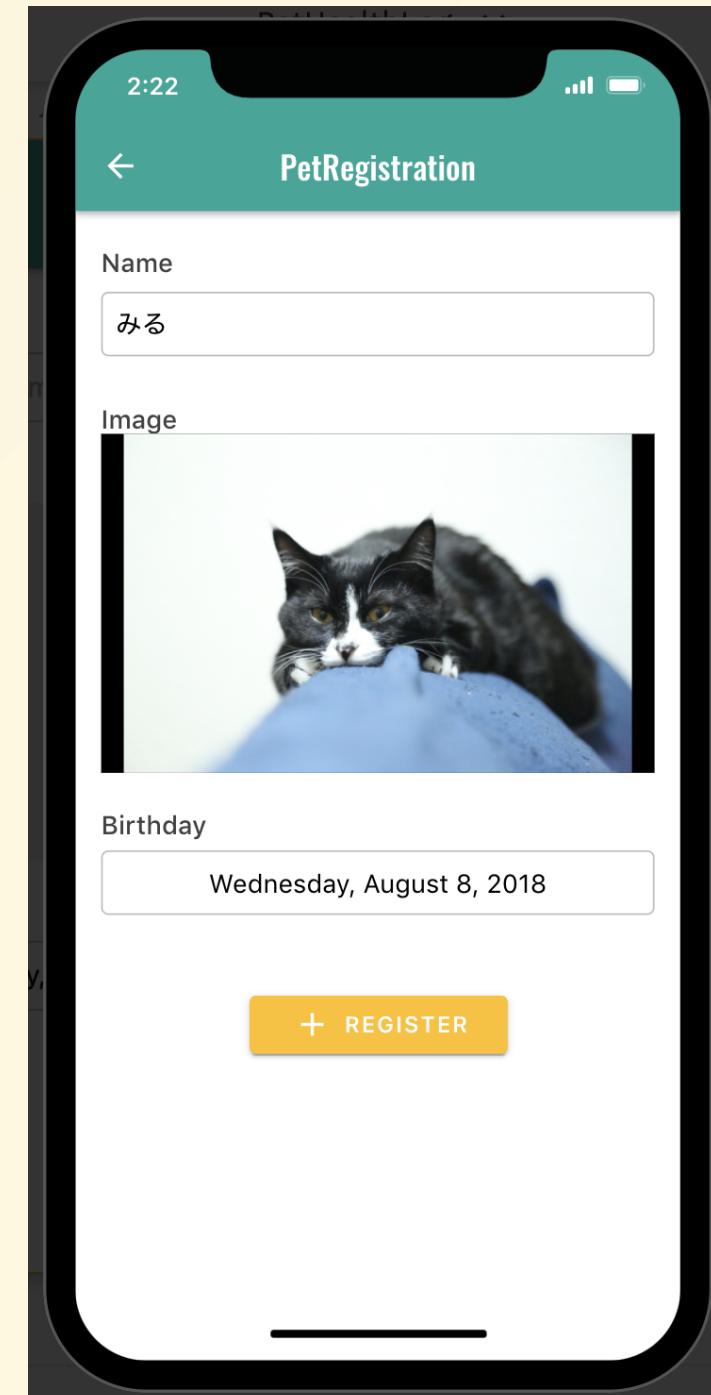
Let's Preview the appearance of the pet registration screen.

- Since there is no link yet, we can't display this screen with screen transitions, so we'll set it to the Home Screen, which is the screen displayed after logging in.
- Change the Screen Navigation Type of Pet Registration screen to Home Screen.



- Open Preview. After logging in, you can see the Pet Registration screen.
- You can enter a name, select an image, and select a birthday.
- Nothing happens when you press the Register button yet.

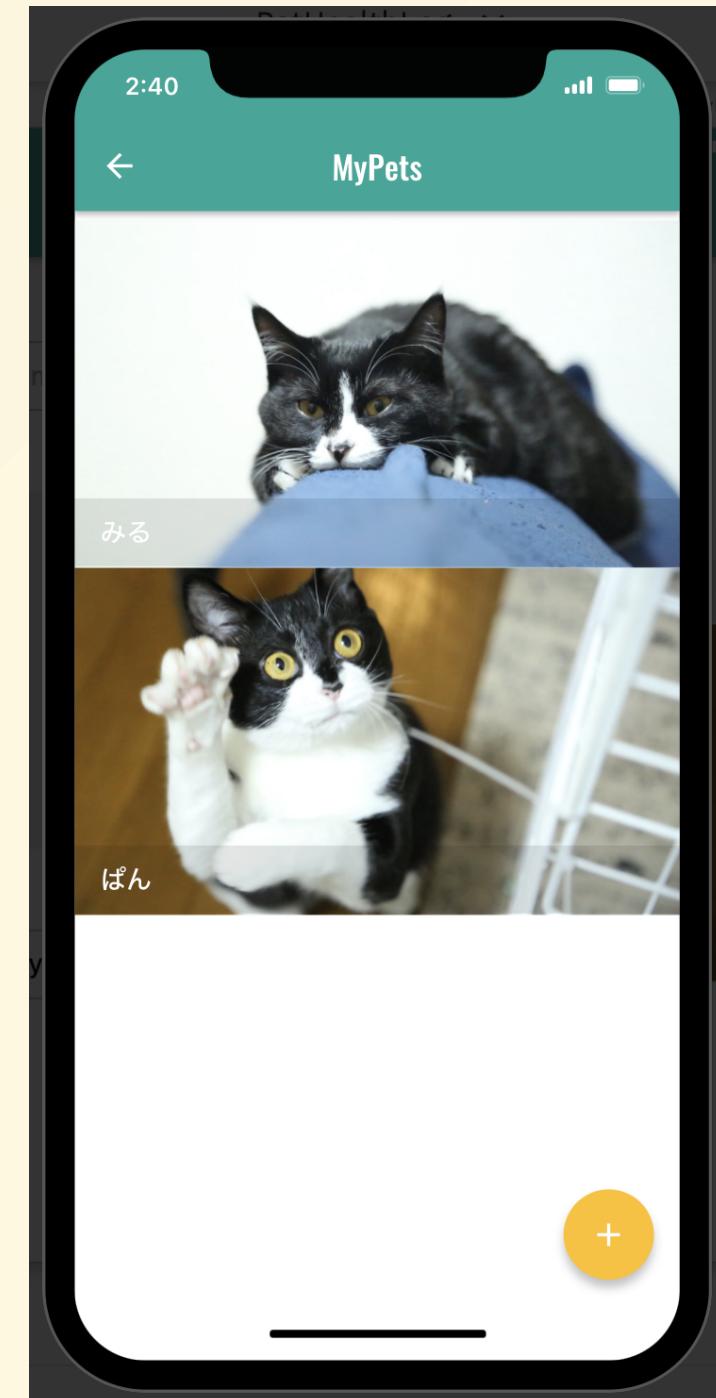
The pet registration screen is done.



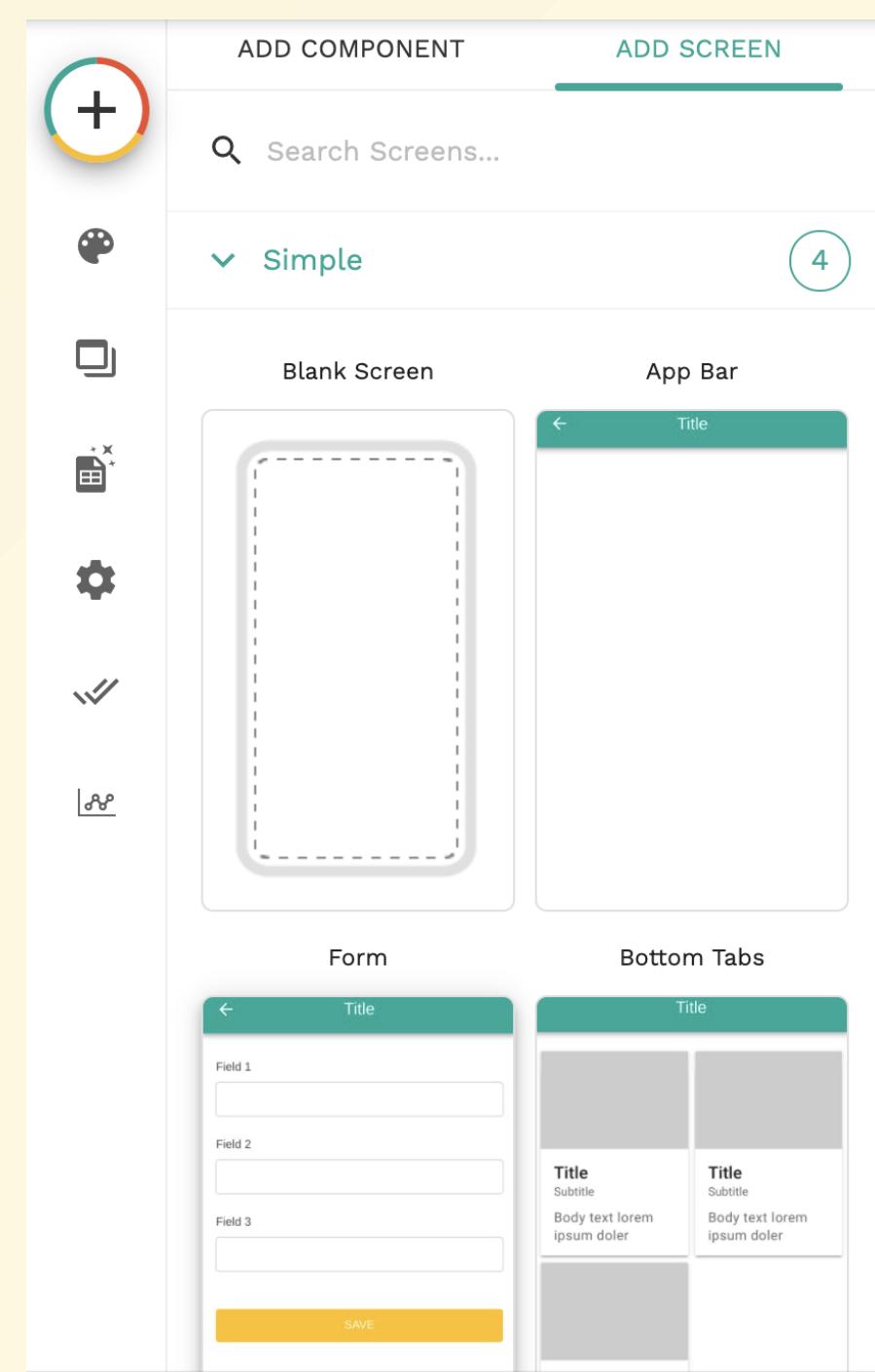
Pet List Screen

- Registered pets can be displayed in a list.
- Clicking on a pet will take you to the pet details screen for that pet.
- Clicking the icon at the bottom right take you to the Pet Registration screen.

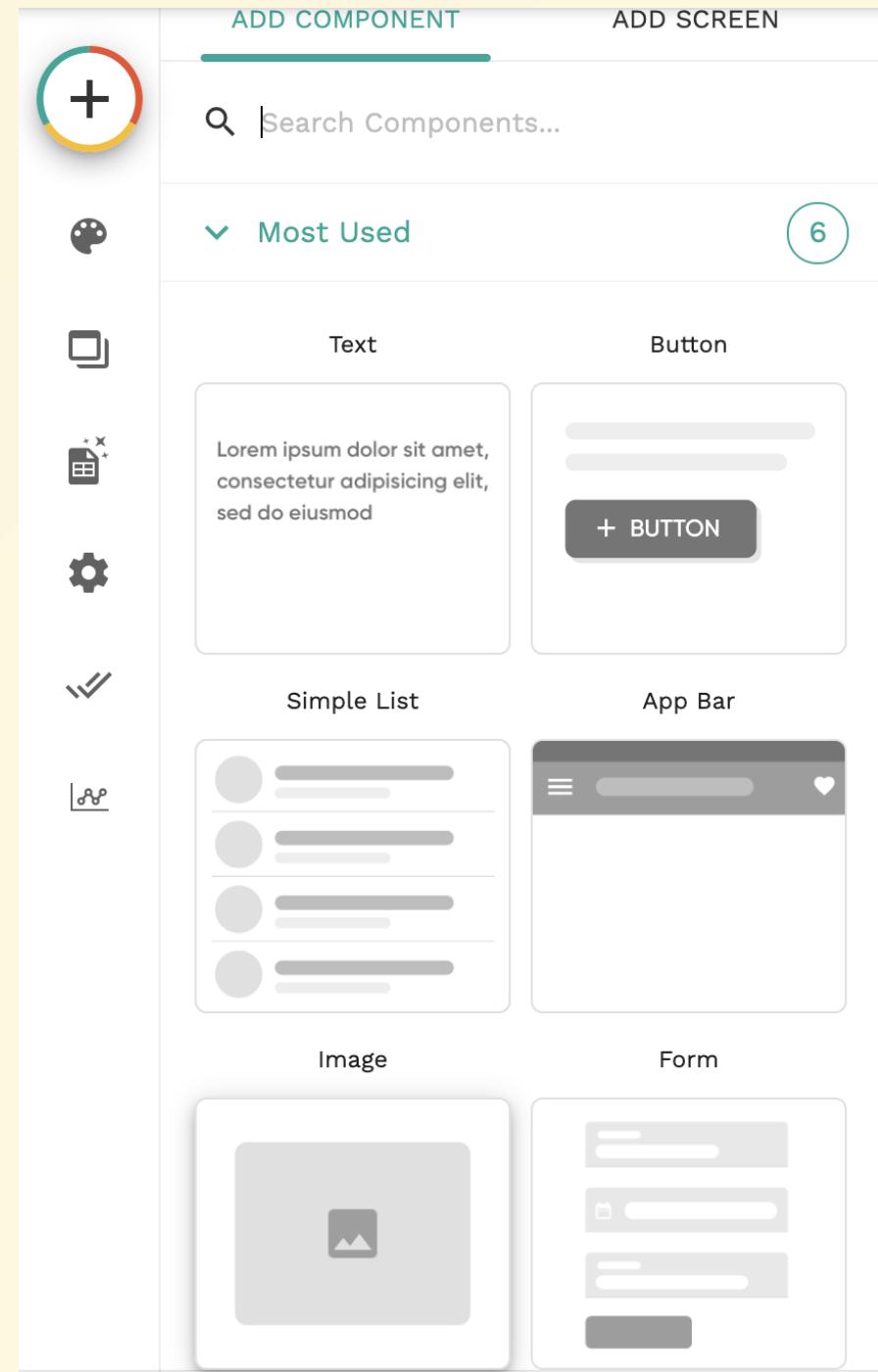
Next, let's create this screen.



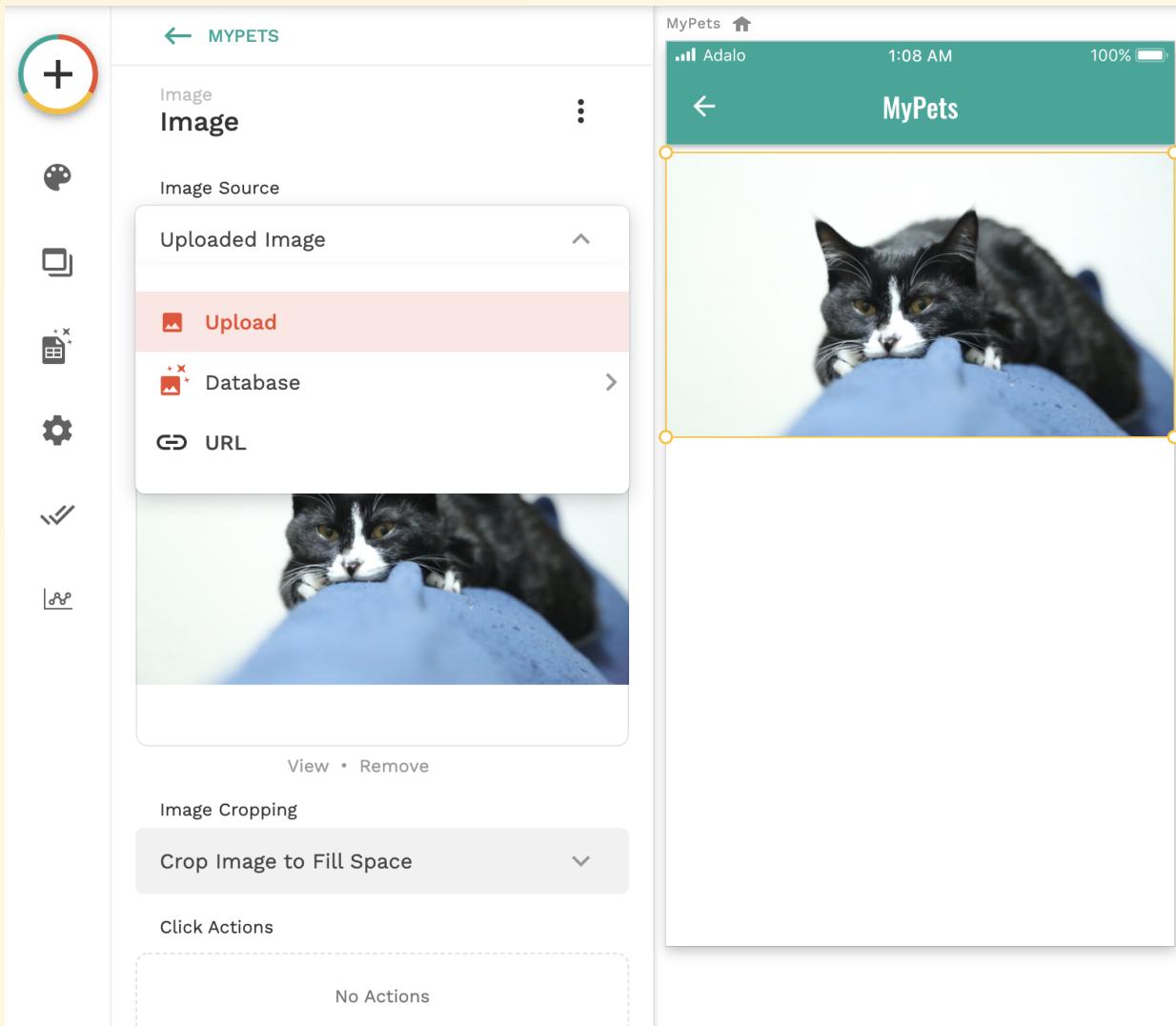
- Select "App Bar" from ADD SCREEN and enter the Screen Name.



