

Programming Boot Camp Learning Phase #4

Bubble Basic #2-1

2022/11/26

Advance preparation

- Today we will add design and logic to the pet health management app we created last time.
- Since we have made some modifications for today's lecture, we will ask you to use a copy of the application prepared by us in order to match the starting point.
- We will distribute the duplicated application, so please send the e-mail address where you created your Bubble account to `@Naotake KYOGOKU`.



Things to do today

- Review of last time
- Craft your design
- Create logic

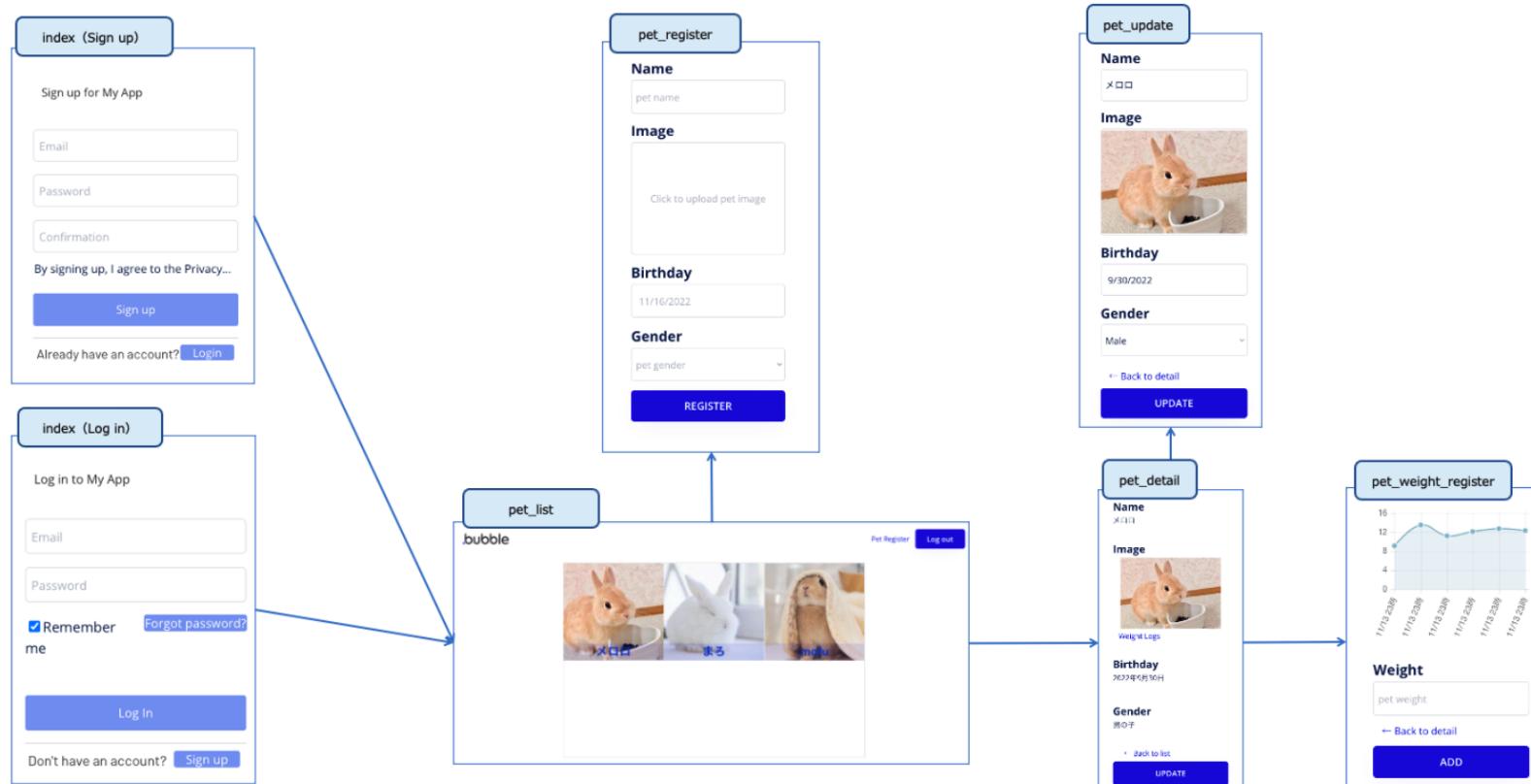
Review of last time

- Bubble is a visual programming tool, and it is a tool that allows you to program the appearance and movement by operating from the screen.
- It is a web application premise, and it will be compatible with smartphones and PCs by adjusting the display size.
- If you were absent last time, let's catch up with this material
 - <https://github.com/GuildWorks/titech-2022/tree/master/docs/Bubble1>

Review of last time

The pet registration, list, details, and weight record screens of the pet management application

While making it, I learned how to use Design/Workflow/Data, which are the basics of Bubble.



Things to do today

This time, we will further add design and logic to the previous application.

This is what the end looks like

top page

The image shows two identical sign-up forms side-by-side, separated by a vertical dark bar. Both forms are titled "Sign up for My App". Each form contains four input fields: "Email", "Password", "Confirmation", and "Pet Owner" (a dropdown menu). Below these fields is a large blue "Sign up" button. At the bottom of each form, there is a link "Already have an account? [Login](#)".

Sign up for My App

Email

Password

Confirmation

Pet Owner

Sign up

Already have an account? [Login](#)

Sign up for My App

Email

Password

Confirmation

Pet Owner

Sign up

Already have an account? [Login](#)

pet list

PetLog



Pet Register Log out

PetLog

≡



pet details

PetLog

[← Back to list](#)



Name (Initial)

pochi(P)

Birthday

2020年8月18日

Age (as Dog/Cat)

2(24)

Gender

男の子

Latest Weight

9kg



[Pet Register](#)

[Log out](#)

PetLog

≡

[Weight Logs](#)

[← Back to list](#)

[Weight Logs](#)



Name (Initial)

pochi(P)

Birthday

2020年8月18日

Age (as Dog/Cat)

2(24)

Gender

男の子

Latest Weight

9kg

Advisor pet list

PetLog

[Pet Register](#)[Log out](#)

Now let's get started.

First, we will create the design

What to do in the design process

- Let's create a screen that fits the display size
 - Uses a technique called responsive web design to control the look to the display size
- Let's use Style
 - Edit and add styles, or apply styles individually

Create a screen that fits the display size

Create a screen that fits the display size

- Web applications are used on various terminals such as PCs, tablets, and smartphones.
- The display size is different for each terminal, but there is a design method called responsive web design as a method to deal with them.
- Depending on the screen size, it is a method that flexibly switches the appearance of elements such as expanding/shrinking, wrapping/not wrapping, and displaying/not displaying.
- As a method of implementation, specify rules for determining placement and size, rather than specifying fixed placement and size.
- By default, Bubble has a fixed placement and size, but you can also specify various rules.

Commonly used rules

In order to achieve responsive design with Bubble, there are the following rules that are often used.

1. Placement rules within parent elements
2. Element sizing rules
3. Display presence/absence rules

Combine these rules to achieve responsive screen design.

It should be noted that these rules are not limited to Bubble, but also apply to web applications in general.

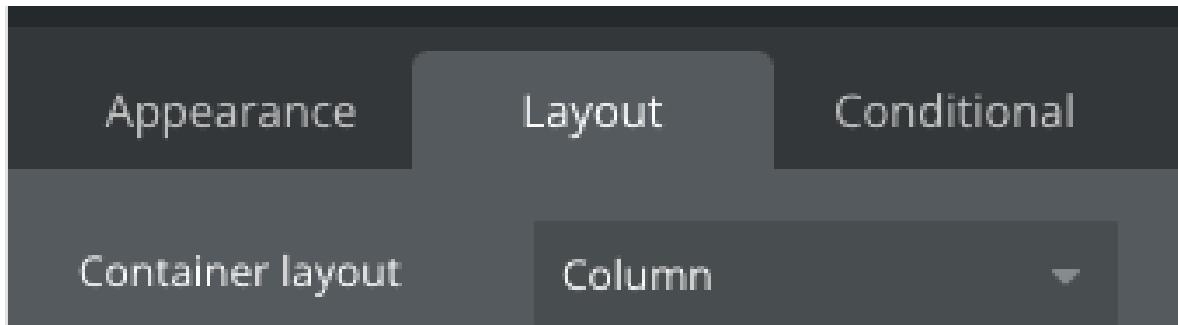
Later, we will incorporate it into the screen together, but some ideas are difficult, so I will explain the outline first.

Rule 1: Placement rules within parent elements

It will be a rule specification for how to place it in the parent element.

In Bubble, a parent element that encloses a group such as a repeating group or an individual element such as an entire page is called a container.

A Container allows you to specify placement rules for the child elements it contains.



There are four placement rules for child elements:

- Fixed: Specify a fixed placement location
- Align to parent: specify the position relative to the parent element
- Row: Arrange in row direction (horizontal direction)
- Column: Arrange in column direction (vertical direction)

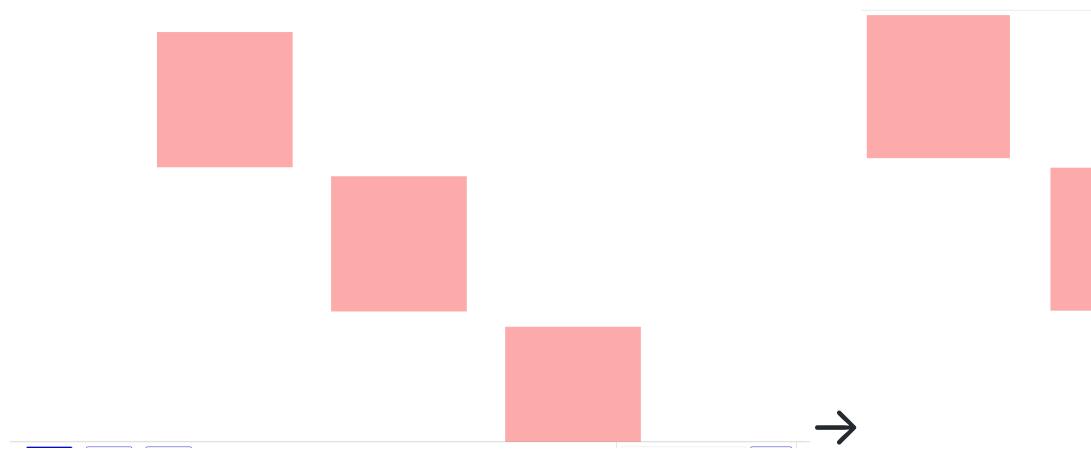
I will explain step by step.

Fixed: Specify a fixed placement location

This is a rule that specifies a fixed placement location. Specifies the placement location in pixels.

It will be the initial setting when the parent element is placed in Bubble.