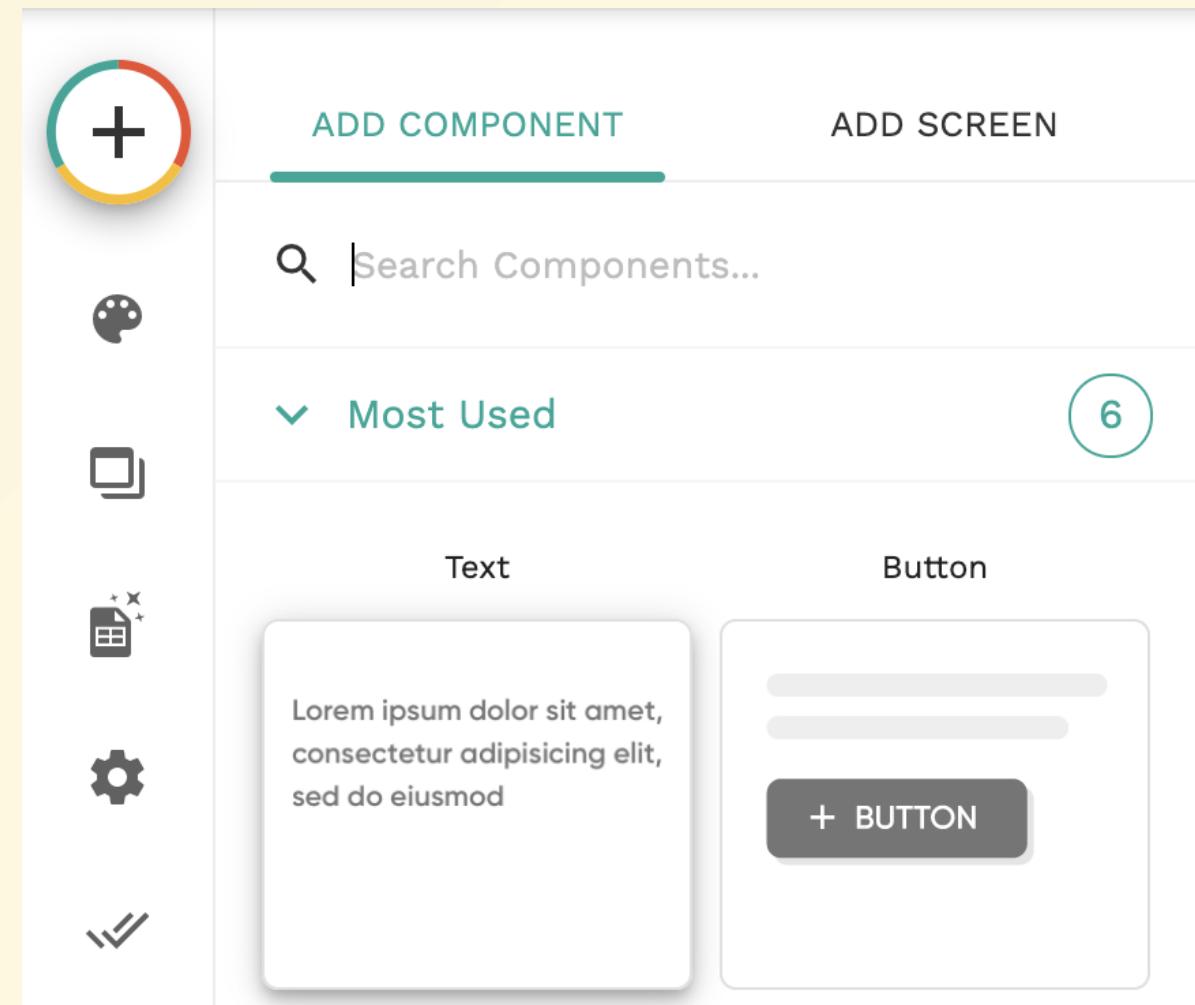
- Select "Image" from ADD COMPONENT



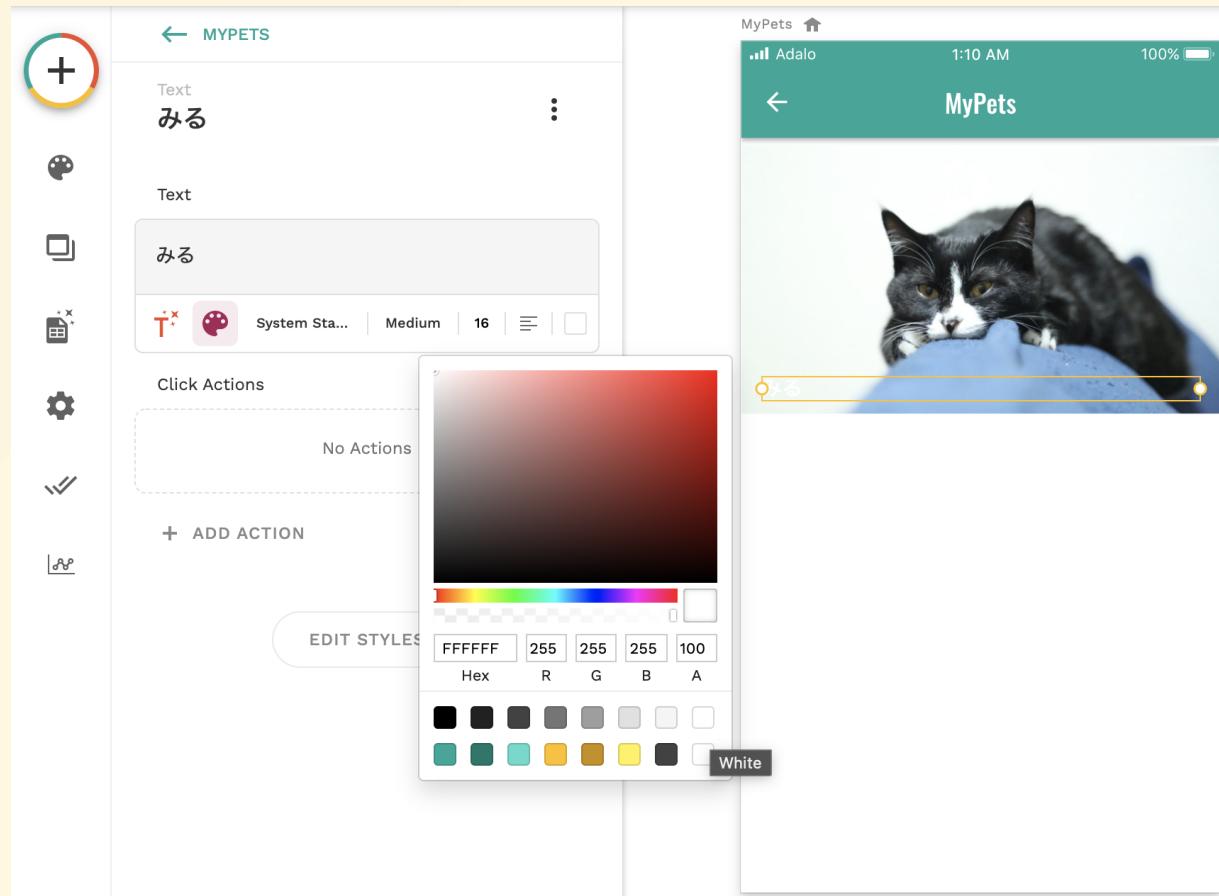
- Place it on the screen.
- Upload a photo of your pet from "Image Source" -> "Upload"



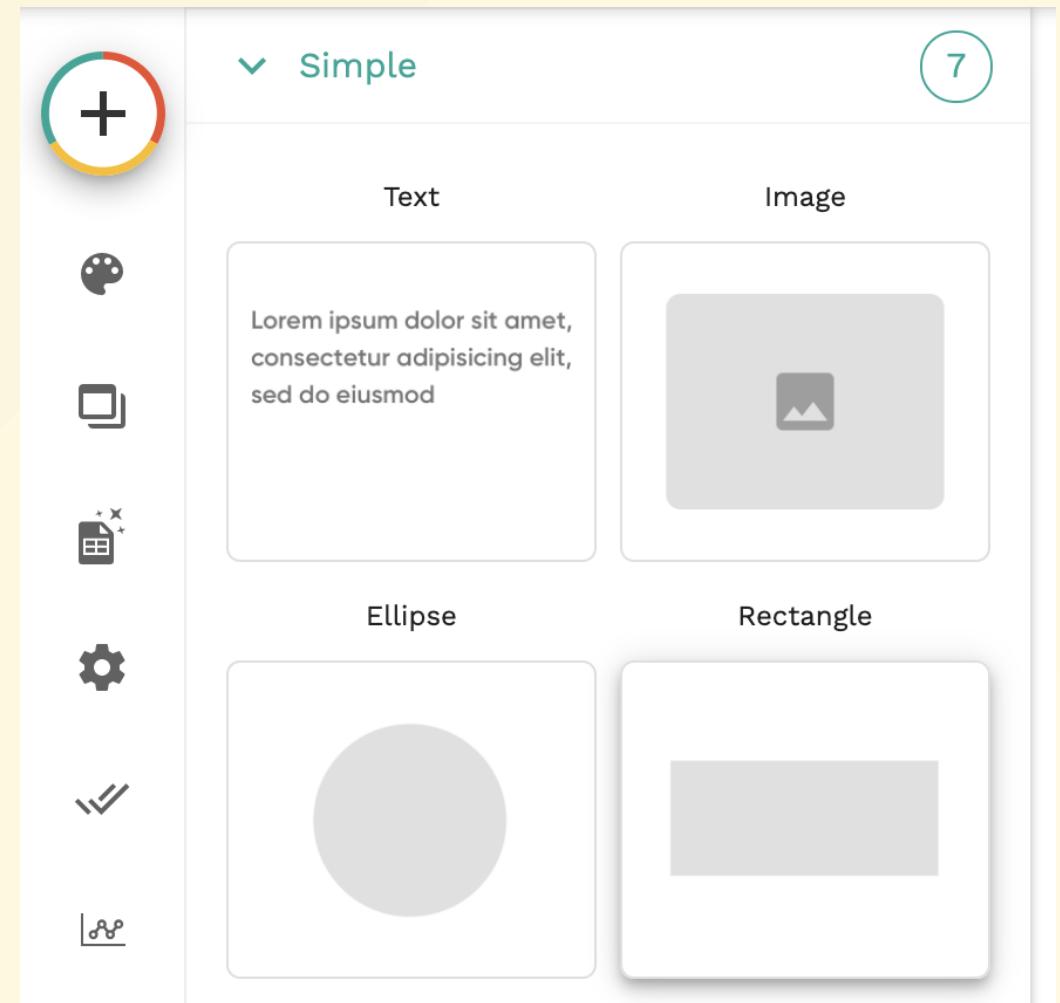
- Select "Text" from ADD COMPONENT



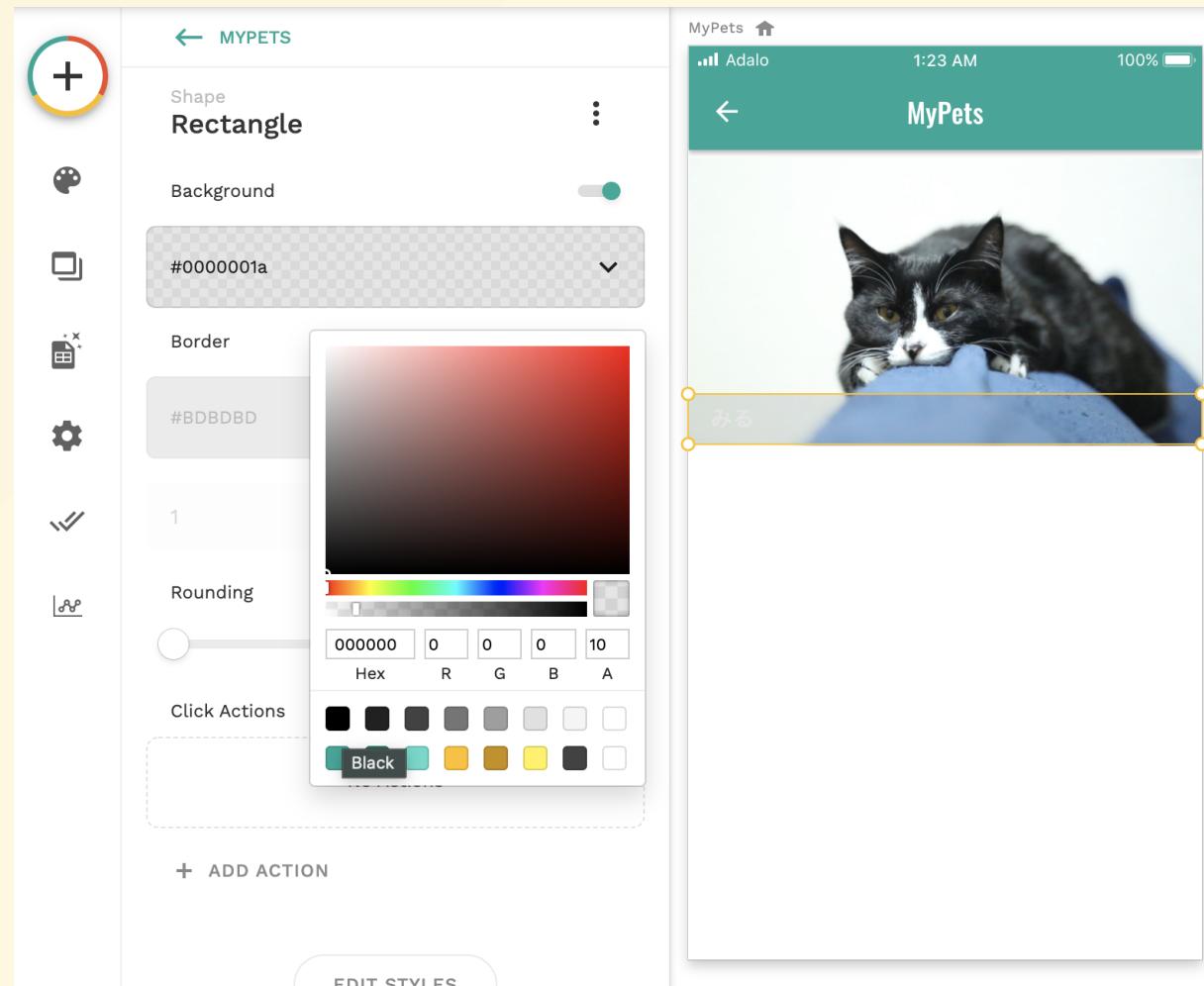
- Enter your pet's name in "Text" value and change the text color to White.
- Depending on the photo you choose, the white text may be difficult to see, so the next step is to make the text easier to read.