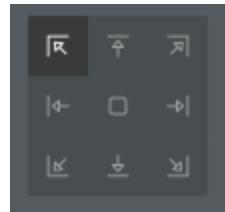
Since it is specified as fixed, it will not change from the specified position even if the screen width is changed. In the example below, it extends off the screen.



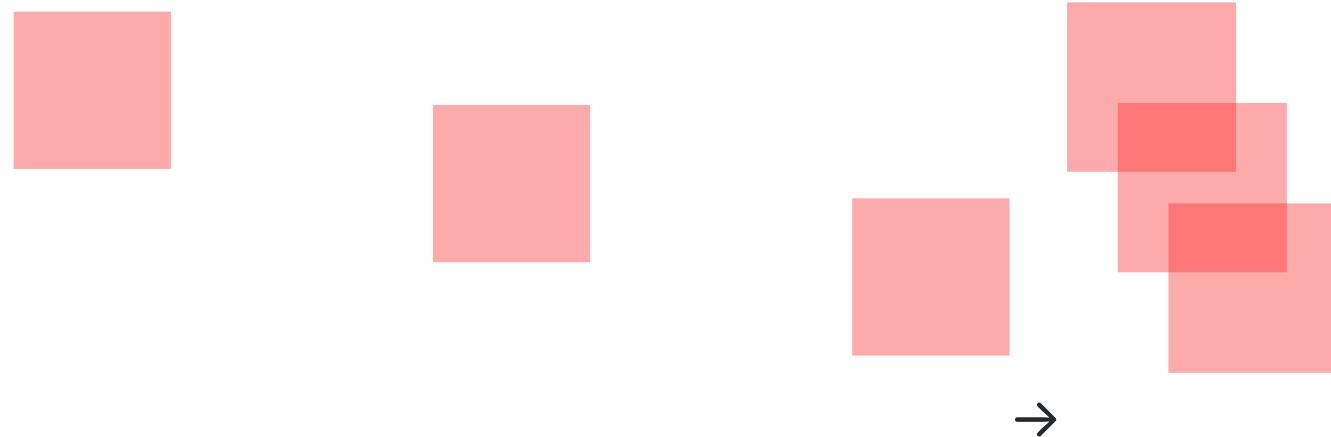
Align to parent: specify the position relative to the parent element

This is a rule that specifies the position relative to the parent element.

In Bubble, you can specify the placement location from 9 areas.



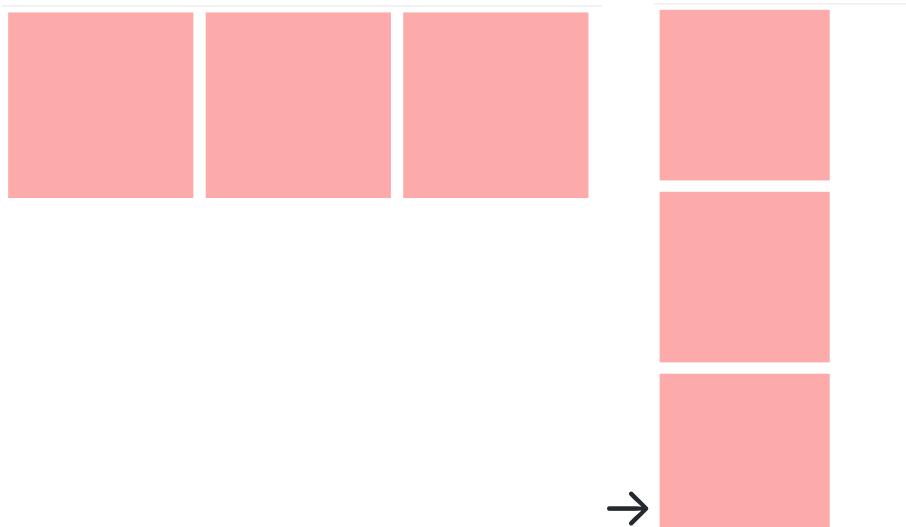
After changing the screen width, it moves while maintaining the relative position. In the example below, when the screen width is narrowed, it moves while maintaining the relative positions of upper left, center, and lower right.



Row: arrange in row direction (horizontal direction)

The rule is to arrange them in the row direction (horizontal direction). Lines are automatically wrapped.

In the example below, narrowing the screen width causes the lines to wrap, resulting in a vertical line.



Row: You can specify the horizontal (left and right) alignment in the row

You can specify the vertical alignment within the row for each element.



(Left-aligned)



(Centered)



(Right-aligned)



(Space-around)



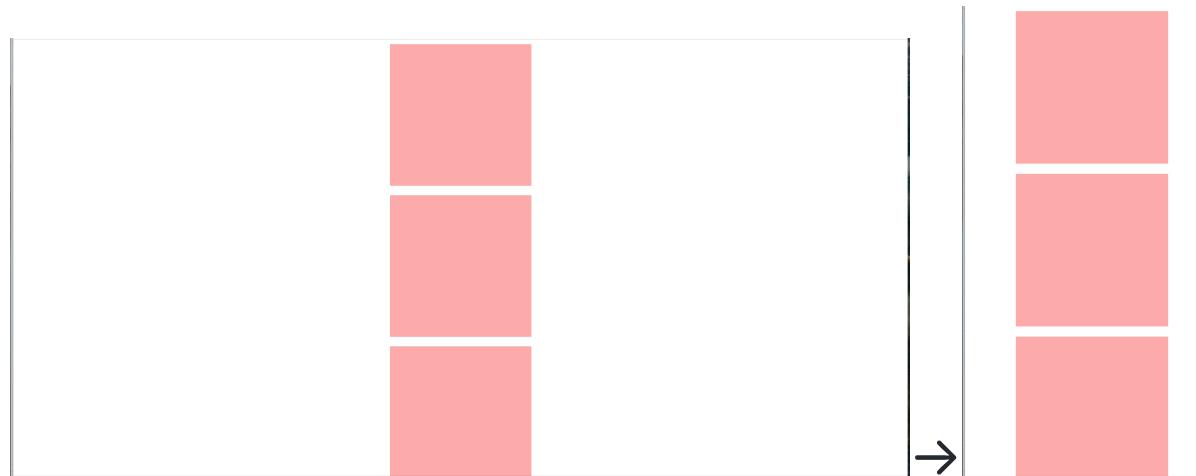
(Space-between)



Column: Arrange in column direction (vertical direction)

Arrange in columns (vertically).

In the example below, the images are aligned vertically in the left-right center alignment, and even if the screen width is reduced, they are aligned vertically while maintaining the center alignment.



Horizontal and vertical alignment can be specified in the same way as Row. (Contents that can be specified for horizontal and vertical are opposite)

Rule 1 (Recap): Placement rules within parent elements

It will be a rule specification for how to place it in the parent element.

There are four placement rules for child elements:

- Fixed: Specify a fixed placement location
- Align to parent: specify the position relative to the parent element
- Row: Arrange in row direction (horizontal direction)
- Column: Arrange in column direction (vertical direction)

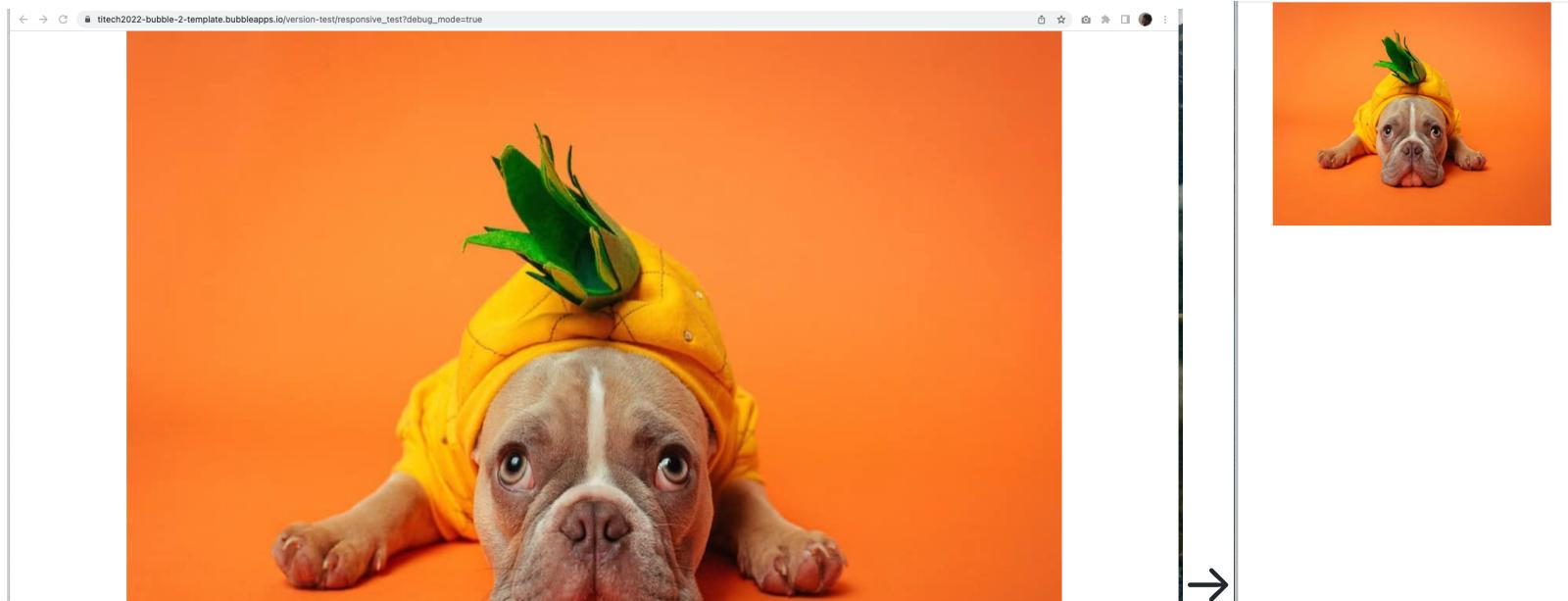
Rule 2: Element Sizing Rule

Instead of specifying a fixed size so that it can grow or shrink depending on the screen width, specify rules for determining its size. Mainly use one of the following two.

- specify a percentage of the size of the parent element
- Specify maximum/minimum size when stretched/shrunked
 - *It is also possible to set unlimited without specifying the maximum and minimum

Percent specification

The example below specifies that the width is 80% of the screen. Reducing the screen width also reduces the image size while maintaining the 80% percentage.



The example below specifies a maximum width of 800px and a minimum width of 300px. It expands and contracts between 300px and 800px, but even if the screen is widened, it will not be larger than 800px, and conversely, even if the screen is narrowed, it will not be smaller than 300px.

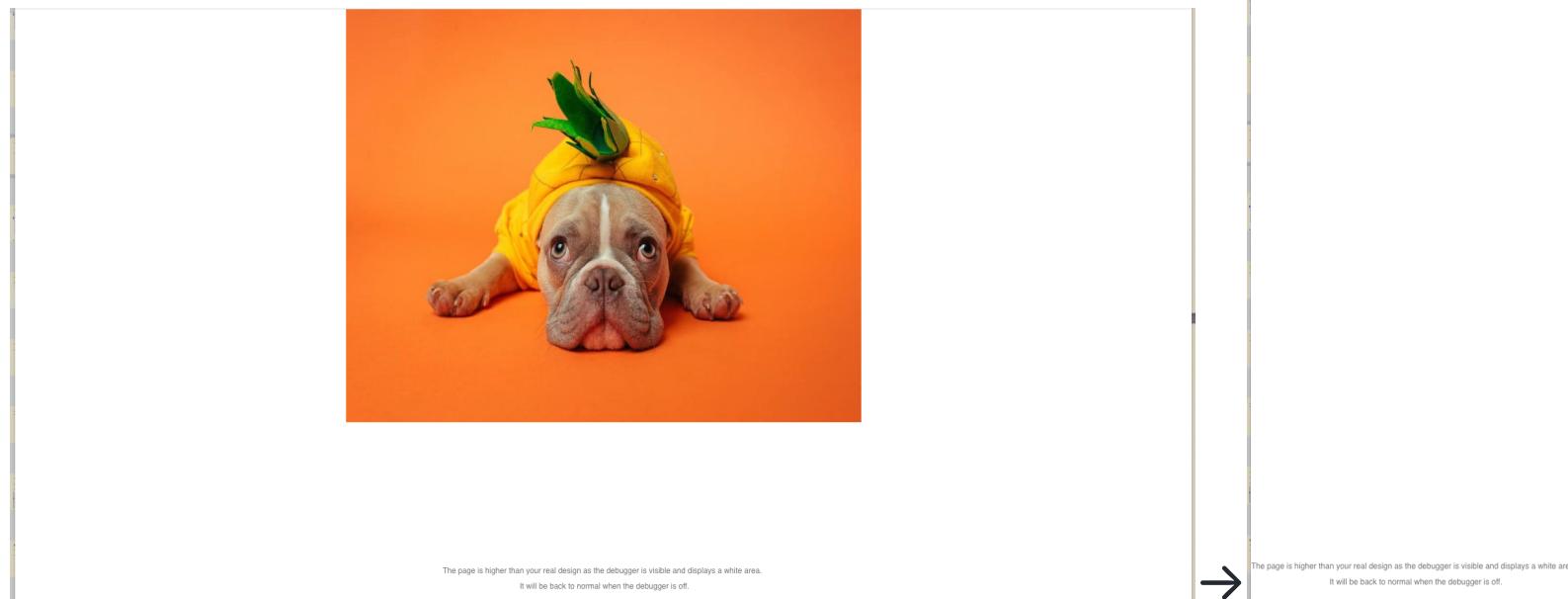


The page is higher than your real design as the debugger is visible and displays a white area.
It will be back to normal when the debugger is off.

Rule 3: Visibility rule

You can switch between showing and hiding elements on the screen by specifying the lower and upper limits of the screen width.

The example below specifies that the image will not be displayed when the screen width is 800px or less.



It is often used when you want to display a lot of information only when the screen is large.

Frequently used rules (review)

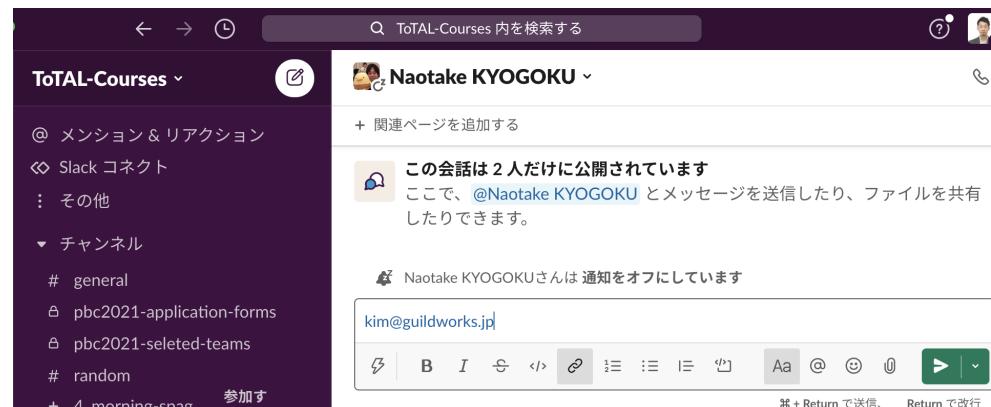
In order to achieve responsive design with Bubble, there are the following rules that are often used.

1. Placement rules within parent elements
2. Element sizing rules
3. Display presence/absence rules

Let's actually use it.

(reconfirmation) advance preparation

- Today we will add design and logic to the pet health management app we created last time.
- Since we have made some modifications for today's lecture, we will ask you to use a copy of the application prepared by us in order to align the starting points.
- We will distribute the duplicated application, so please send the e-mail address where you created your Bubble account to `@Naotake KYOGOKU`.

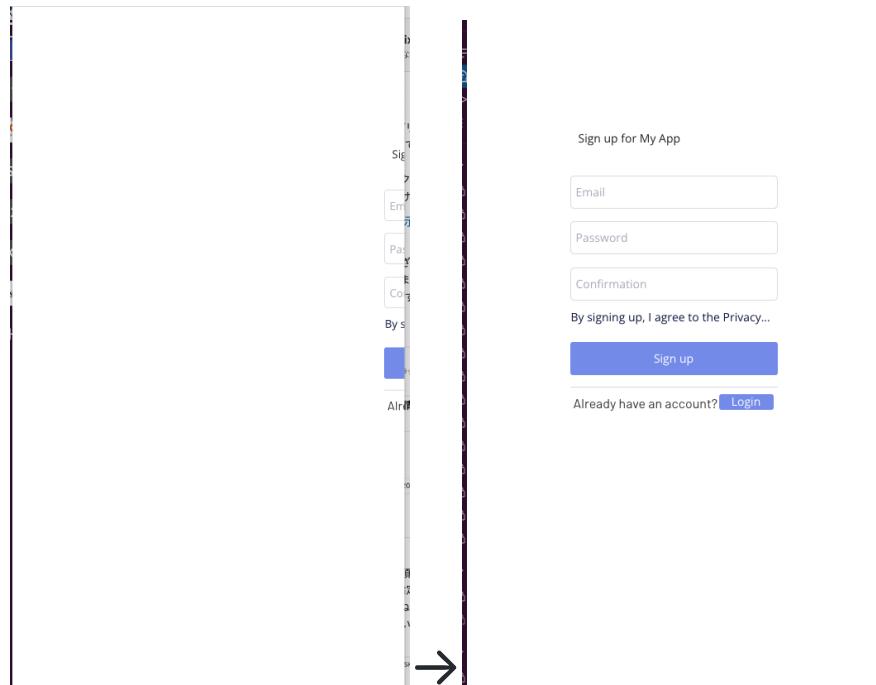


Apply responsive design to top page (login page)

First, apply a responsive design to the top page (login page).

Before support, the login area was only visible in the corner when displayed on a smartphone.

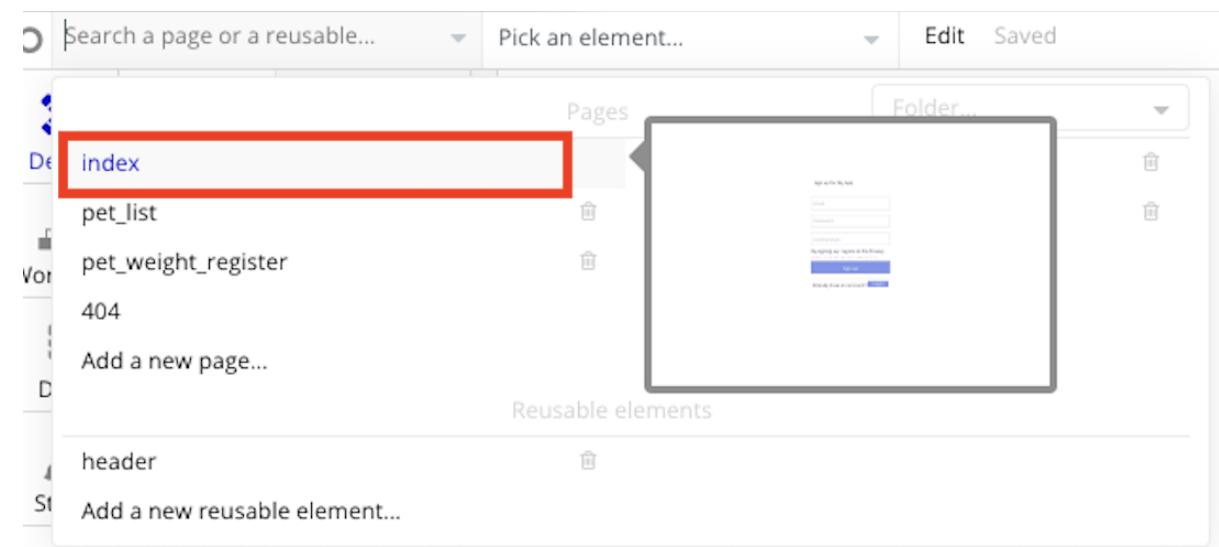
When supported, it will be displayed in the center according to the screen width.



Use Align to parent, which was introduced as a placement rule within the parent element.

Open the top page (login page). Do you remember the steps?