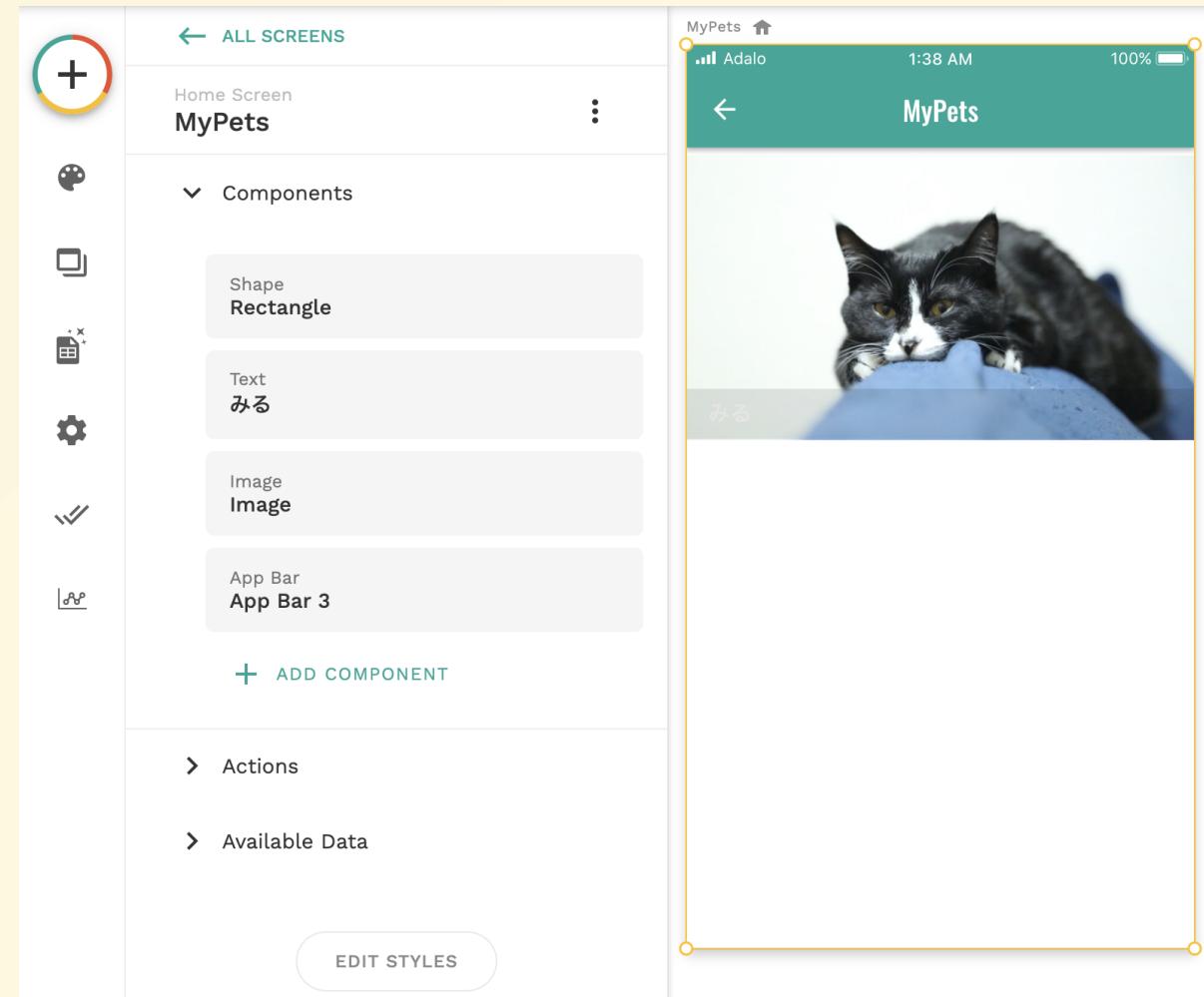
- Select "Rectagle" from ADD COMPONENT



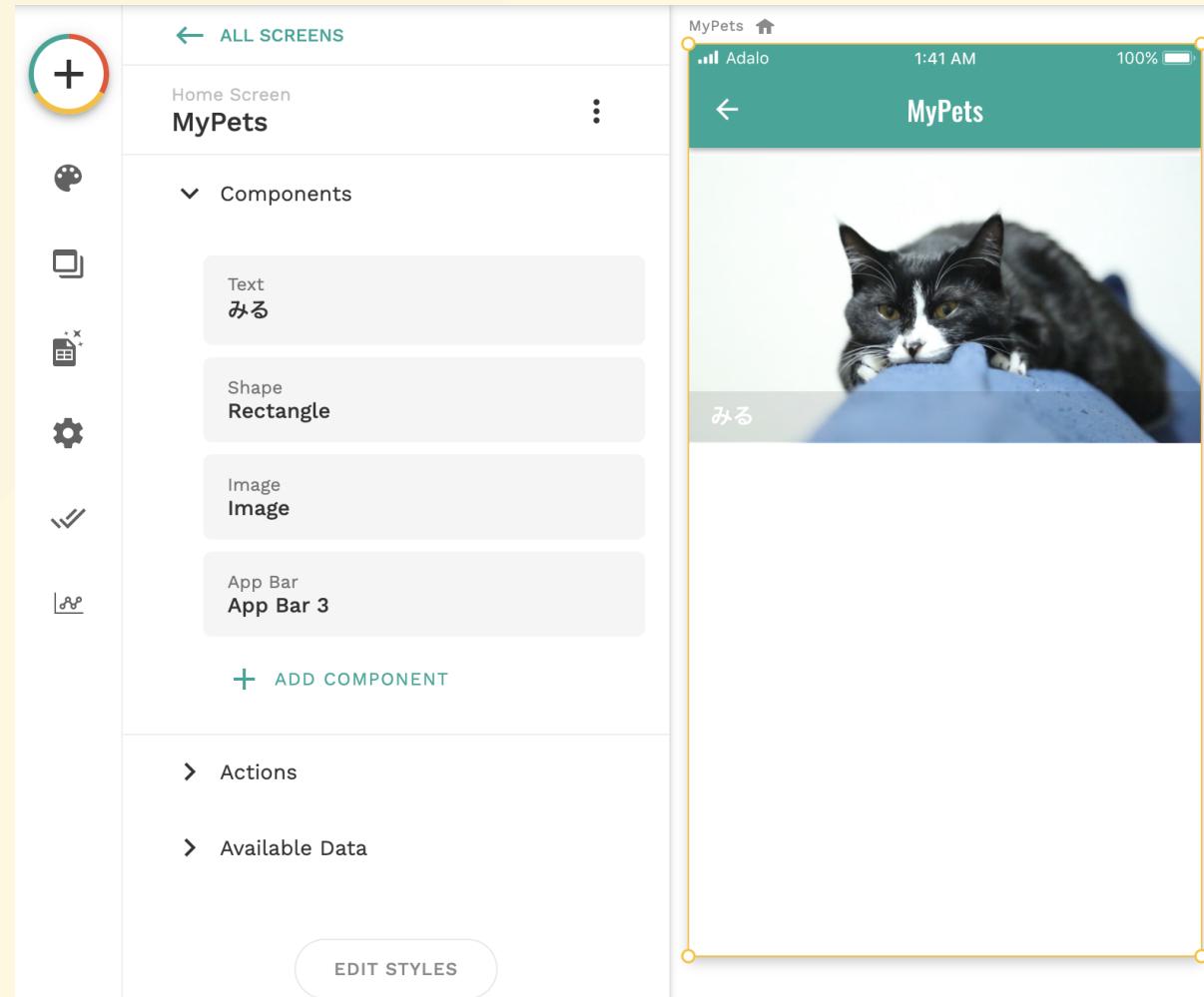
- Place it over the pet's name.
- After selecting Black as the Background color, change the value of A in RGBA to 10.
 - RGBA is a form of color representation that combines the intensity of each of the three primary colors (Red, Green, and Blue) with a degree of transparency (Alpha).



- Select the Pet List screen from Screens, and confirm that Rectangle is above Text in the Components order.
 - The Rectangle is now hiding the Text because the one on top is displayed in front of the others.

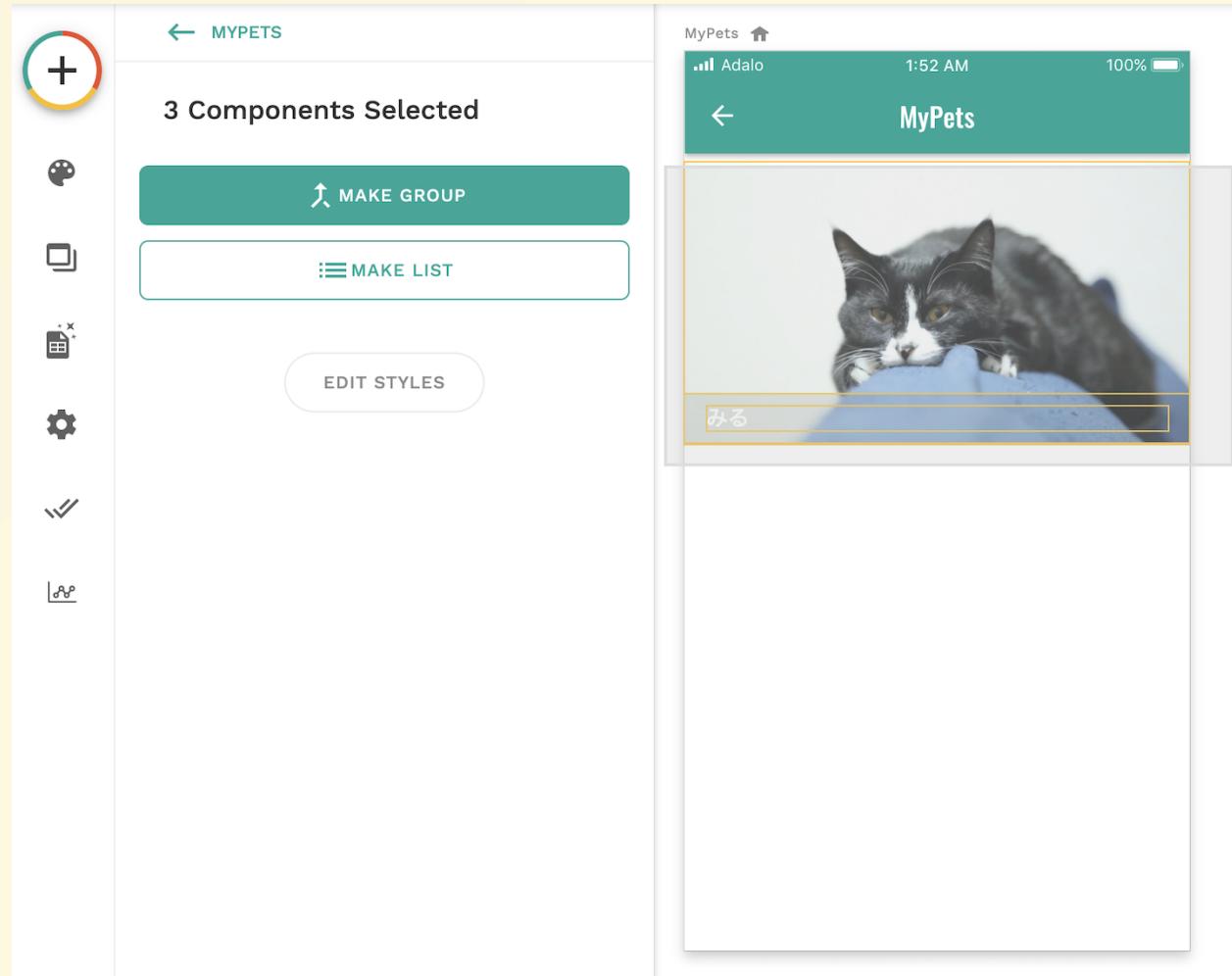


- Let's switch the order. Put Text at the top and Rectangle at the second.
 - The Text is now in the foreground, and the Rectangle makes it easier to see the white text!

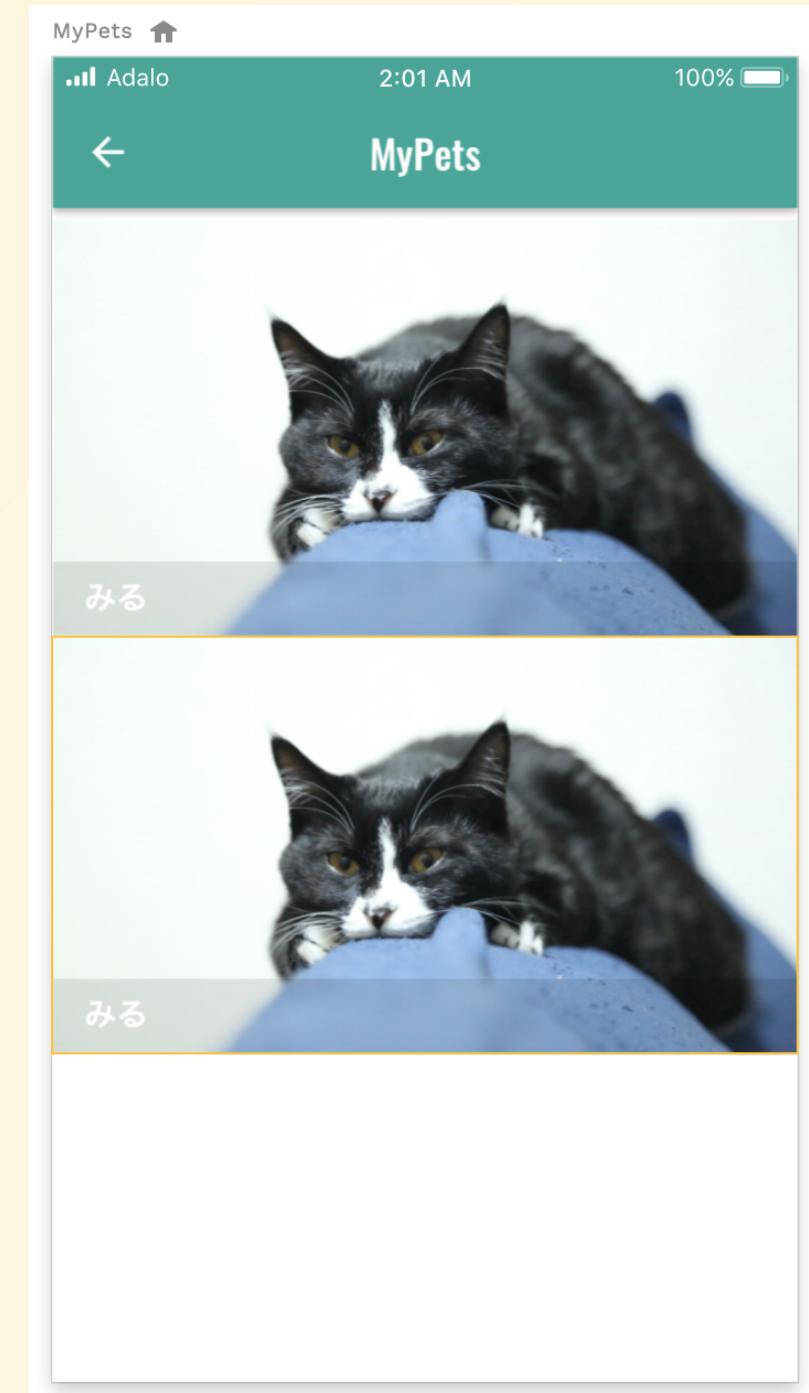


Next, let's add one more pet.

- Select the three components you added (Image, Rectangle, Text) on Canvas, and click "MAKE GROUP".



- Copy and paste (`Ctrl + C` and `Ctrl + V` on Windows, `Command + C` and `Command + V` on Mac) the created Group while it is selected, and place the duplicated Group under first pet.

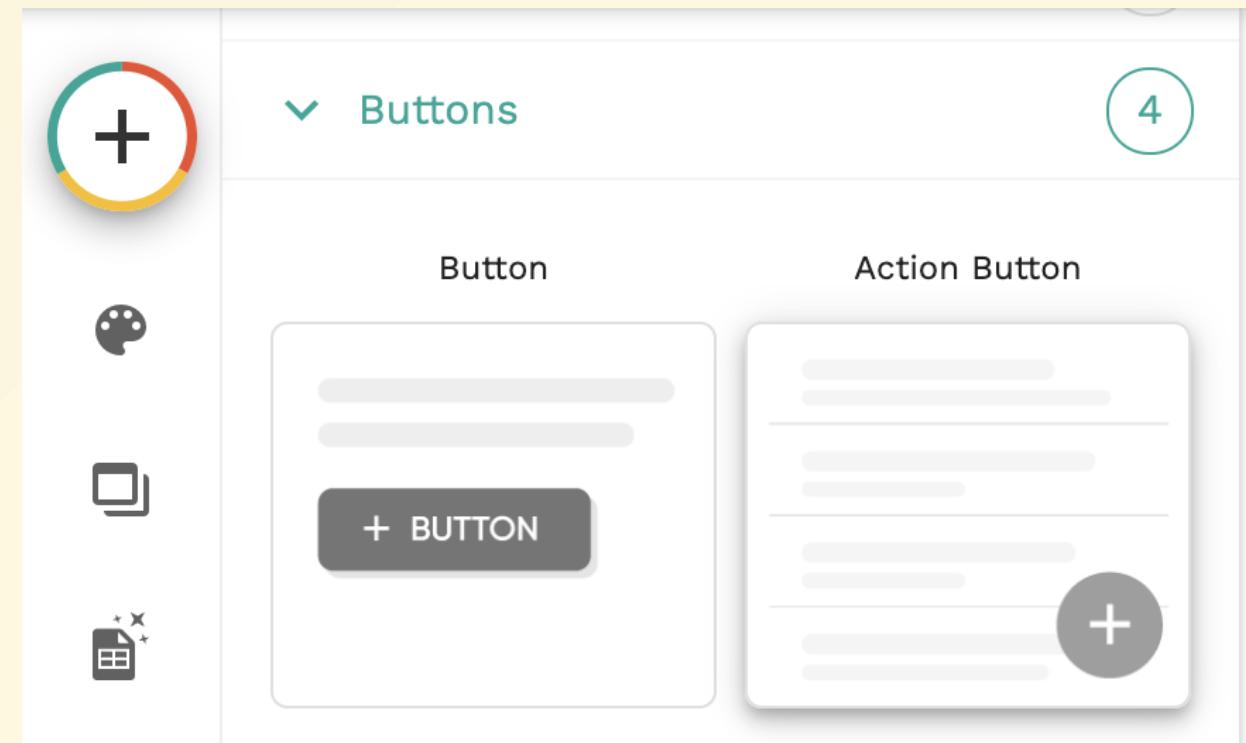


- Change the second Image and Text to those of another pet.

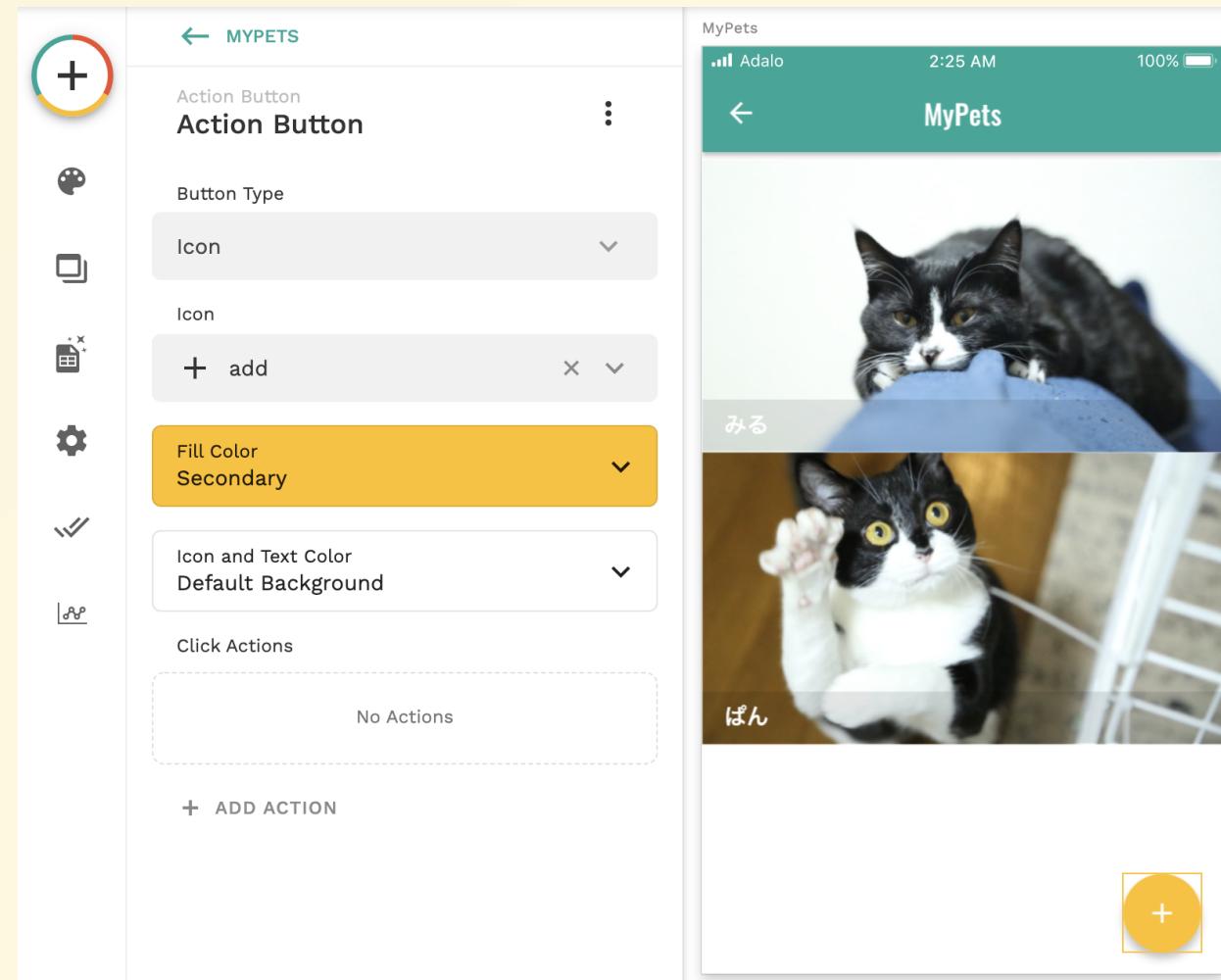


Next, add the link to the pet registration page.

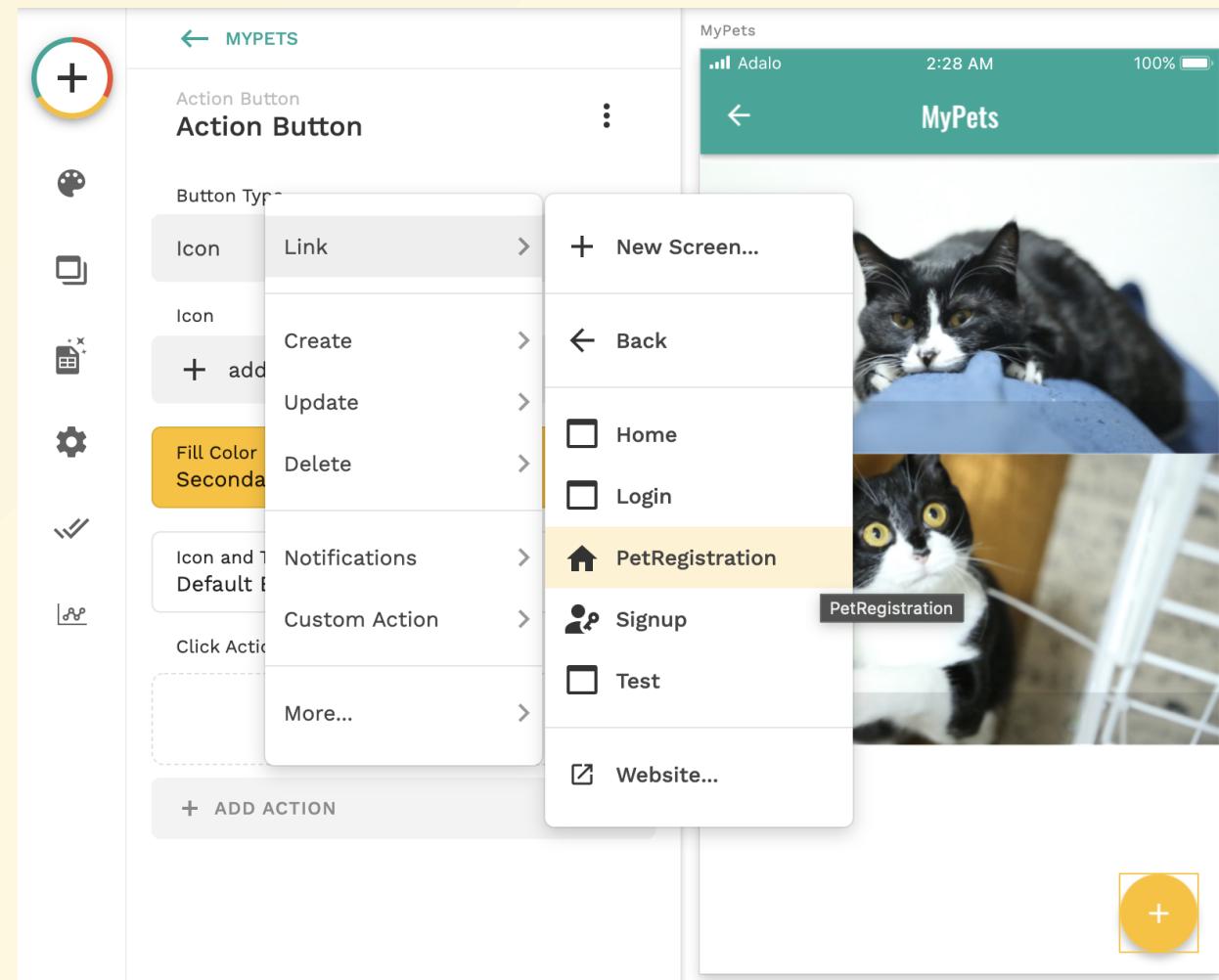
- Select "Action Button" from ADD COMPONENT



- Place it in the lower right corner of the screen.
- Change the "Icon and Text Color" to "Default Background"(White).



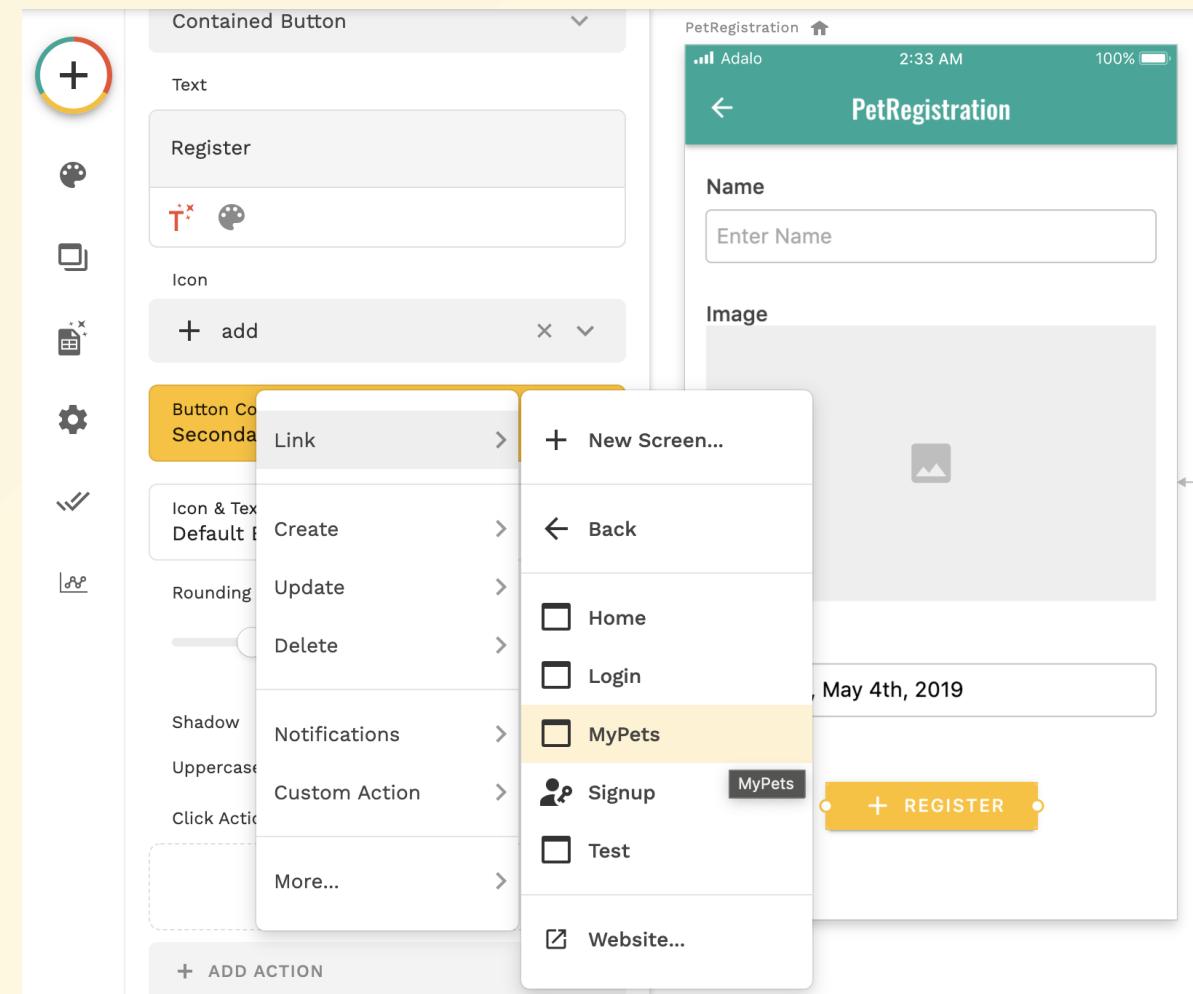
- Select "ADD ACTION"
 - Select "Link"
 - Select [Pet Registration Screen Name]



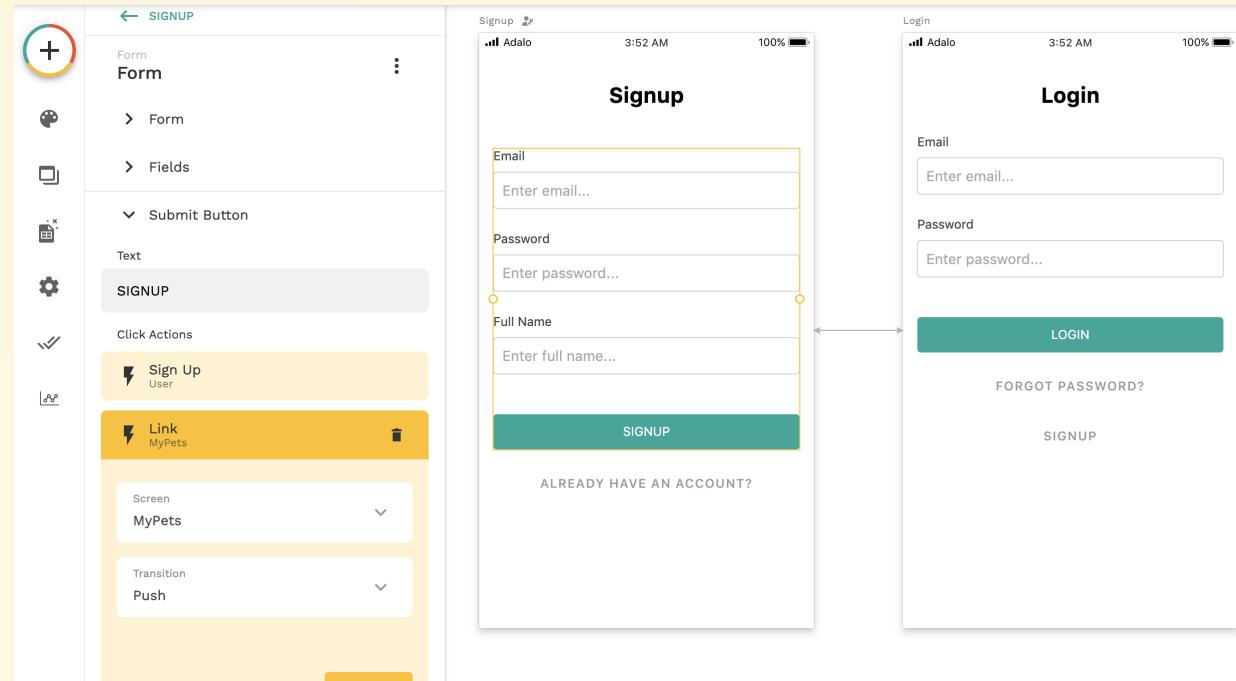
Let's add a link from the pet registration screen to the pet list screen.