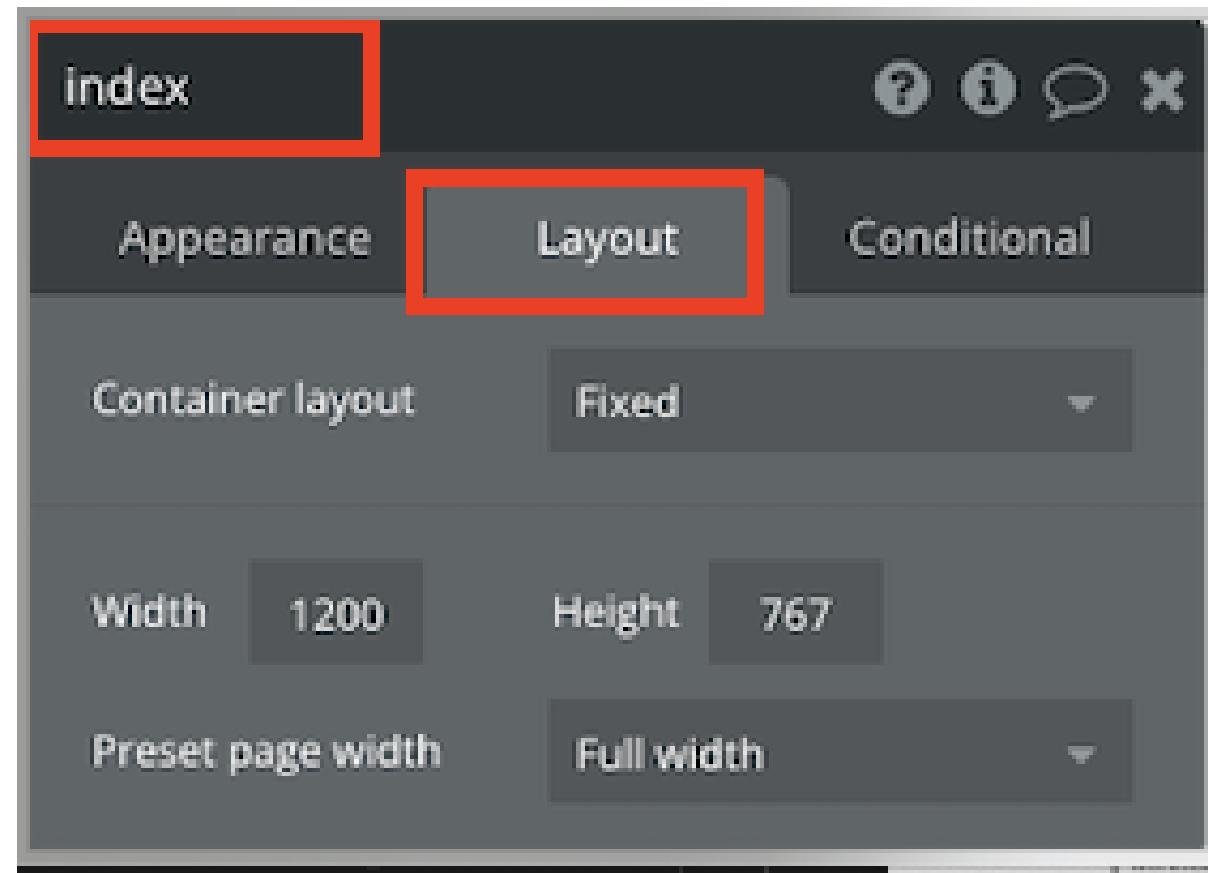
- Open Design in the menu on the left of the screen.
- Click on the right of the b logo on the top left of the screen and select the index page.



Double-click on a blank area of the screen to open the settings window for the page itself.

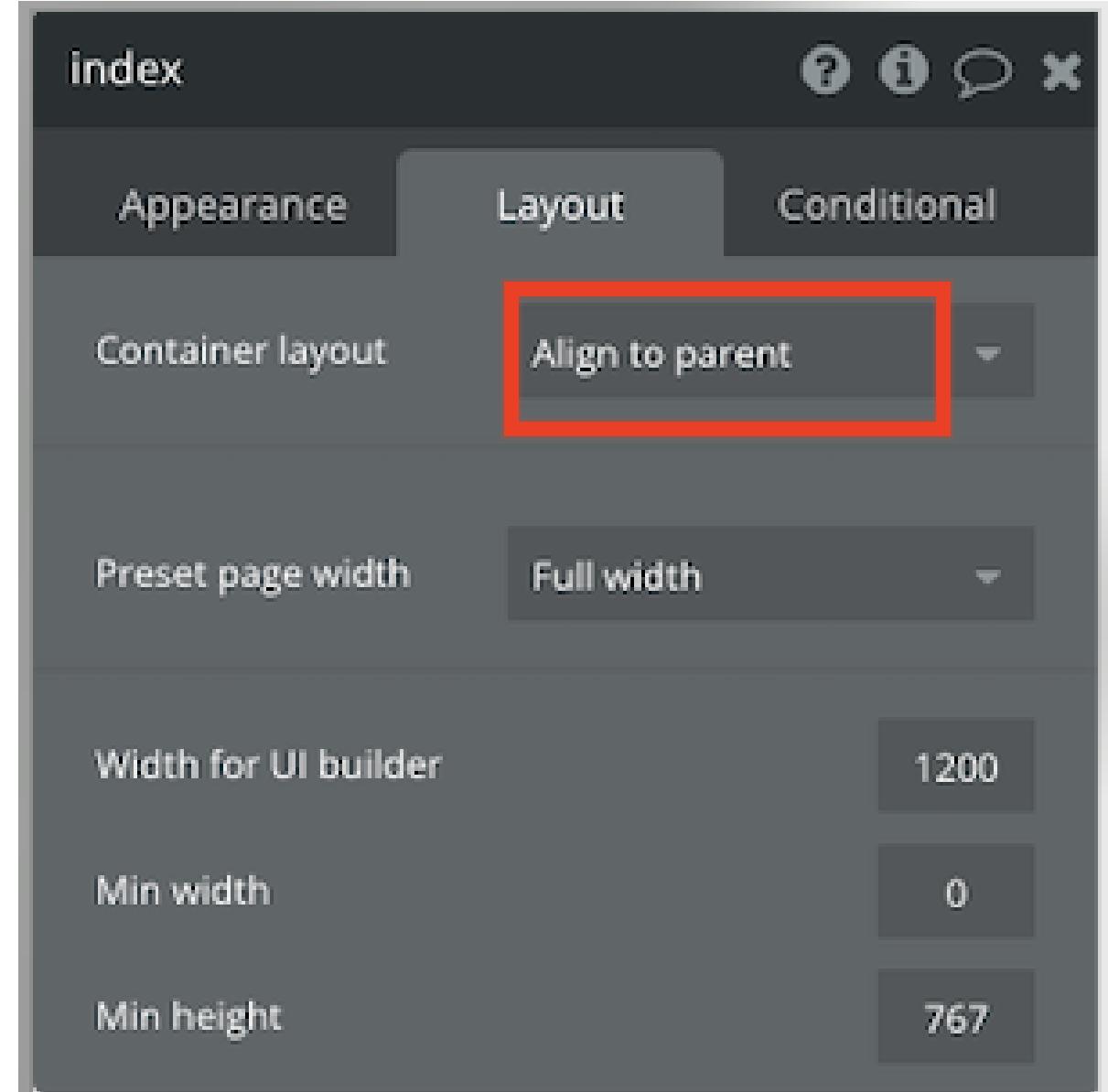
The screenshot shows the Bubble UI Builder interface. The left sidebar contains a navigation menu with sections like Design, Workflow, Data, Styles, Plugins, Settings, and Logs. The 'UI Builder' tab is selected. The main workspace displays a sign-up form titled "Sign up for My App". The form includes three input fields: "Email", "Password", and "Confirmation", followed by a checkbox for agreeing to terms and a "Sign up" button. Below the form, there is a link for existing users and a "Login" button. A red square highlight is placed over a blank area in the center of the workspace, indicating where to double-click to open the page settings.

- A settings window titled `index` should open.
- Open the tab called `Layout`
 - When opened, `Container layout` is set to `Fixed`.
 - This is the state of the fixed placement rule.
 - I'm going to change this.



Change the Container layout from Fixed to Align to parent

- Now the parent element (here the index page itself) has specified the rule that child elements should be positioned relative to each other.



Next, open the `Login Form` setting window.

- Click around the outer frame of the login form
 - If you move the mouse, some frames will appear, but the outer one will be the one.
- Make sure the window title is `Login Form`. Since the elements are nested, be careful not to open the setting window of another element.

Sign up for My App

Email

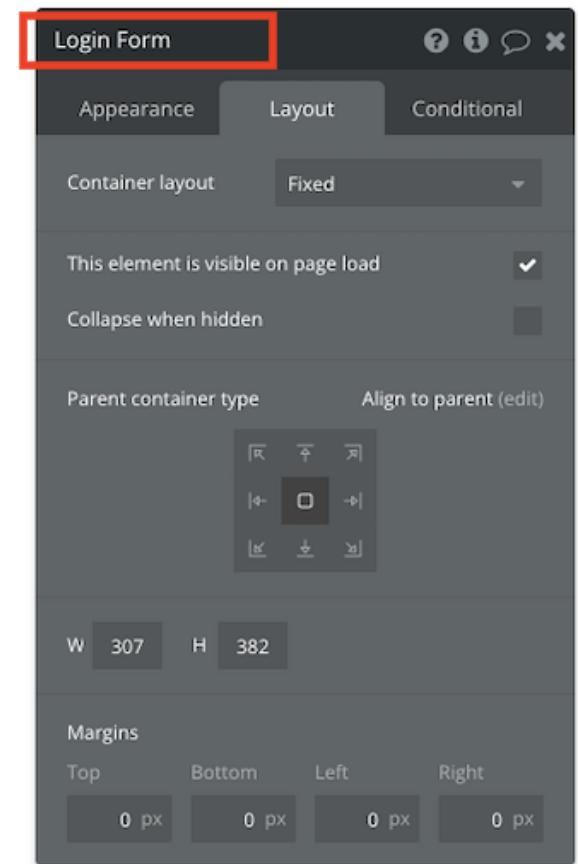
Password

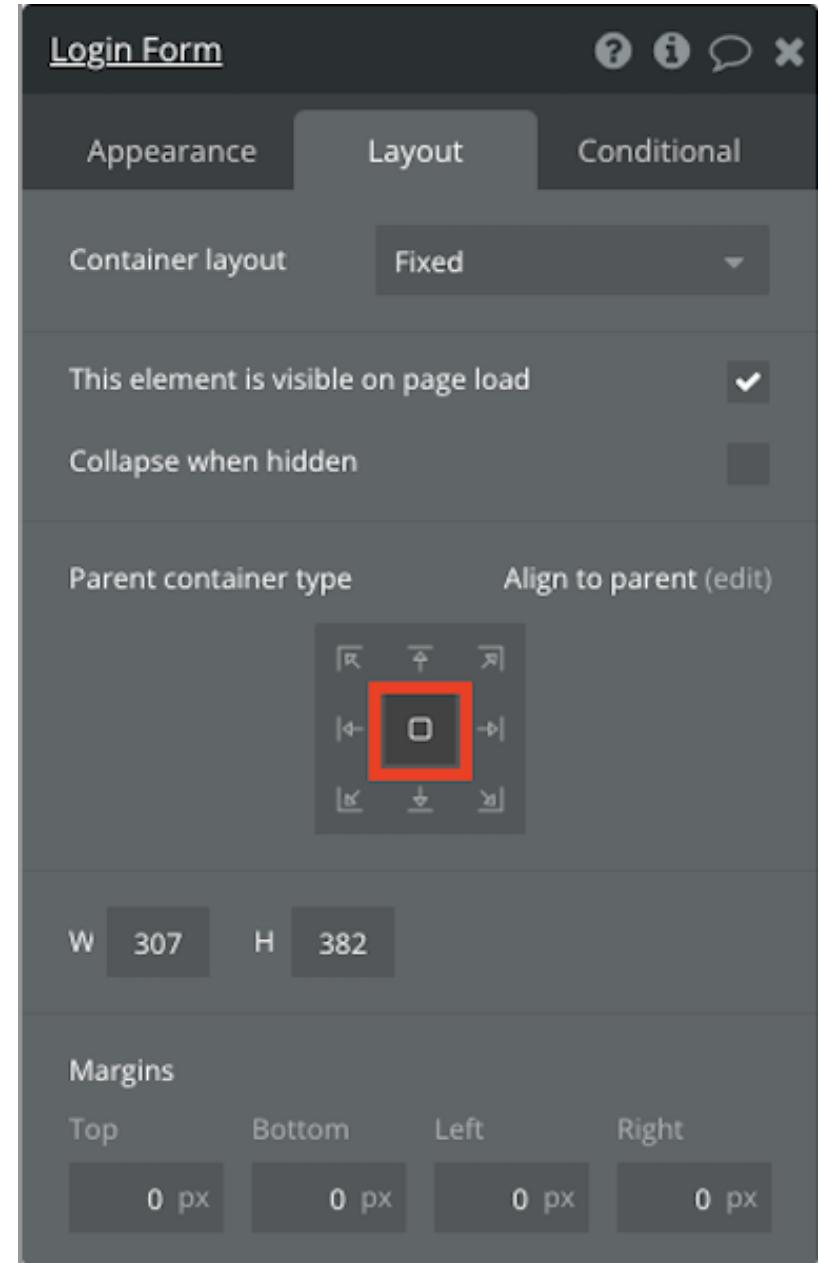
Confirmation

By signing up, I agree to the Privacy...