- Select the Register button on the Pet Registration page
- ADD ACTION -> Link -> Select [Pet List Screen Name]

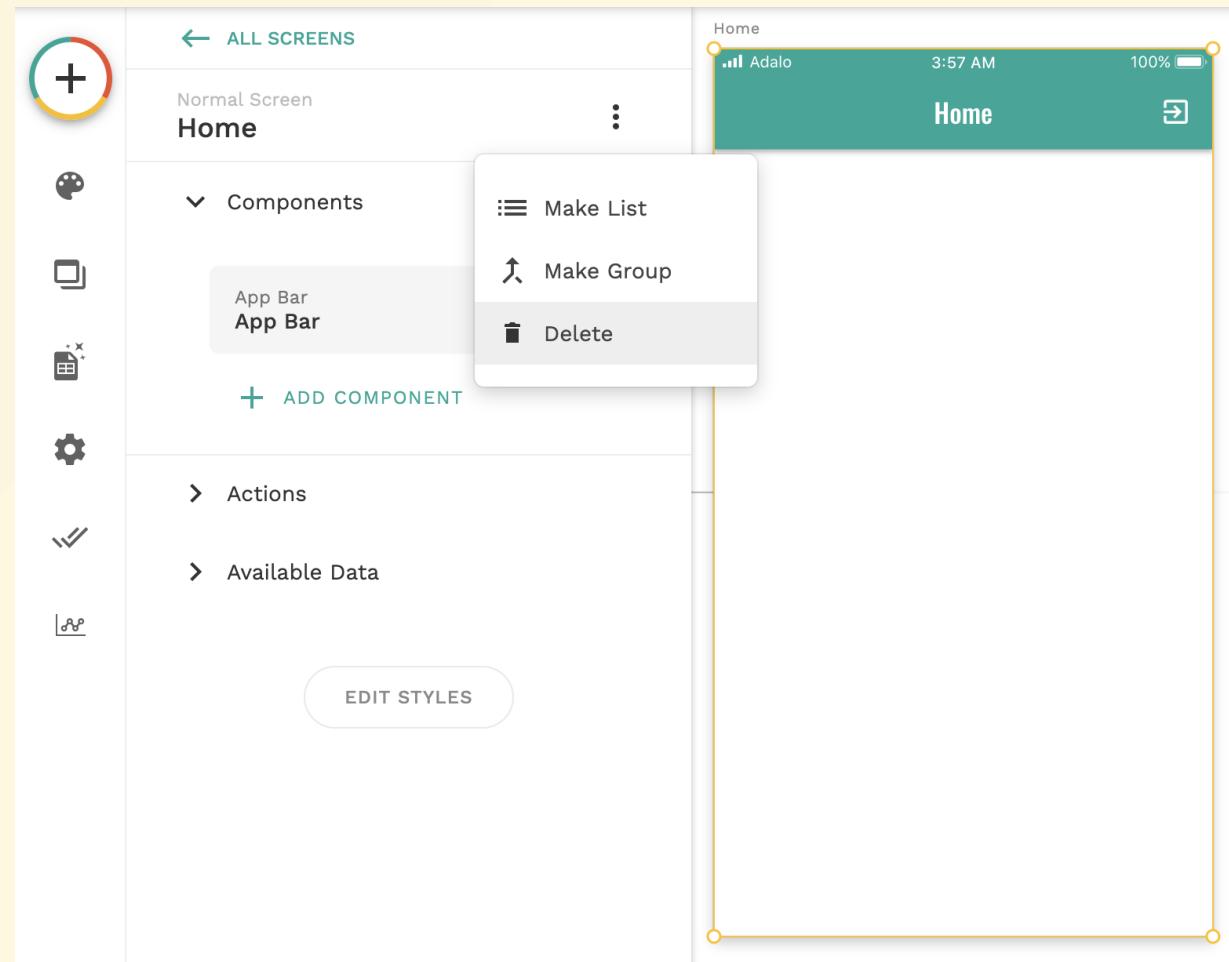
You can't register your pets yet because you just added a link (Data registration is in the next lecture).



- Change the destination of the SIGNUP button on the SignUp screen and the LOGIN button on the Login screen from Home to the Pet List screen.



- The Home screen that was created by default is no longer needed. You can delete it.



Preview the appearance of the Pet List screen.

- Change the "Screen Navigation Type" of the Pet List screen to "Home Screen" as you did when you previewed the Pet Registration screen.
- After logging, you can see the Pet List screen.

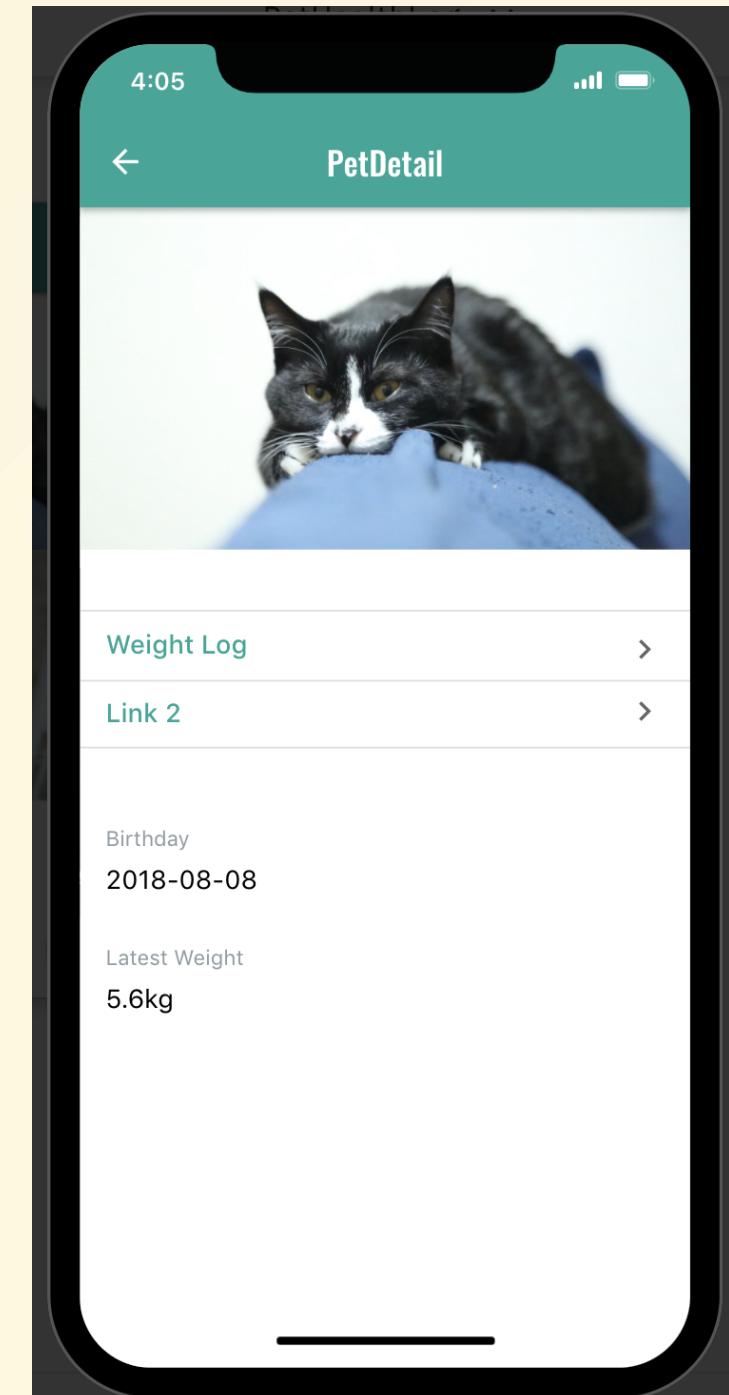
Pet List screen seems OK.



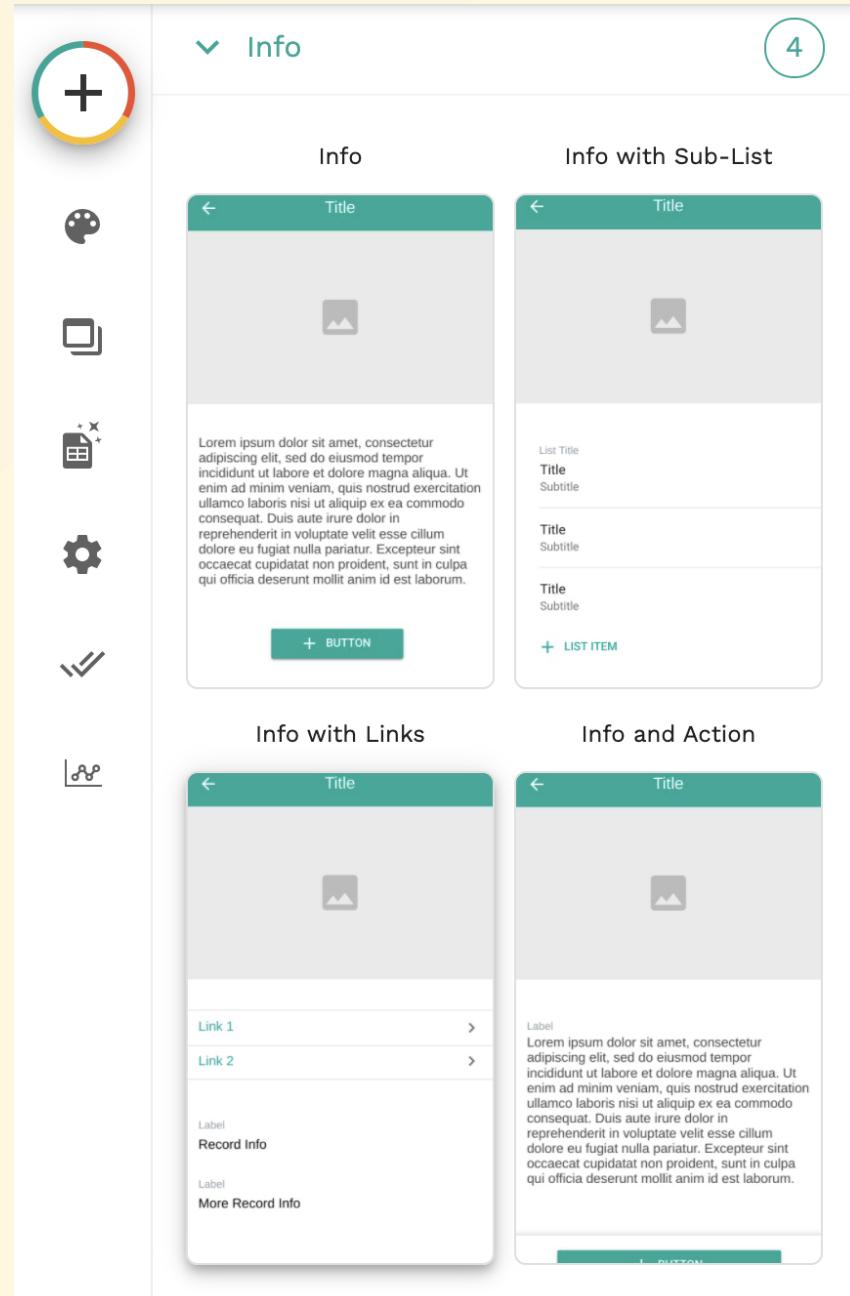
Pet Detail Screen

- There is a link to the weight Record screen.
(Link2 is for exercise)
- Birthday is displayed.
- The latest weight is displayed.

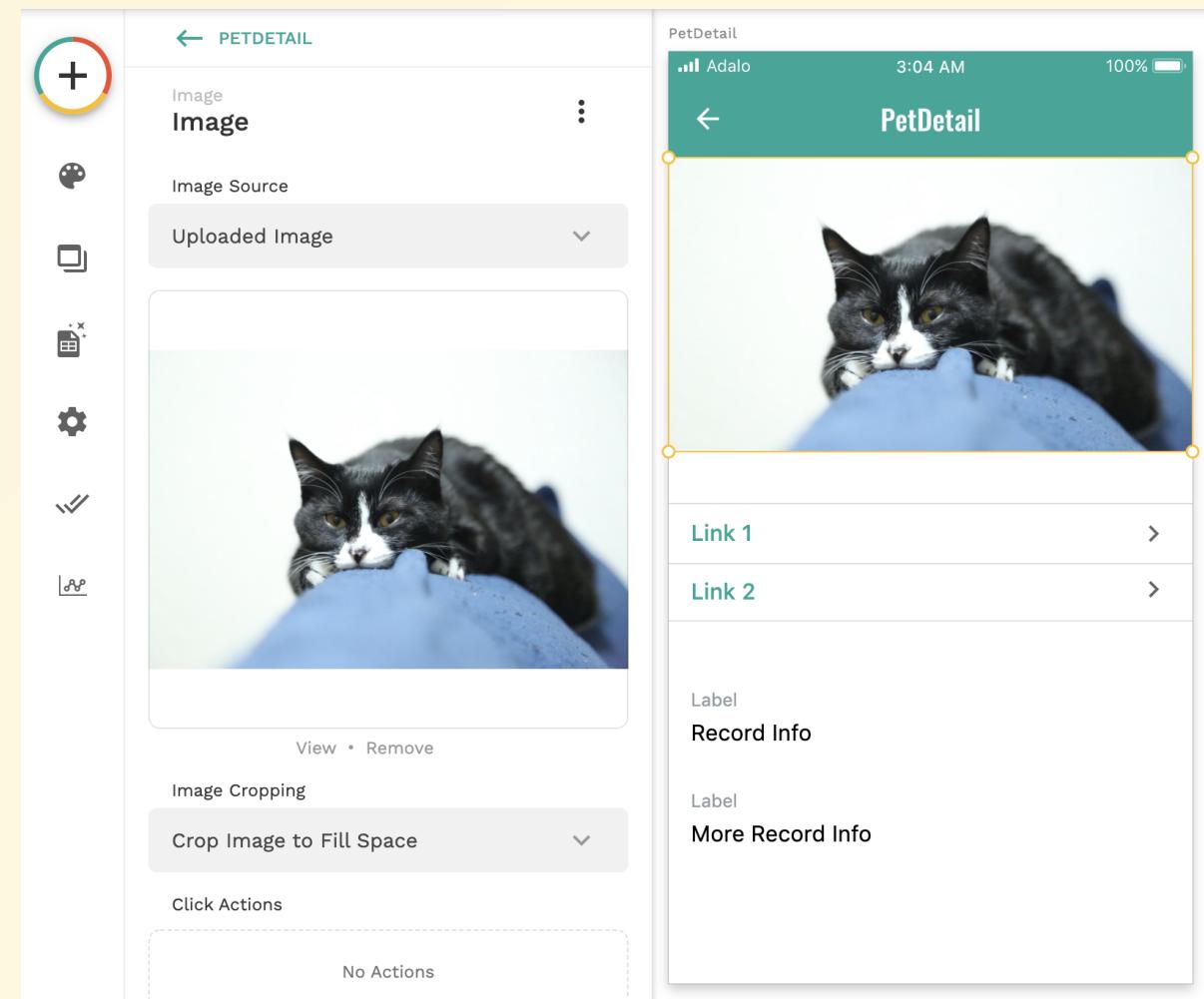
Next, let's create this screen



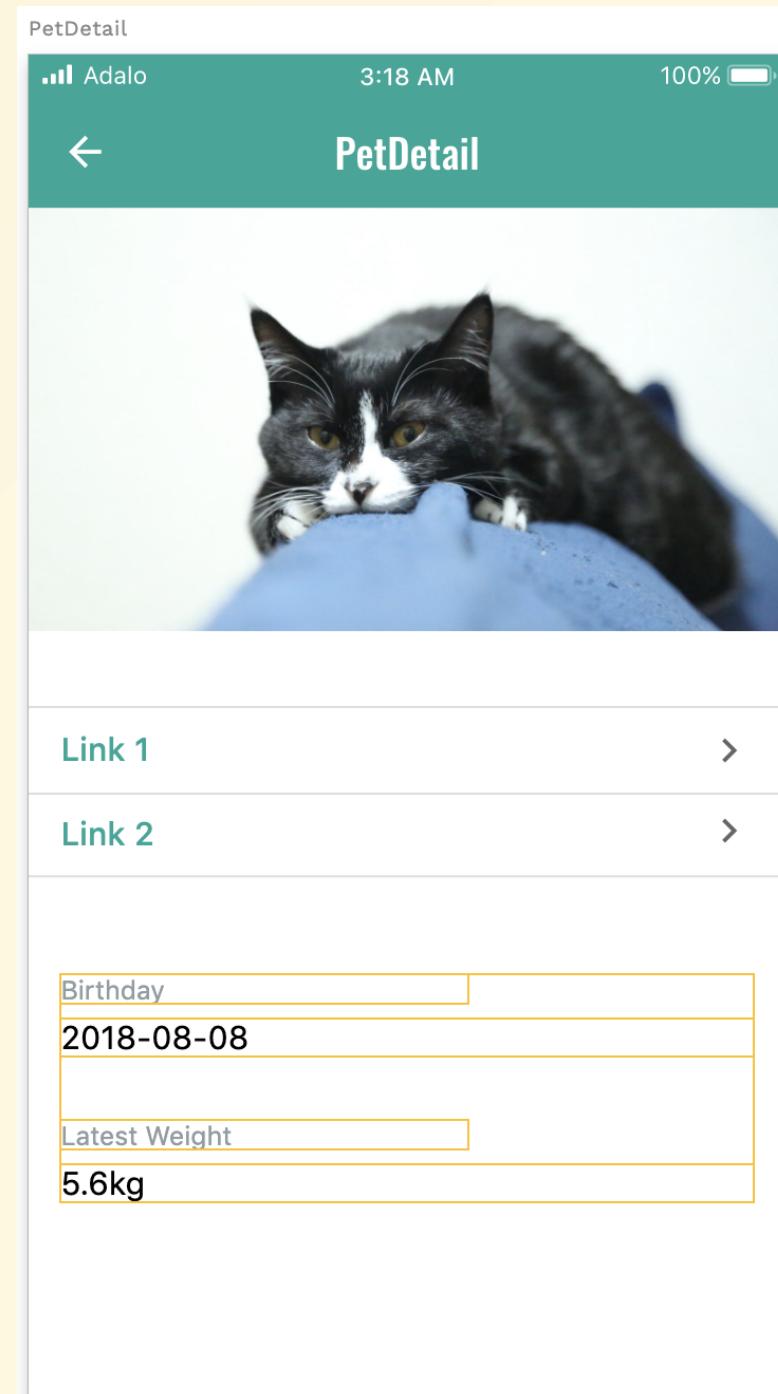
- Select "Info with Links" from ADD SCREEN and enter the Screen Name.