Sign up

Already have an account? [Login](#)





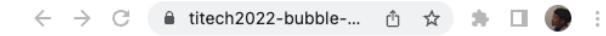
Center.

- Open the **Layout** tab in the **Login Form** settings window
- Select the center where the placement positions are lined up.

If you can specify it, let's check it in the preview.

Even if you reduce the width of the browser, it should now be centered on the screen.

Now you know how to use Align to parent, which was introduced as a placement rule within the parent element.



Sign up for My App

Email

Password

Confirmation

By signing up, I agree to the Privacy...

Sign up

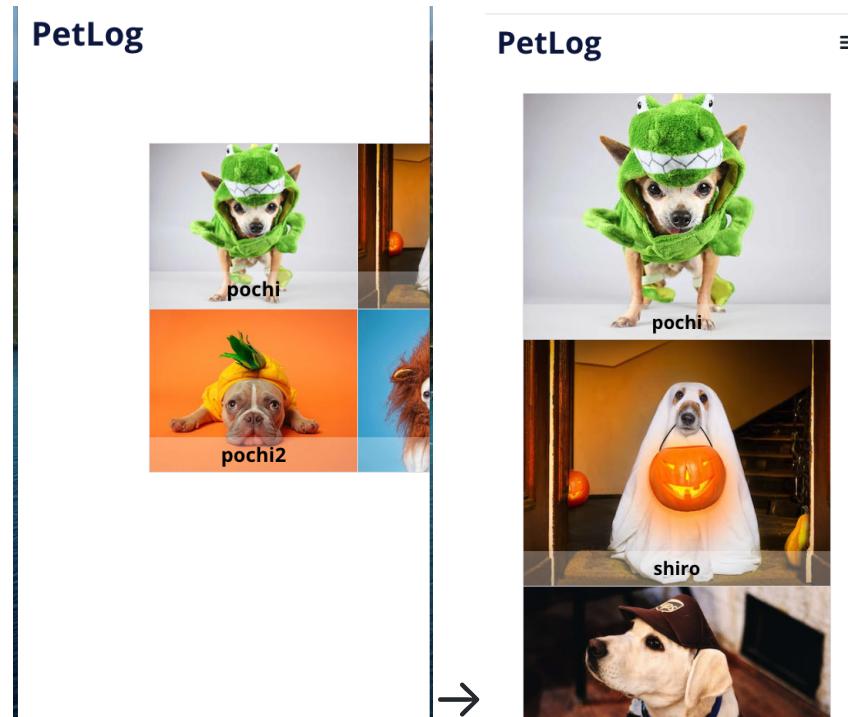
Already have an account? [Login](#)

The page is higher than your real design as the debugger is visible and displays a white area.
It will be back to normal when the debugger is off.

Apply responsive design to pet list page

Now it's time to apply a responsive design to the pet list page.

If it corresponds, the number of columns will change flexibly to the width of the screen, and you can see all pets in a list.

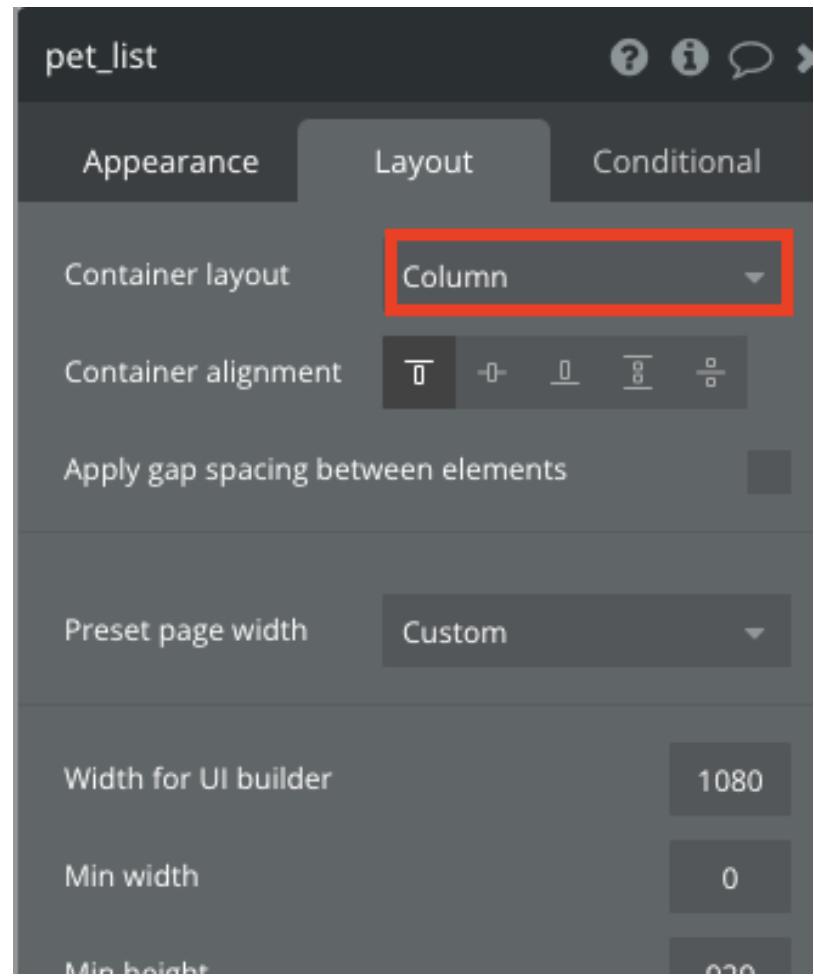


Use Column, which was introduced as a placement rule within the parent element. We will also combine the size specification and responsive settings specific to the repeating group.

Let's change the Container layout of the page in the same way as the login page.

This time, specify Column .

- Open pet_list screen
- Double click on a blank part of the page to open the settings window for the page itself
- Specify Layout tab of setting window
- Change Container layout to Column



By doing so, the elements on the screen are arbitrarily arranged vertically.

Child elements directly under the parent element set by `Column` are arranged in the column direction (vertical direction). We will use this arrangement as a base.

PetLog		
Current cell's Pets's Image	Current cell's Pets's Image	Current cell's Pets's Image
Current cell's Pets's Name	Current cell's Pets's Name	Current cell's Pets's Name

Next, we will set the repeating group.

- Open the setting window of the repeating group `pet list` and go to the `Layout` tab
- Enter the following settings
 - Horizontal alignment: `centered`



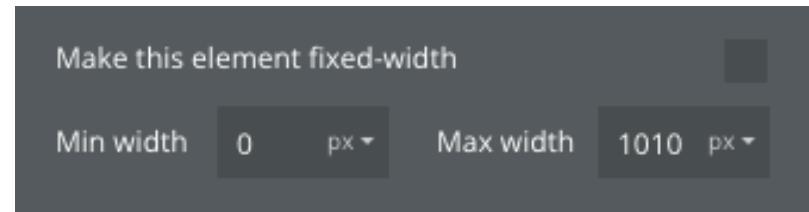
The elements directly under the pet list page are arranged in columns, but at that time, this repeating group will be aligned horizontally and centered.

Additionally, set the following

- Make this element fixed-width:
unchecked
- Min width: not specified
- Max width: 1010px

This repeating group does not have a fixed width, but rather expands and contracts according to the width of its parent element (here the screen itself).

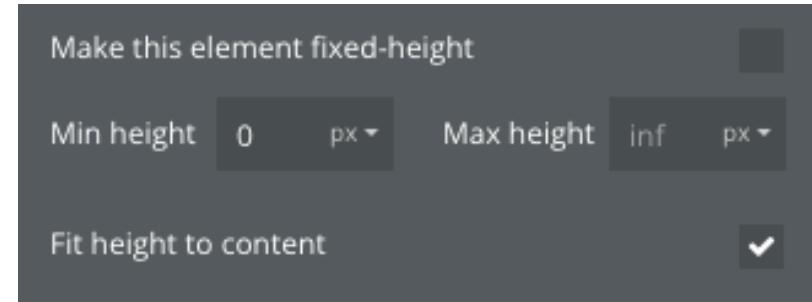
However, if it spreads too much, it becomes difficult to see, so the maximum width is set to 1010px.



Enter the following settings

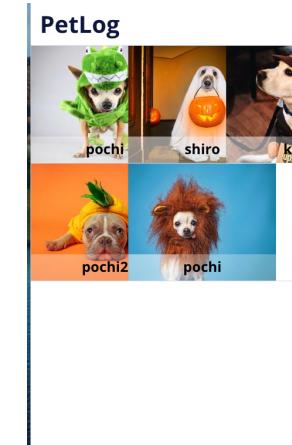
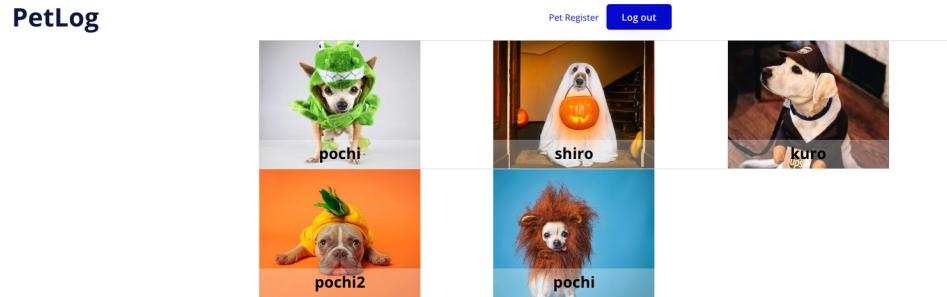
- Make this element fixed-height:
unchecked
- Min height: not specified
- Max height: Not specified (inf) *
Probably an abbreviation for
infinity
- Fit height to content: checked

The height of this repeating group is not fixed, and it is set to expand and contract according to the contents.



Now let's show a preview.

It's still ugly, but the repeating group should be centered and stretch horizontally and vertically.



However, the cell size is not the intended size, and the number of columns does not change. Let's set it up.

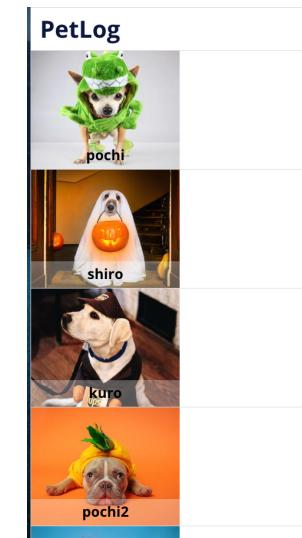
Now move to the **Appearance** tab of the repeating group's configuration window. We will set the following.

- Set fixed number of rows: unchecked
 - Min height of row: 200px
- Set fixed number of columns: unchecked
 - Min width of column: 250px

The number of columns and rows is not fixed, and the minimum width of rows and columns is specified. This allows the number of rows and columns to be flexibly switched depending on the size of the table while maintaining the minimum width.

Now let's see the preview.

It's still ugly, but the number of columns and rows now changes according to the width of the screen and the width of the table.

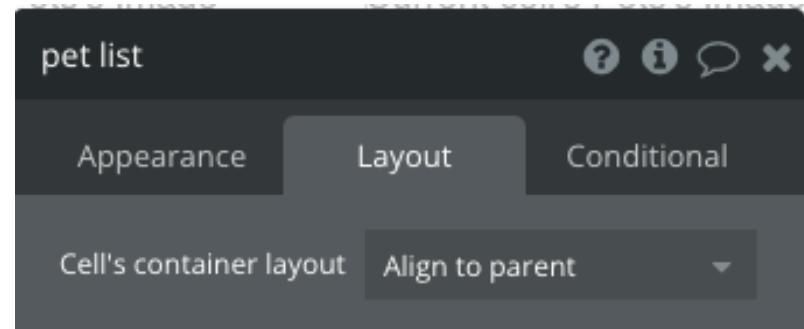


However, there are times when it's too far to the left in the cell, or when you reduce the width, you end up with an unintended margin. Let's fix it.

Also, go to the **Layout** tab in the Repeating Group's settings window. Set the following:

- Cell's container layout: Align to parent

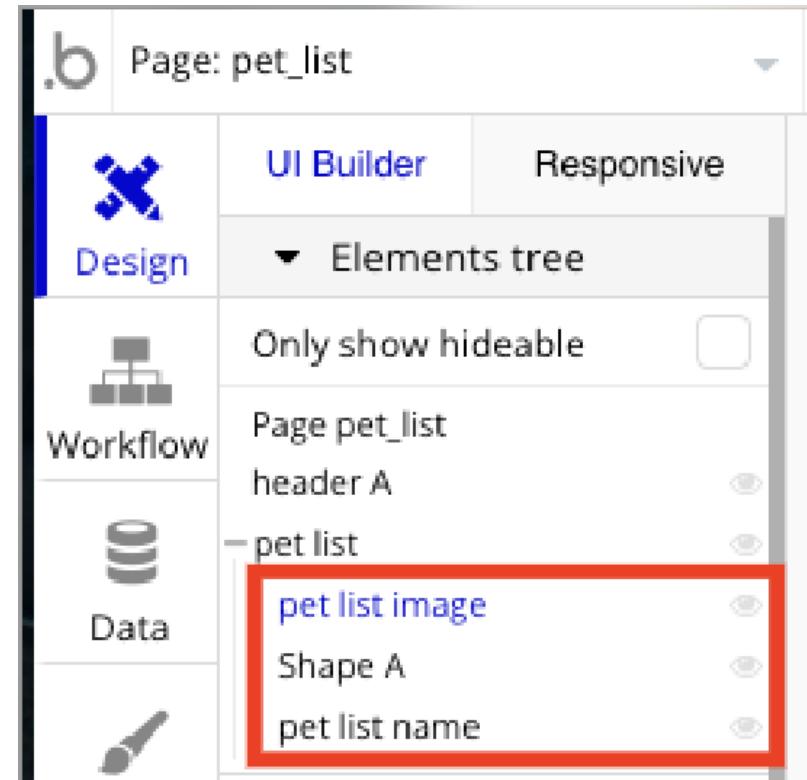
This is the setting used for the login page. Allows you to position elements relative to their parent element (here each cell of a repeating group).

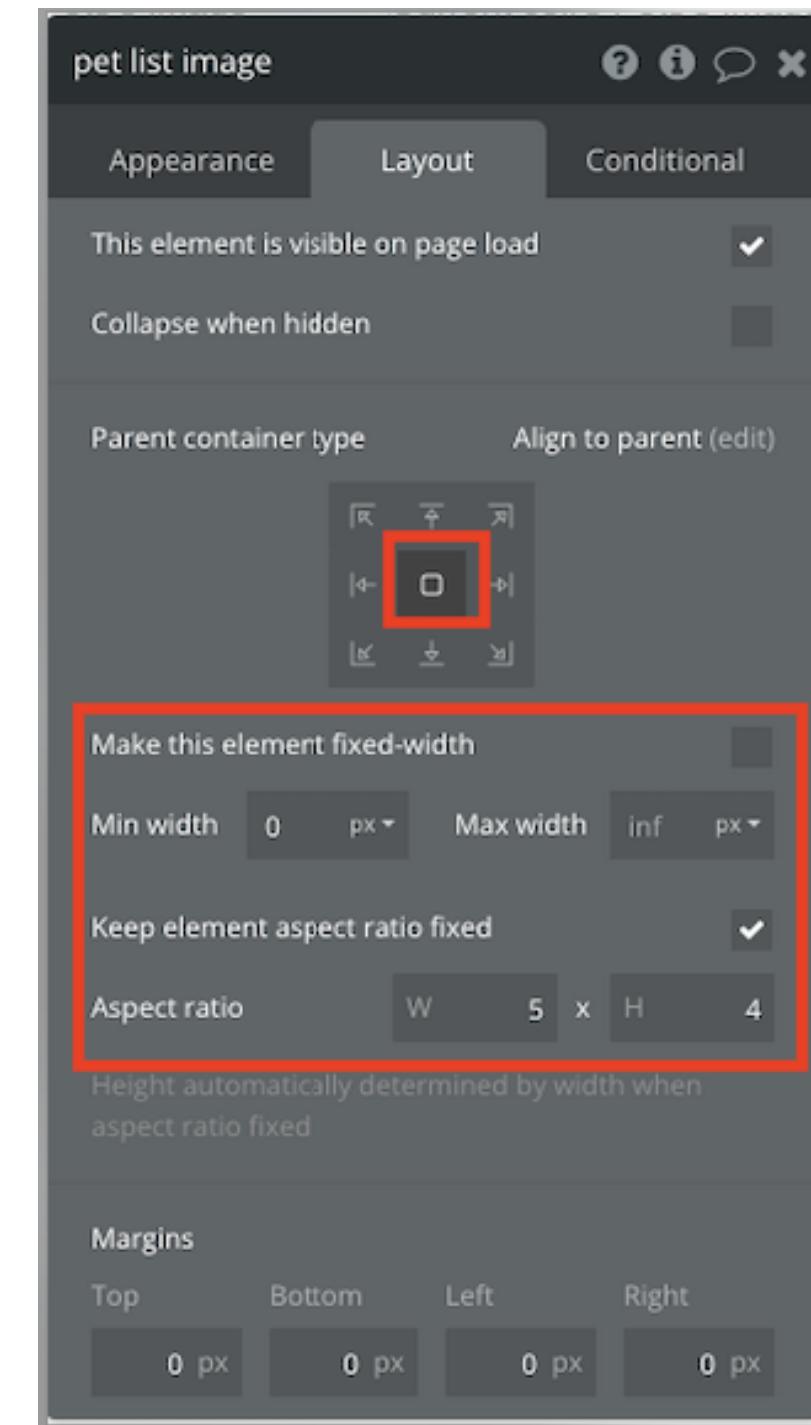


Next, we will lay out the elements inside the cell.

Since the elements overlap and it is difficult to select, specify from the **Elements tree** on the left side of the screen.

- There is a section called **Elements tree** at the top of **UI Builder** in the Design menu.
- Uncheck **Only show hideable** if it is checked.
- *If only **pet list** is displayed, click **+** to open the tree.





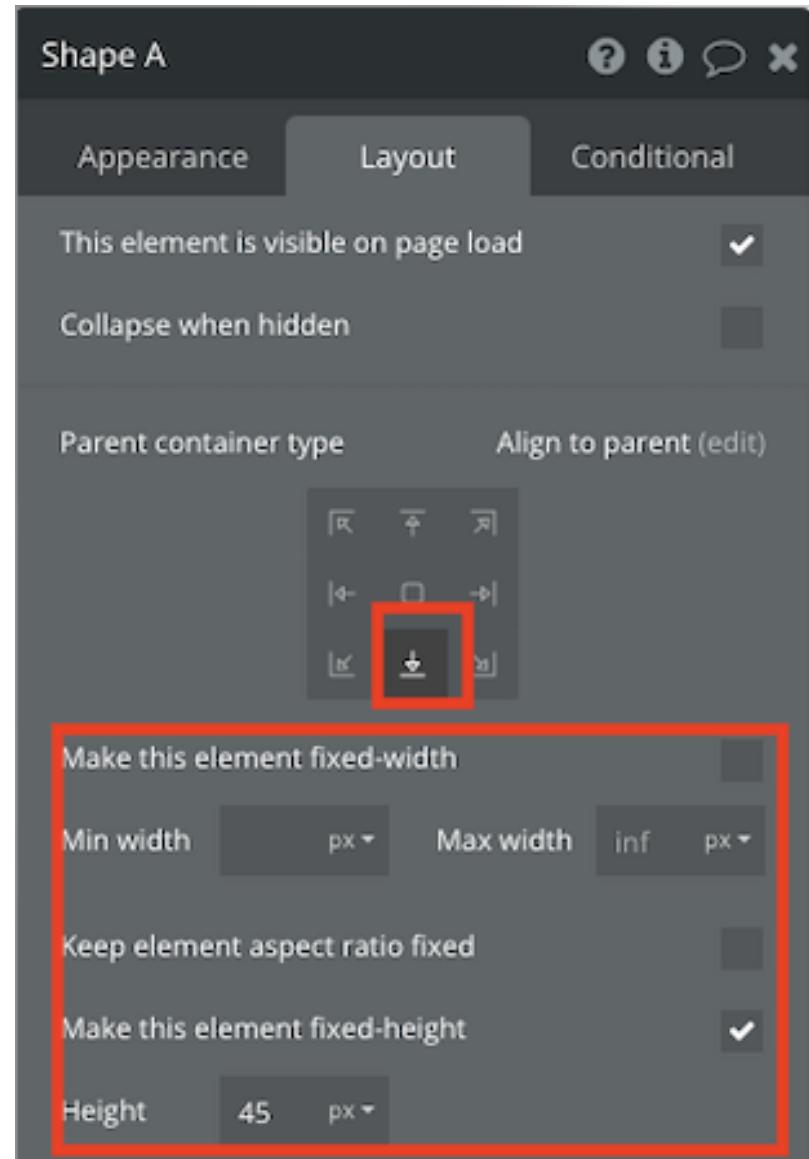
Now, let's set it in order from **pet list image**.