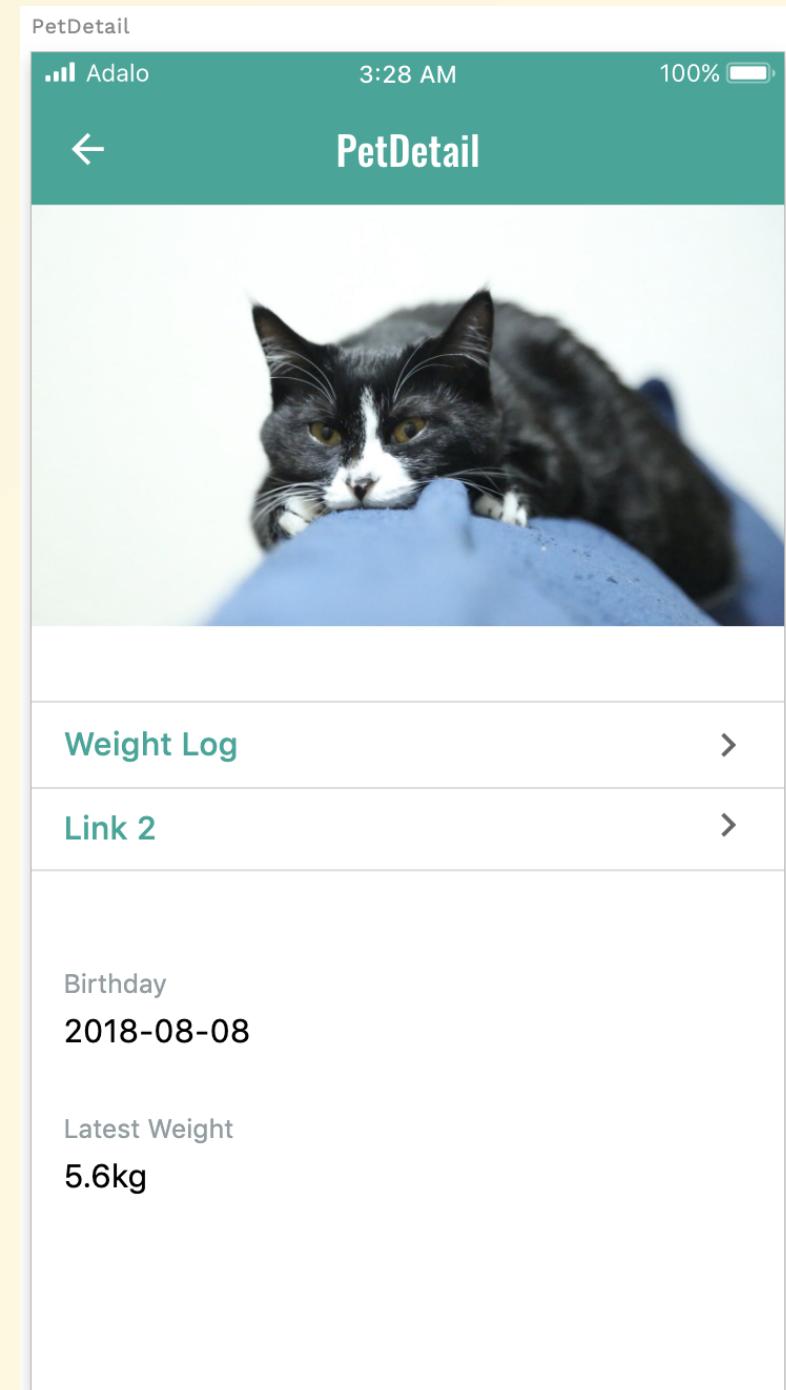
- Upload one of the photos used in the Pet List screen in Image Source.



- Rewrite the Text with the label "Birthday" and its value, and the label "Latest Weight" and its value.

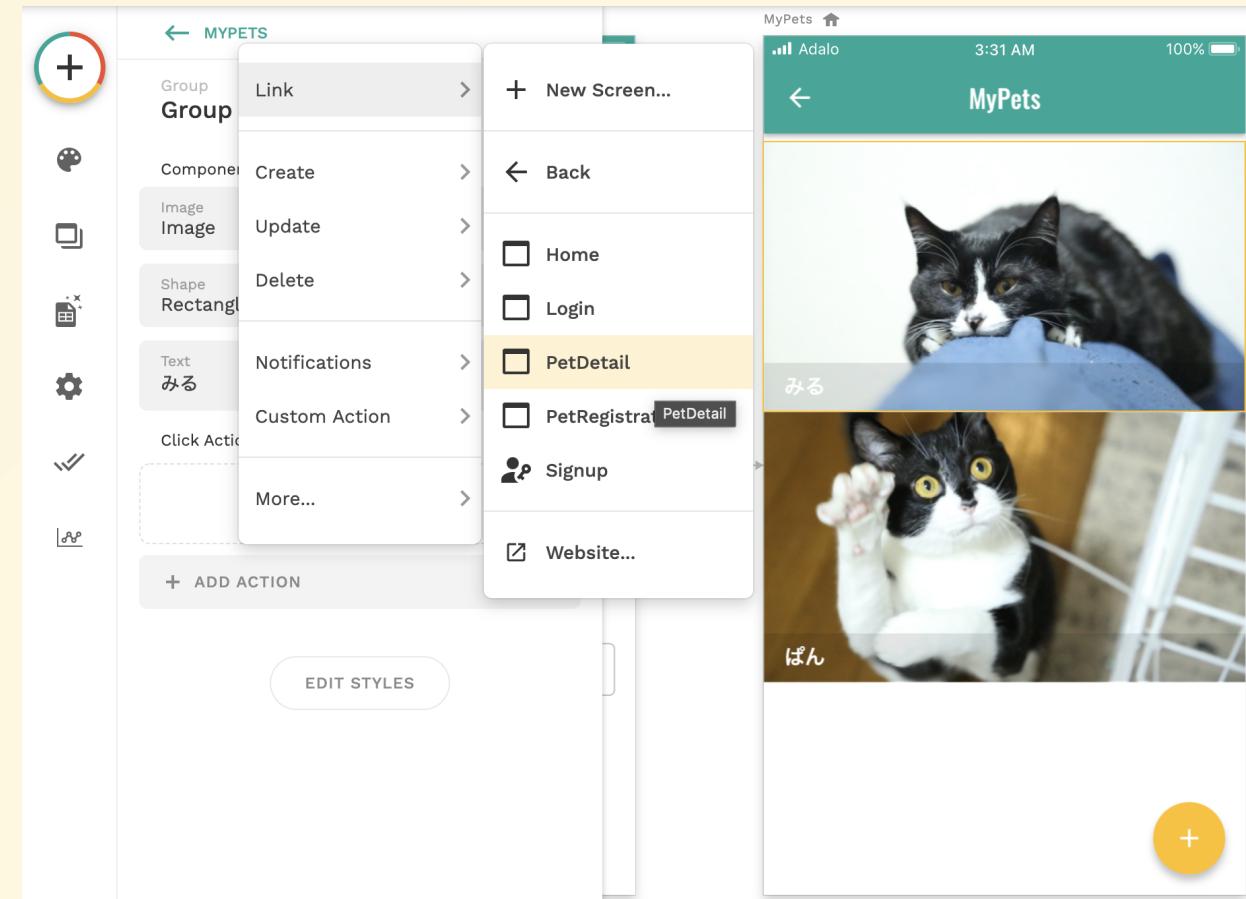


- Change the Text named "Link 1" to "Weight Log"
- Leave Link 2 as it is.
(This will be used as a link to the screen created in the exercise)



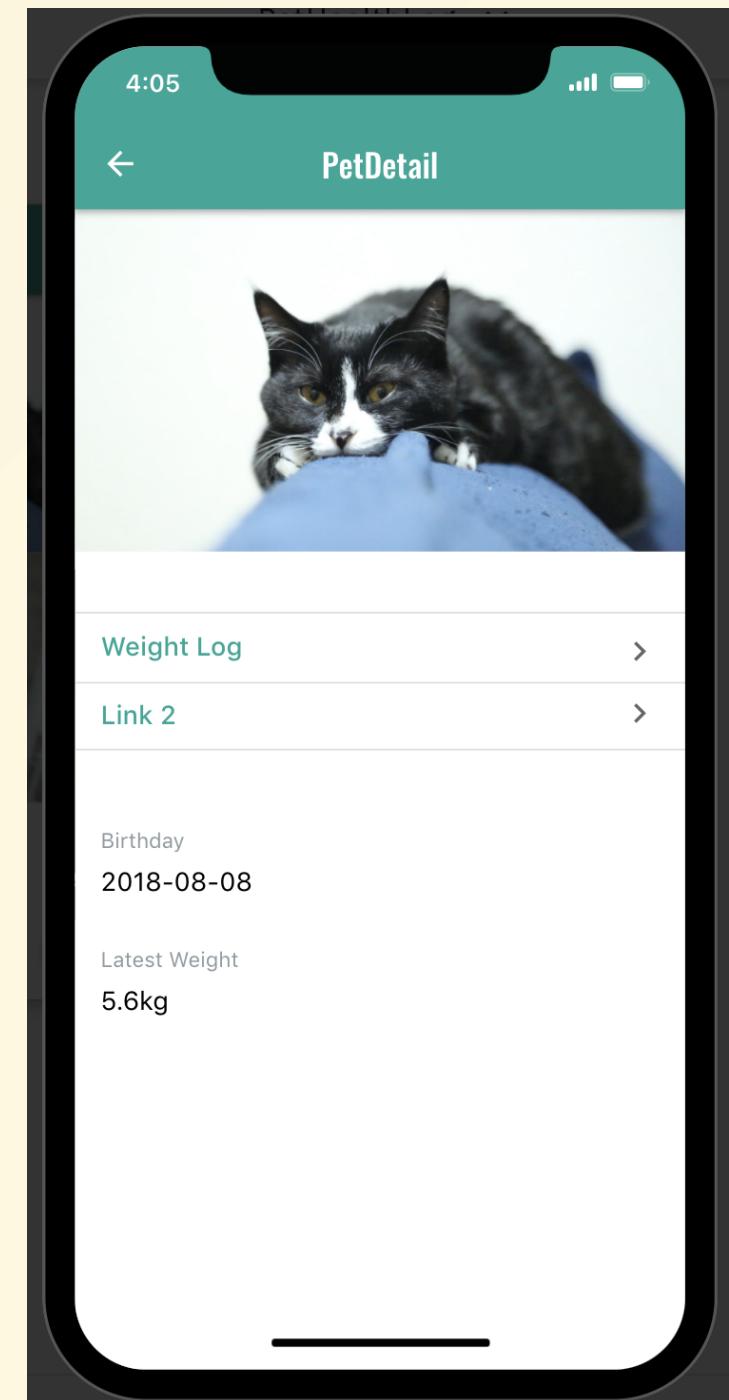
Let's make it possible to move from the pet list screen to the pet detail screen.

- Select the Group that contains the components for the first pet in the Pet List screen, and click "ADD ACTION" -> "Link" -> [PetDetailScreenName]



- Preview the appearance of the Pet Detail screen.

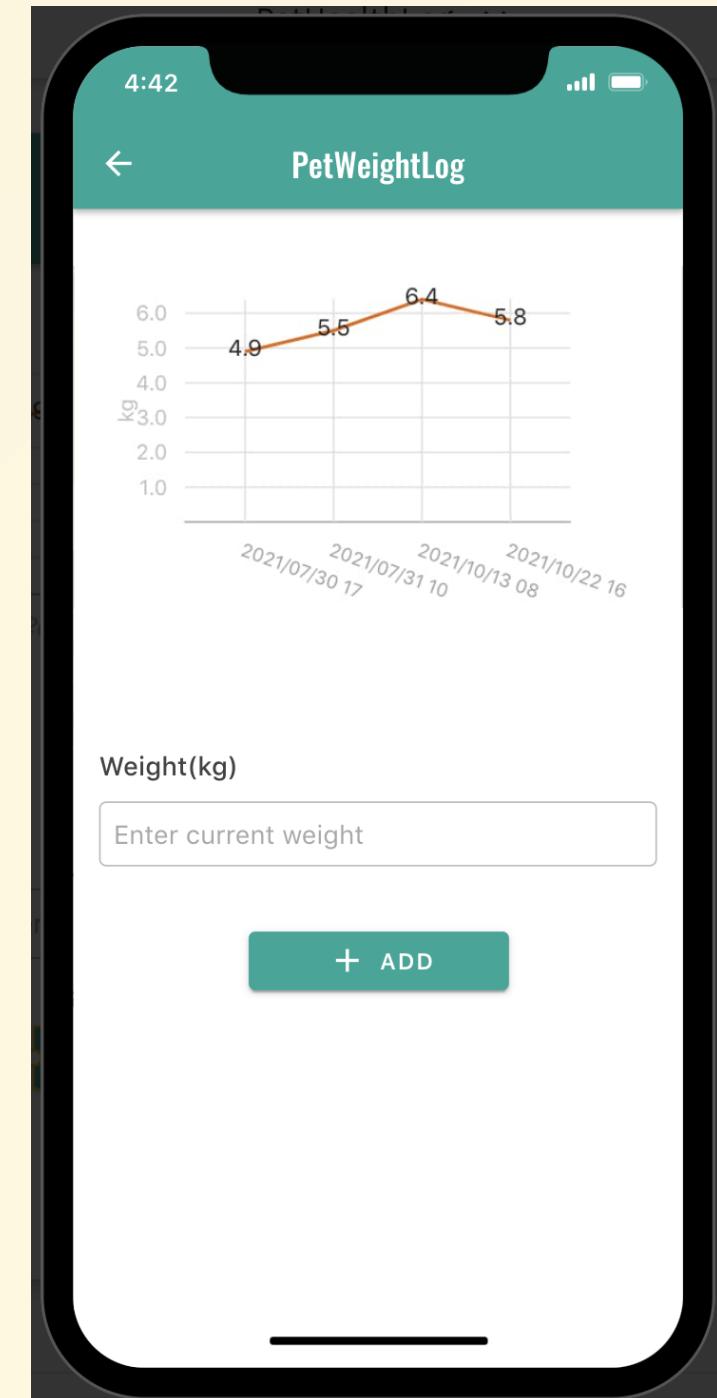
The pet detail screen seems OK.



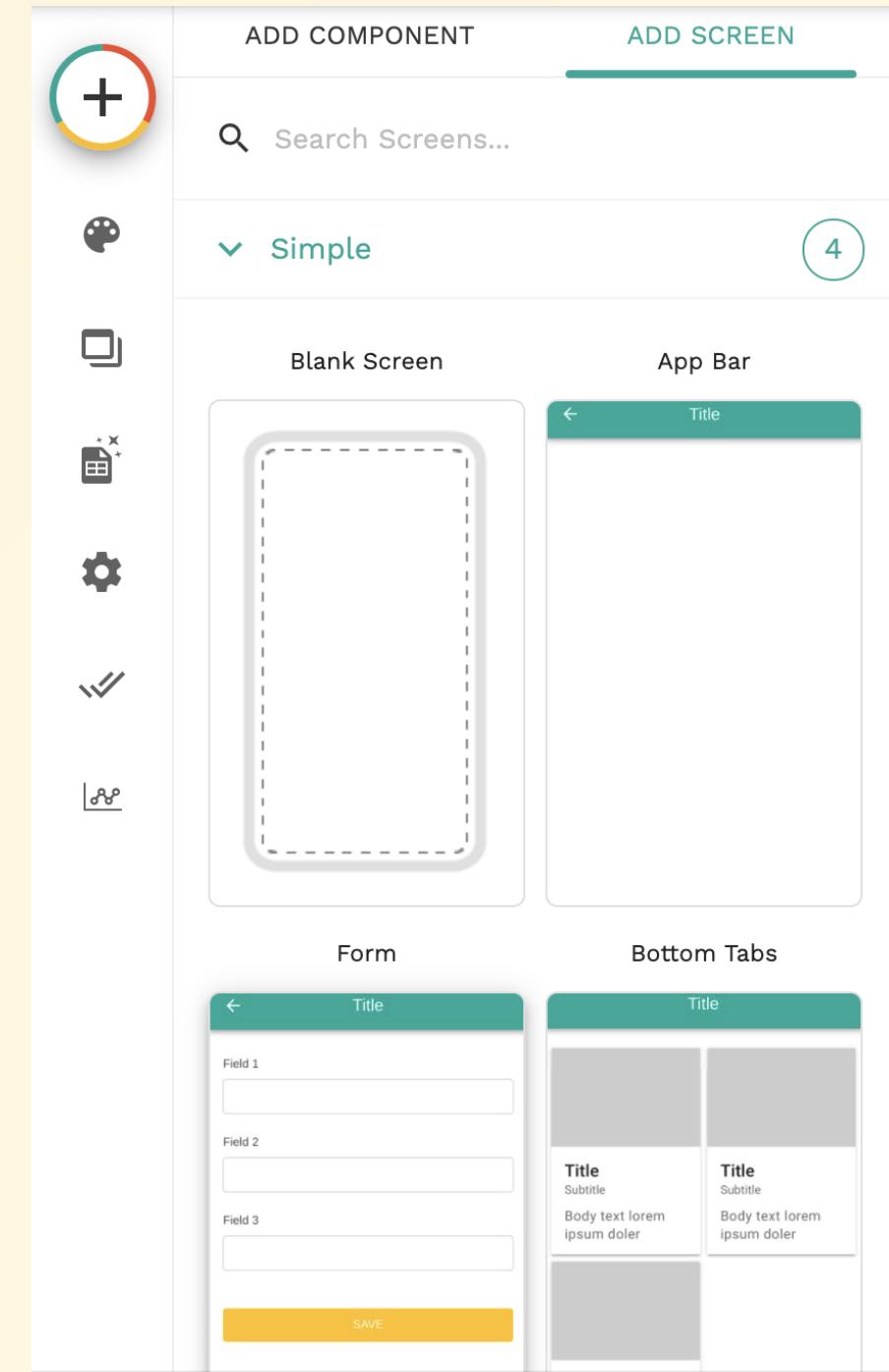
Weight Record screen

- A graph showing the transition in weight is displayed.
- You can enter your pet's current weight.
- You can add your pet's weight by pressing the button.