- Click the **pet list image** in the **Elements tree** to open the settings window
- In the **Layout** tab, set the same as the image on the right.

It is set to be placed in the center of the cell and to be displayed as large as possible while maintaining the aspect ratio of 4:5.

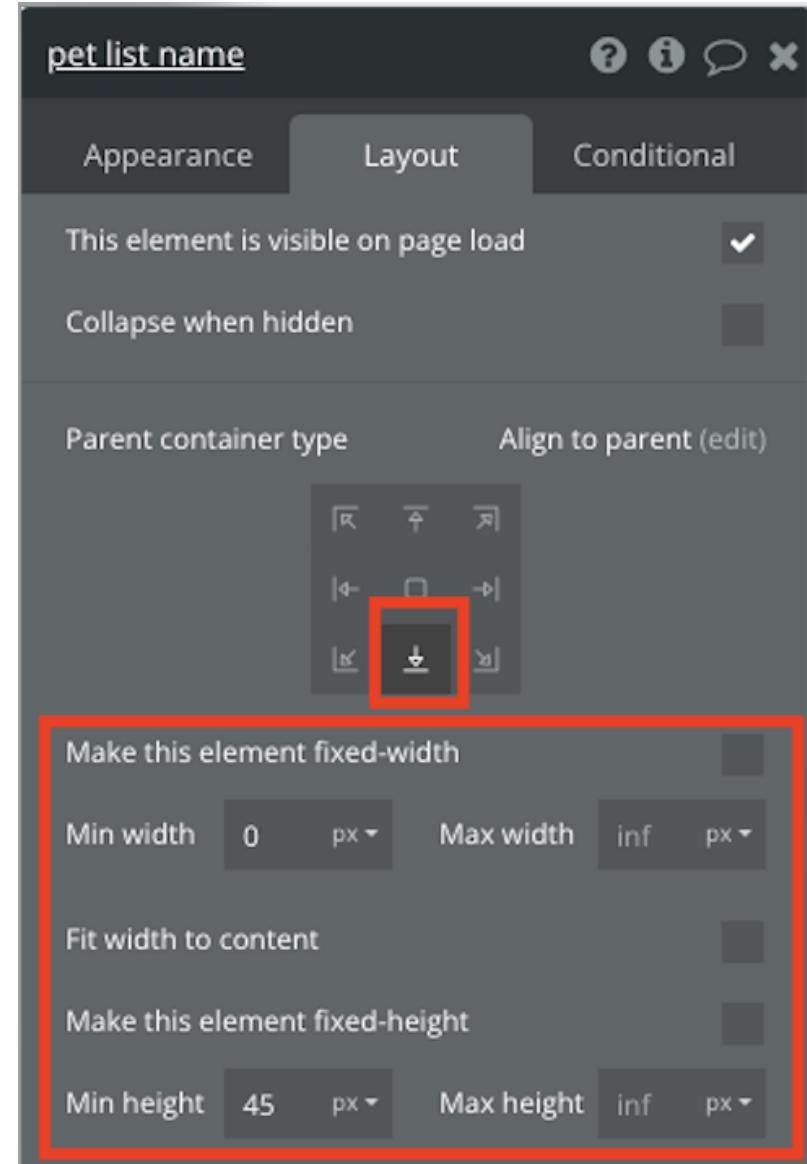
Next, put the same settings as the image on the right in **Layout** of **Shape A**.

It is set to be placed at the bottom of the cell and displayed as large as possible to the left and right while maintaining the height of 45px.



Next, put the same settings as the image on the right in the **Layout** of **pet list name**.

It is the same content as **Shape A**.



Preview.

It's a shame. I'm also worried about the position and margins of the header.

PetLog

Pet Register Log out

pochi shiro kuro pochi2

pochi

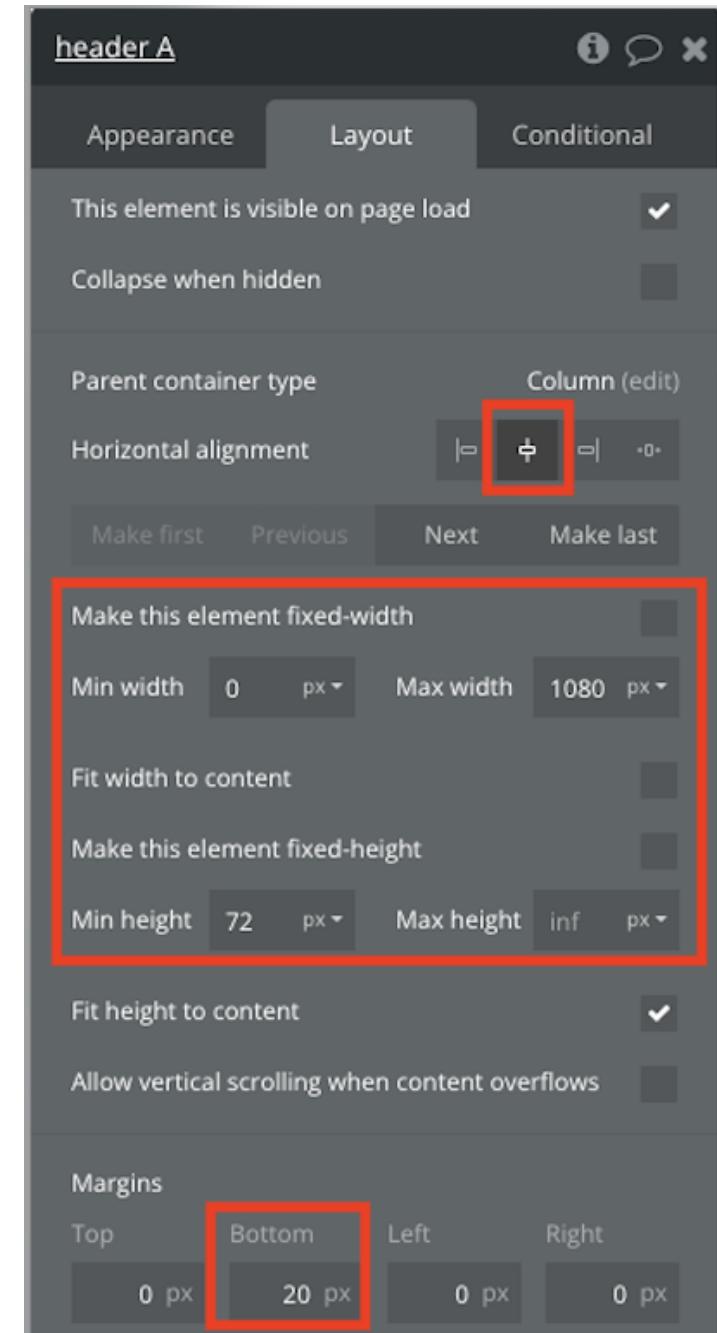
PetLog

pochi

shiro

Open the header setting window and put the right setting in Layout .

Centered when lined up in columns on a page. The width is not fixed and extends up to 1080px according to the page width. Leave a 20px margin at the bottom. That's the setting.

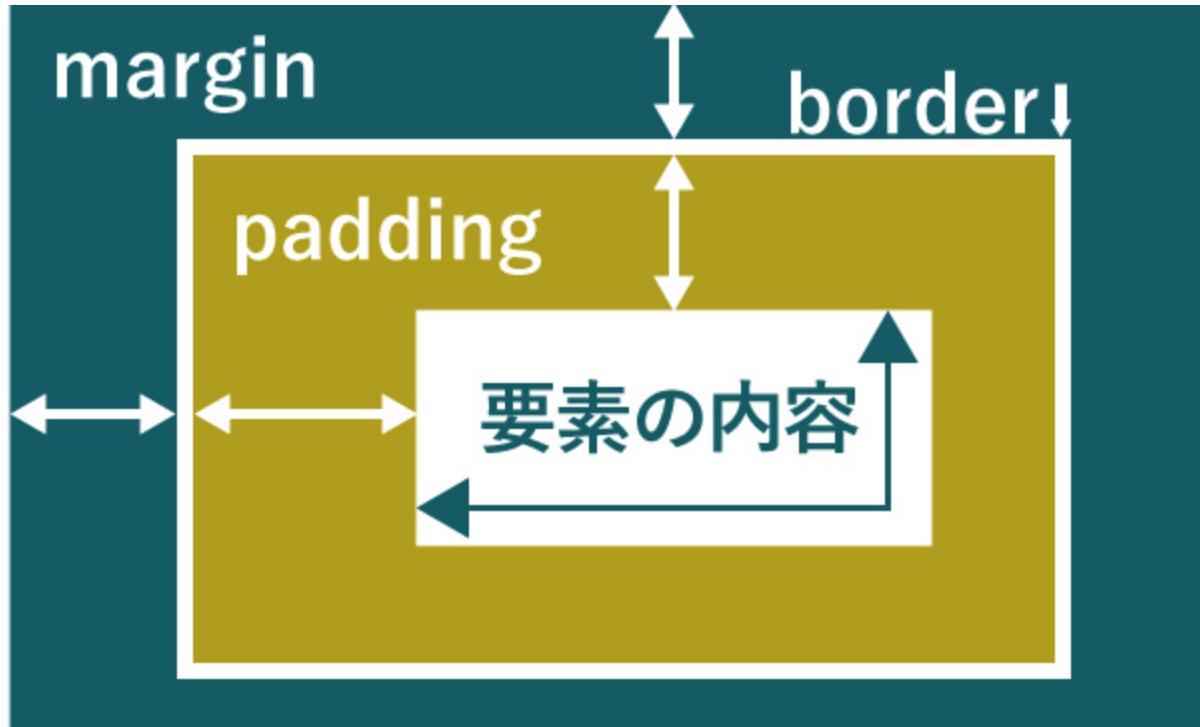


About Margin and Padding

Since the word "margin" is used for the first time, I will explain it.