Let's create this screen.



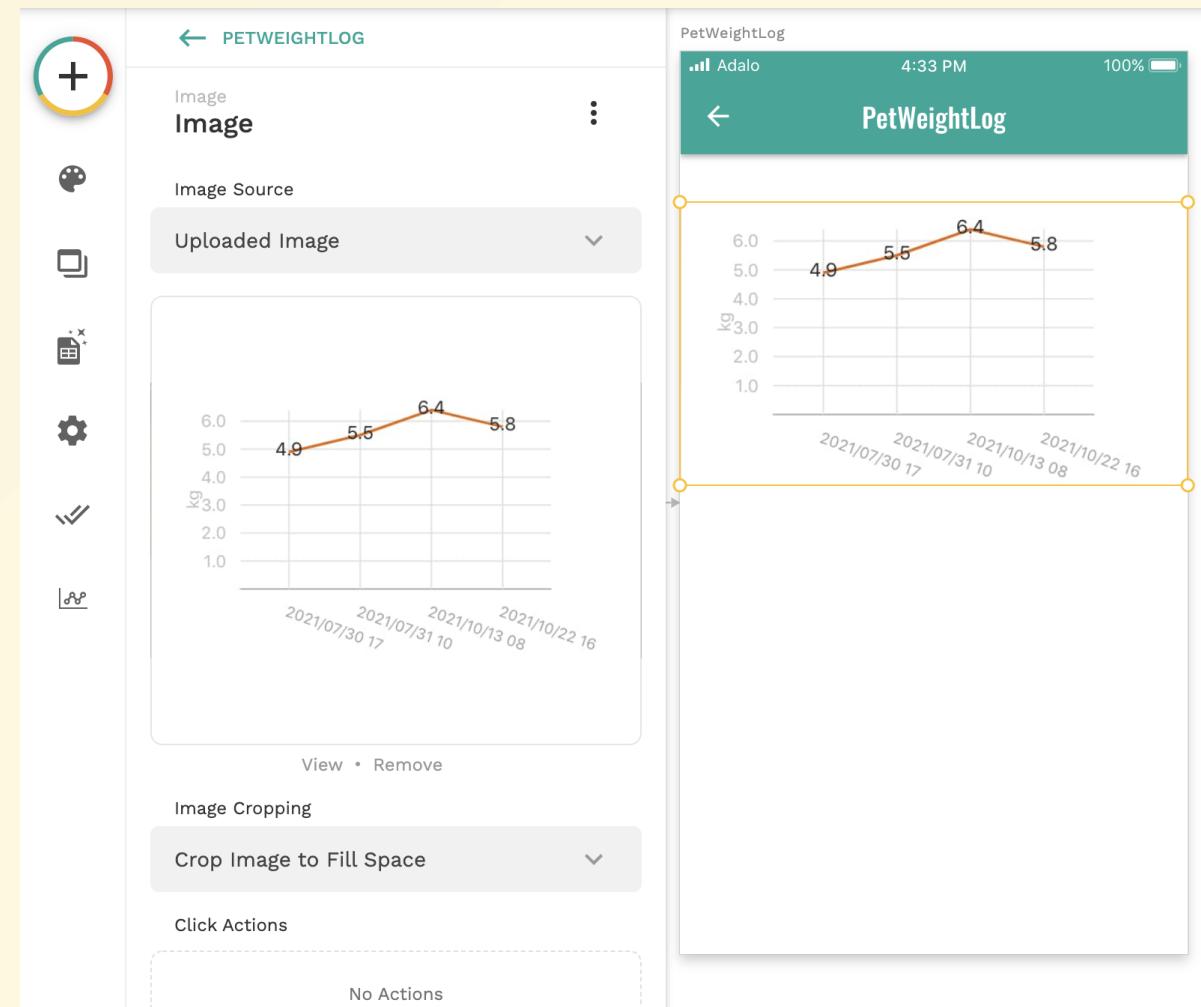
- Select "App Bar" from ADD SCREEN and enter the Screen Name.



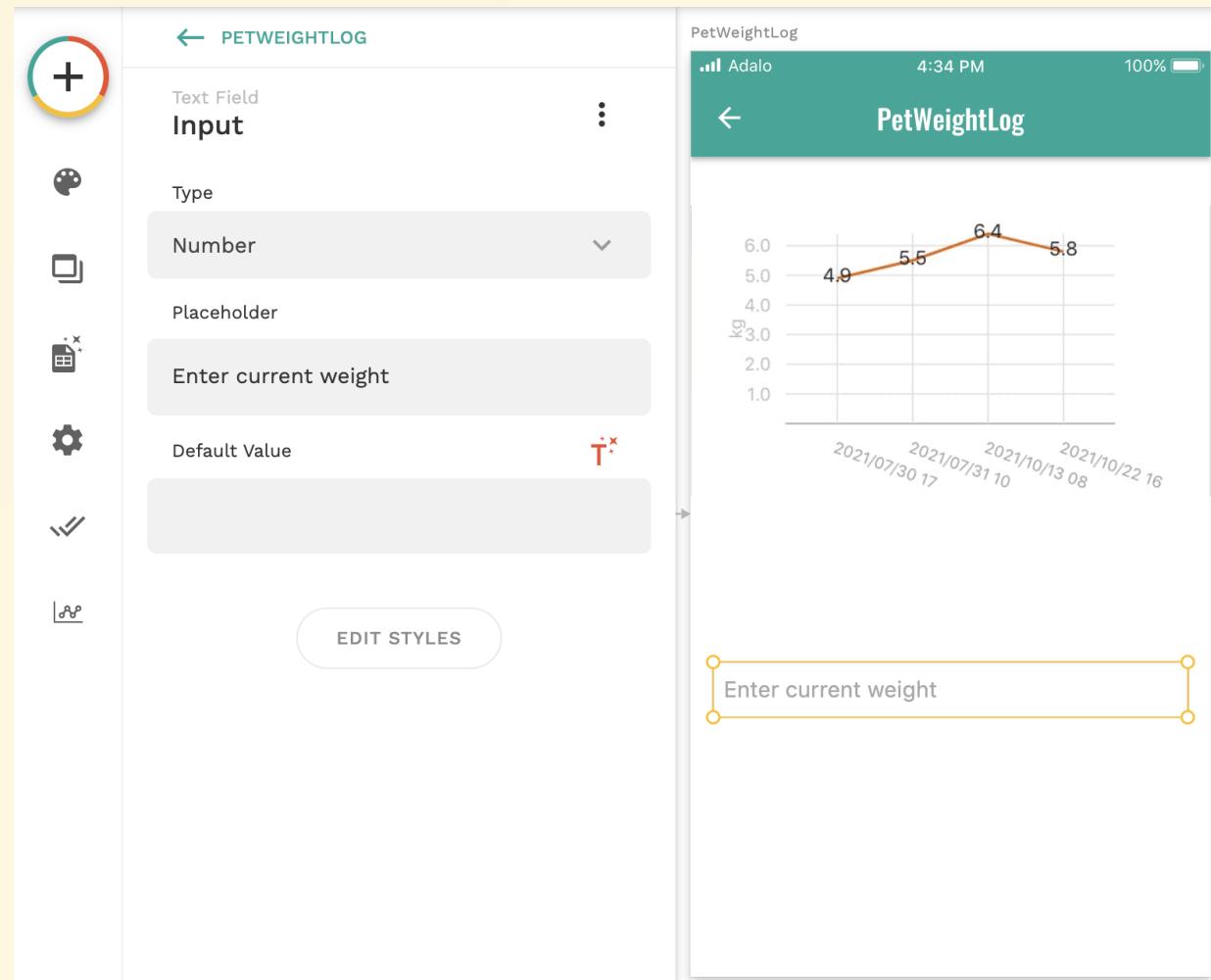
- To create a Chart, we need to prepare a database, which will be explained in the next lecture.
- This time, paste the Chart image instead of using actual chart.
 - I'll share the Chart image with you via Slack.
(You can also take a screenshot of the image on the right and use it)



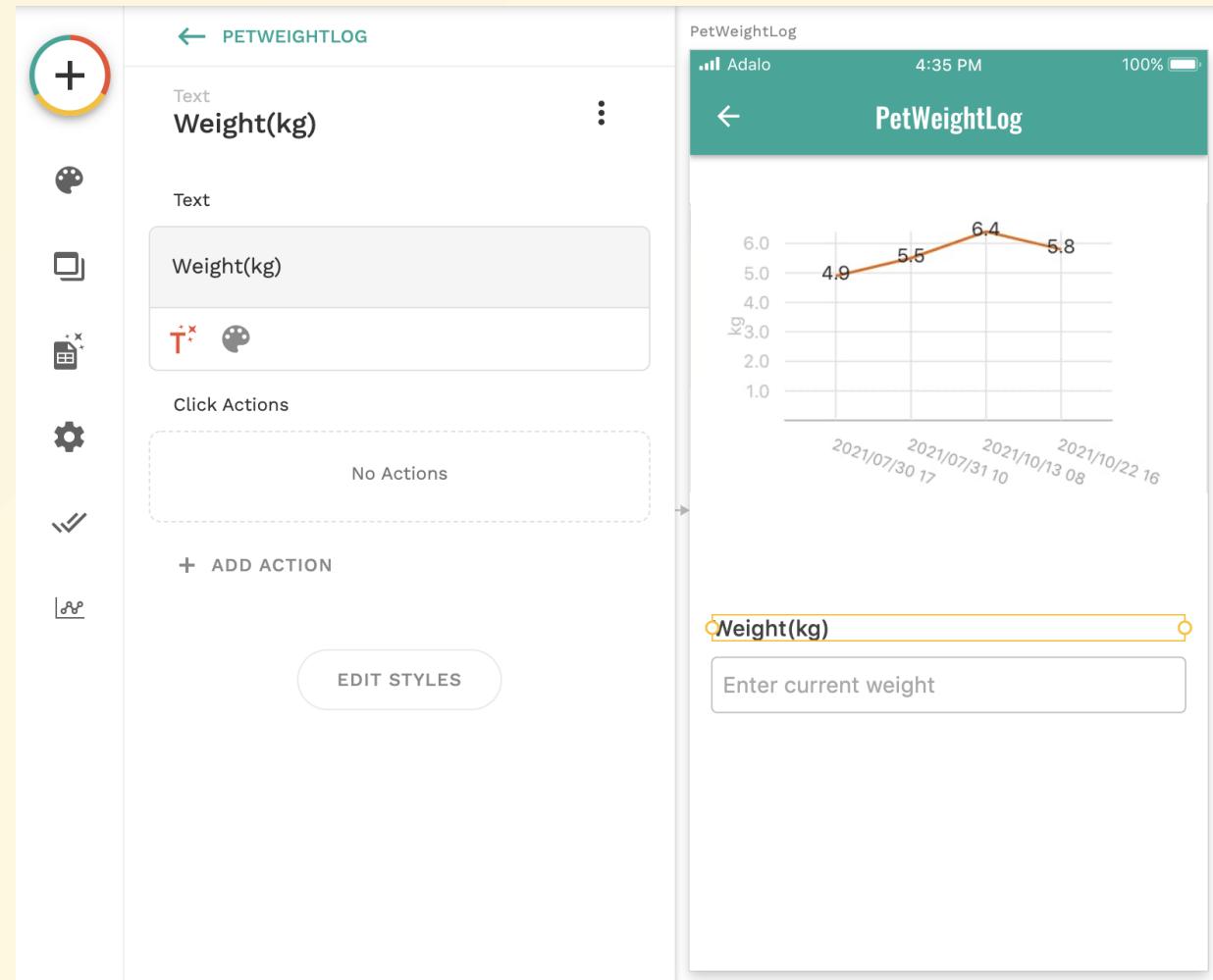
- Add an Image from ADD COMPONENT and upload the Chart image.



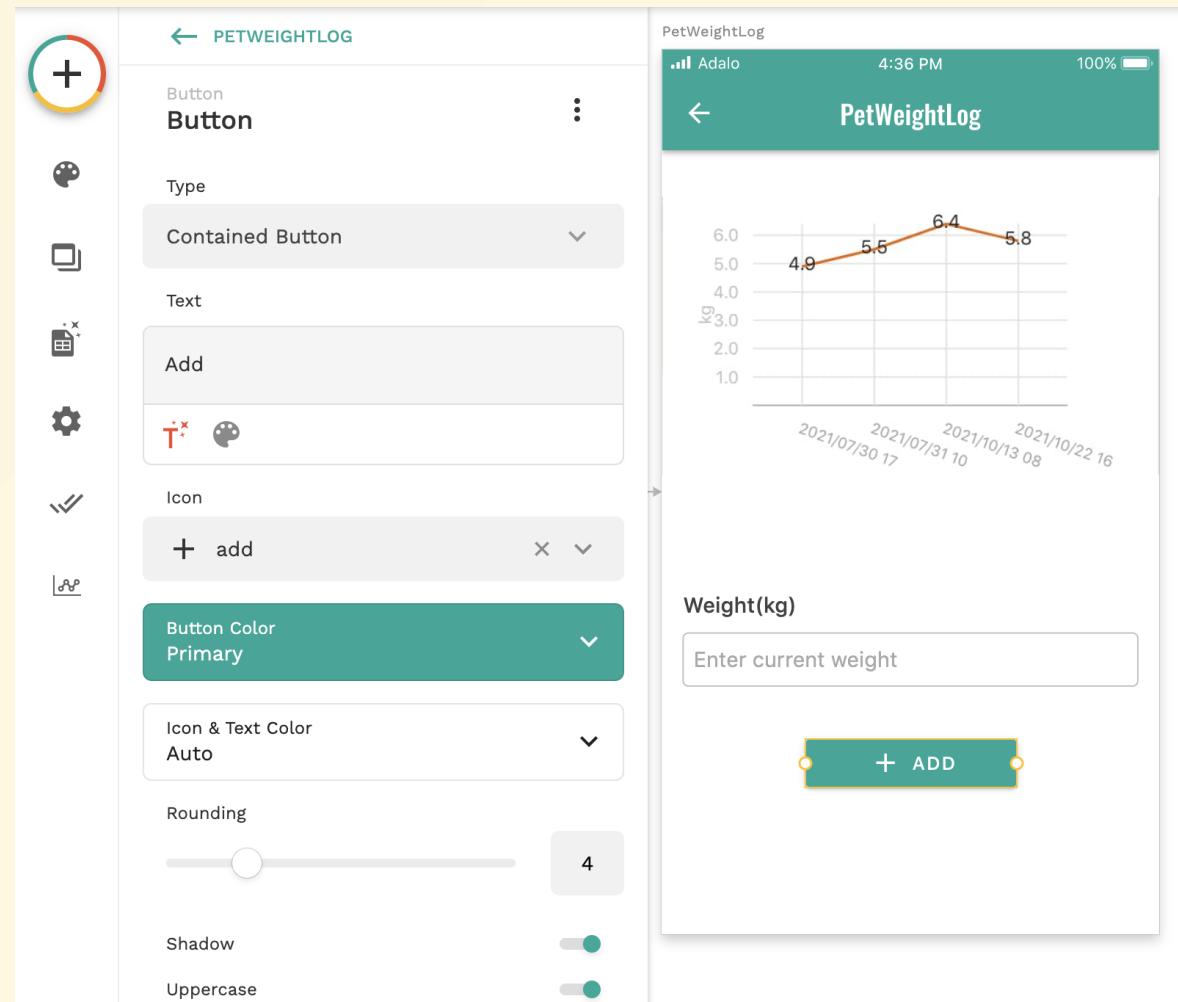
- Add "Text Input" from ADD COMPONENT.
- Change "Type" to "Number".
- Change "Placeholder" to "Enter current weight".



- Add a "Text" from ADD COMPONENT.
- Change the value to "Weight(kg)".

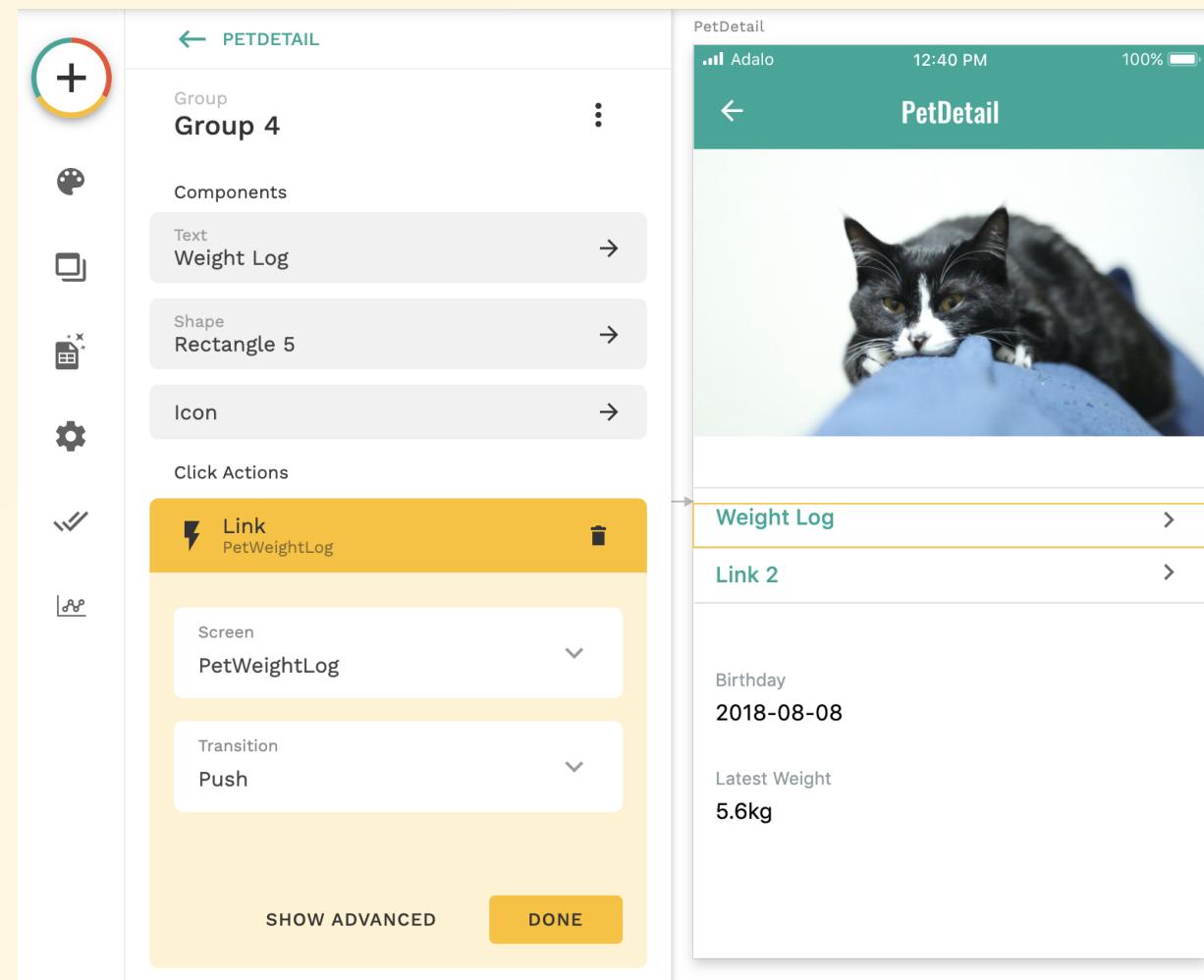


- Add "Button" from ADD COMPONENT.
- Change Text to "Add".



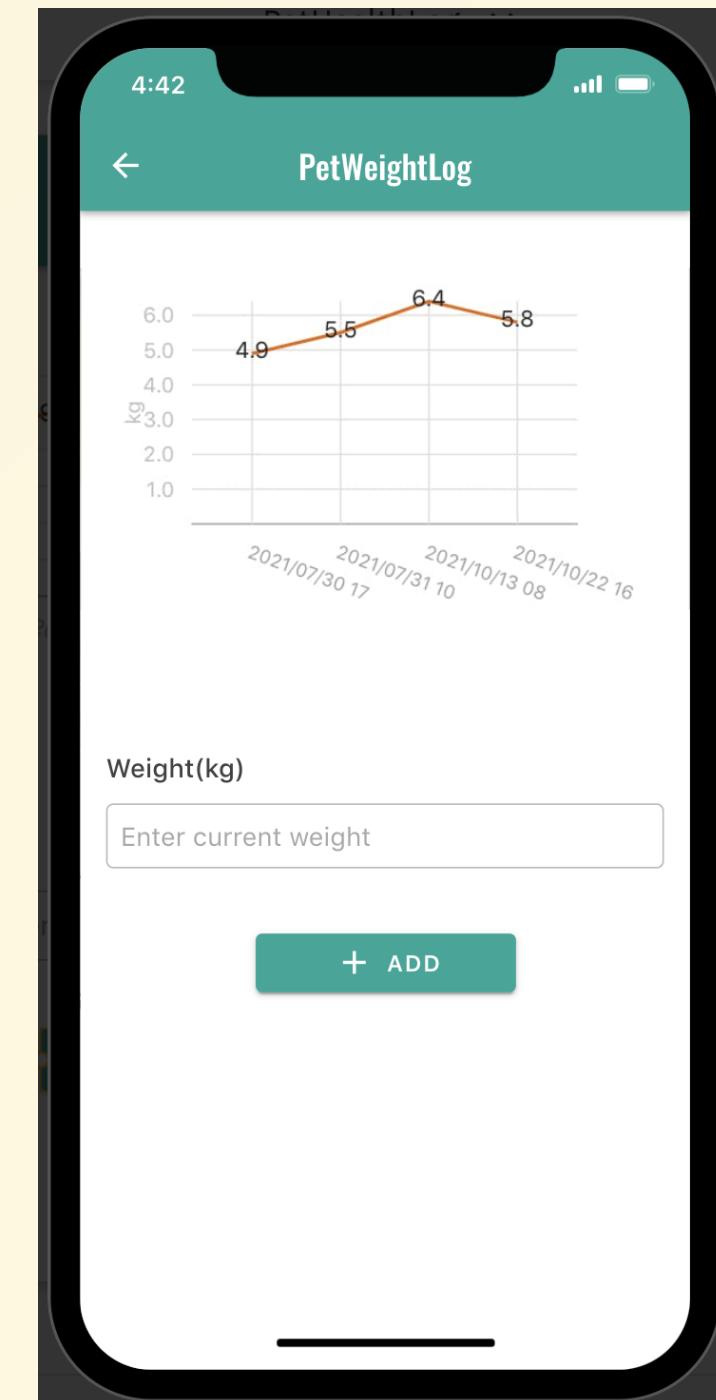
Set up a link from the pet detail screen to the weight record screen.

- Set up a link to the weight record screen with "Click Action" of the Group containing "Text:'Weight Log'" in the pet detail screen.

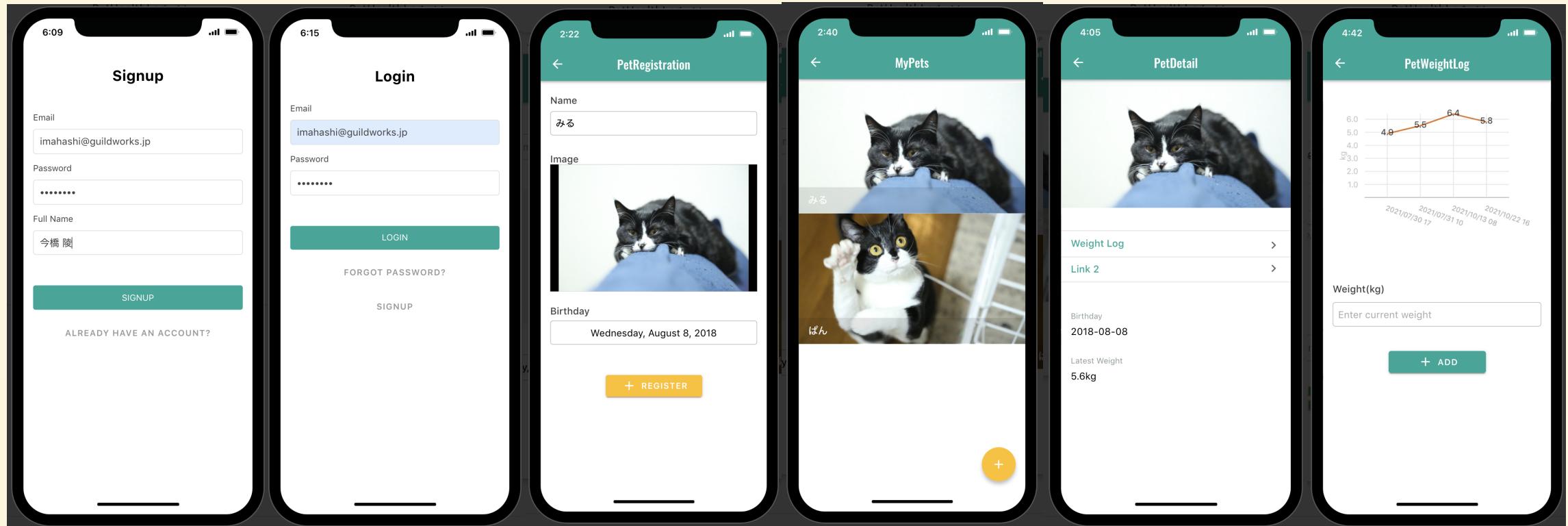


Let's preview the screen.

The weight record screen
seems OK.



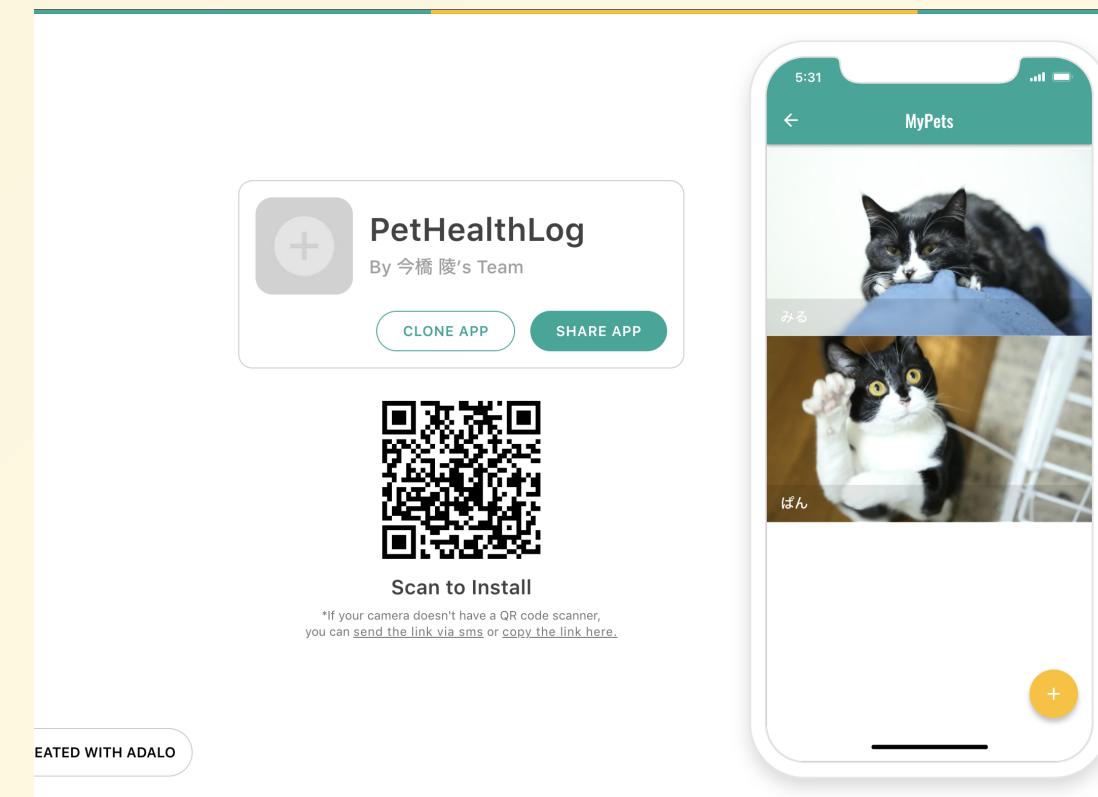
We have created all UI for the sample app 🎉



URL for cloning

- You can clone the application from the following URL, and use it to check completed version.

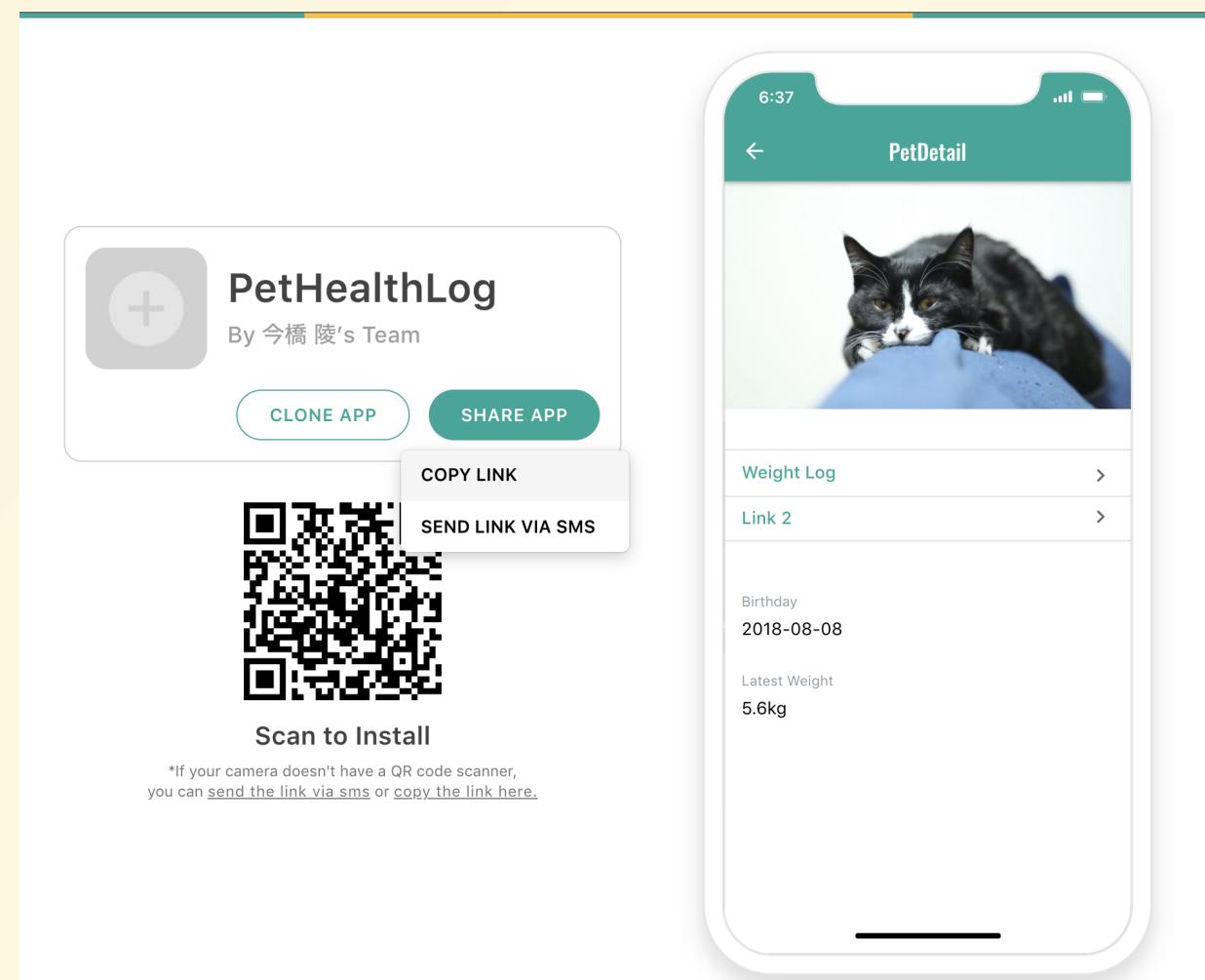
<https://previewer.adalo.com/014fd9d1-80c6-4325-899a-d943e778c865>



Exercise

- Create your own screen that will be the transition destination for "Link 2" on the pet details screen.
- Alternatively, you can create a new app as you like.

When you are ready, share the URL on Slack to make it available for everyone.



Notes about the exercise

- Components and Screens named "xxxxList" may be difficult to use because they need to be connected to the database, which will be explained in the next lecture.
 - If you face a problem and can't solve by yourself, I recommend you to avoid using "xxxxList" for today.
- While the NoCode tool allows you to create apps easily, it may not allow you to achieve complex UI and functions.
 - If you are stuck, think about how you can achieve what you want to do with a simple UI and functions.
 - For example: Avoid including too many components in one screen(separate them into multiple screens).

Presentation of exercise results

(If there is enough time)

Would you like to present the app you made in the exercise?

Summary

- In this lecture, we learned about Adalo and created the UI of the pet health management application.
 - We used only simple components that do not require a database.
- In the next lecture, we will continue to use Adalo to build a database that matches the UI we created today, and make it possible to manipulate data from the app.
 - By using a database, various functions can be realized and the UI can be easily created. I hope you'll enjoy it!

That's all!

Thanks for your time!