There are two words for margins, Margin and Padding, which mean the following:

- Margin: Margin outside the bounds of the element
- Padding: padding inside the border of the element

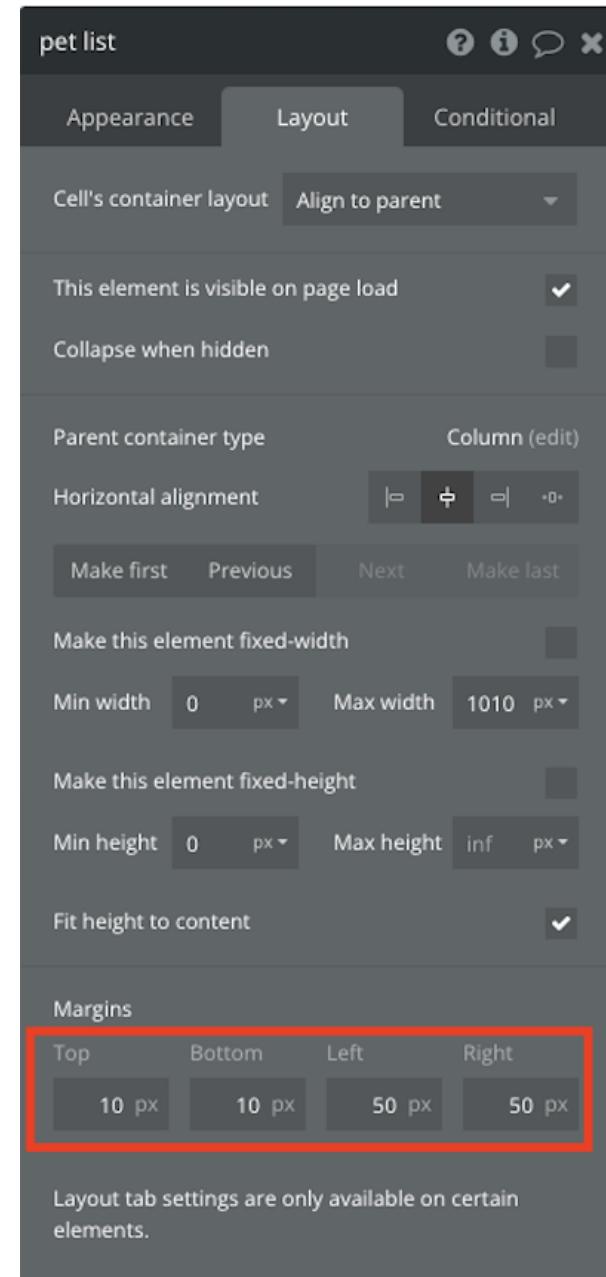


Please be aware when you want to use different margins inside and outside the border.

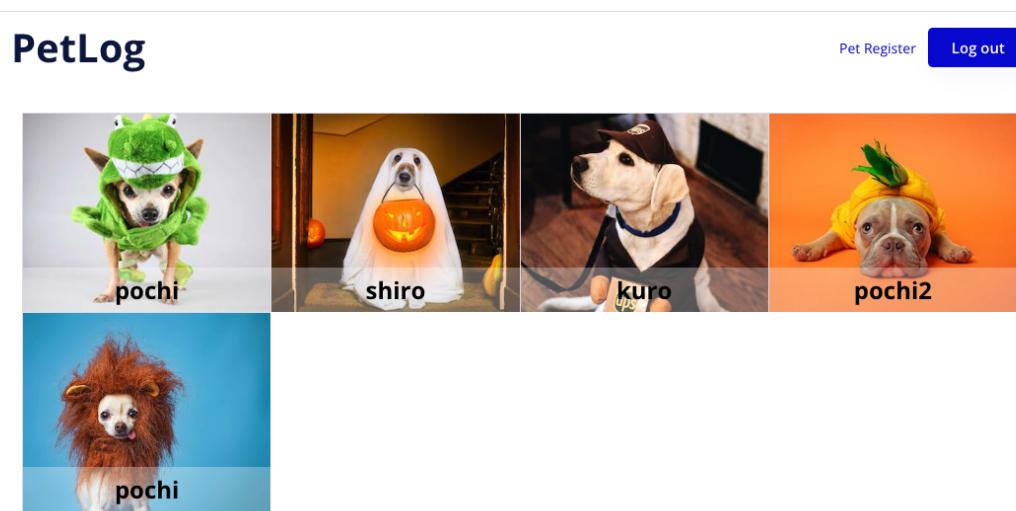
Also, add some space to the repeating group.

Set the following in the Layout tab of the repeating group.

The top and bottom margins are 10px, and the left and right margins are 50px.



Now let's preview.



Yay.

In addition, although the hamburger menu is displayed, please do not mind that it does not work.

Apply responsive design to pet detail screen

Since the pet details screen cannot make use of the size of the PC screen, let's make it responsive.

Multi-column settings are made using the Row arrangement rule within the parent element.

It also controls the visibility of elements.

PetLog

Pet Register Log out

← Back to list

Image


Name
pochi

Birthday
2022年11月23日

Gender
男の子

[Weight Logs](#)

← Back to list

PetLog

Pet Register Log out

← Back to list

Image

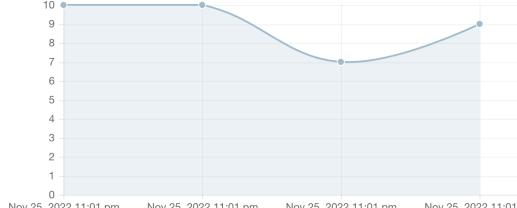

Name
pochi

Birthday
2020年8月18日

Gender
男の子

[Weight Logs](#)

← Back to list



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Combine the groups to create a column like this.

PetLog

[← Back to list](#) [Weight Logs](#)

Image
Current Page Pet's Image

Name
Current Page Pet's Name

Birthday
Current Page Pet's
Birthday: formatted as 2022年11...

Gender

A line chart showing weight logs over seven months. The Y-axis represents weight in kilograms, ranging from 0 to 90. The X-axis represents the months from January to July. The data shows a peak in weight during March and April, followed by a gradual decline through July.

Month	Weight (kg)
January	65
February	60
March	80
April	82
May	55
June	55
July	40

I feel like this.

PetLog

[← Back to list](#)



Name

pochi

Birthday

2020年8月18日

Gender

男の子



[Pet Register](#)

[Log out](#)

[Weight Logs](#)

PetLog

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[Weight Logs](#)

Image



Name

pochi

Birthday

2020年8月18日

Gender

男の子

First of all, we will create such a group.

Group (Row Container)

Group (Fixed Container)
Image

Current Page Pets's Image

Group (Fixed Container)

Name

Current Page Pets's Name

Birthday

Current Page Pets's
Birthday:formatted as 2022年11...

Gender

Group (Row Container)

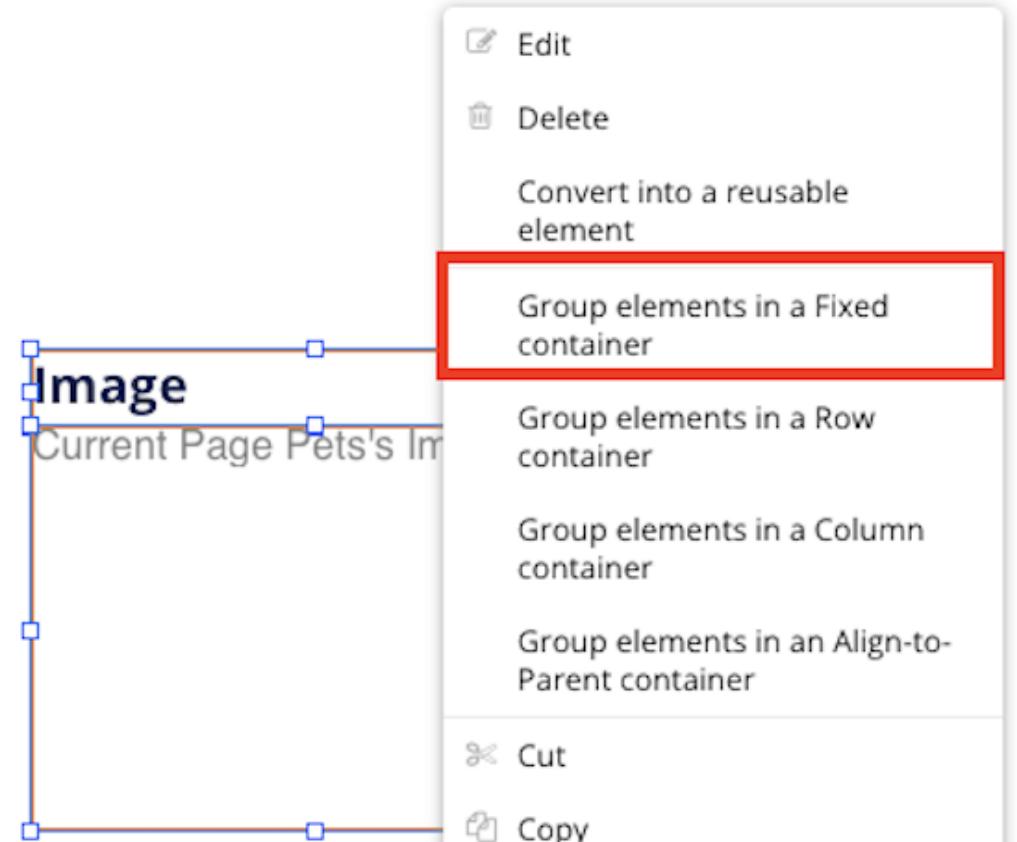
Weight Logs

← Back to list

We want to separate the image area and the text area, so create a group for each.

- Drag and select image label and image display part
- Right-click (or double-tap) to bring up the menu
- Specify Group elements in a Fixed container .

A group is created containing the selected elements. Since it is created as a fixed placement (Fixed) group, it will be a fixed placement within the group.



Similarly, drag the Name, Birthdate, and Gender elements to create a Fixed group.

Image

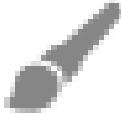
Current Page Pets's Image

- Edit
- Delete
- Convert into a reusable element
- Group elements in a Fixed container
- Group elements in a Row container
- Group elements in a Column container
- Group elements in an Align-to-Parent container
- Cut
- Copy
- Paste
- Select all
- Copy with workflows
- Paste with workflows
- Bring to front
- Send to back
- Center horizontally
- Center vertically
- Align left
- Align horizontal centers
- Align right



Give the created group a name for easy identification later.

- Click a group from the **Elements tree** to bring up the settings window
- Click the title part of the setting window to change the name
 - Group A → Image Group
 - Group B → Text Group

	UI Builder	Responsive
 Design	▼ Elements tree	
	Only show hideable	<input type="checkbox"/>
	Page pet_detail	
	Link ← Back to list	
	header A	
	Link Weight Logs	
+ Group A		
+ Group B		

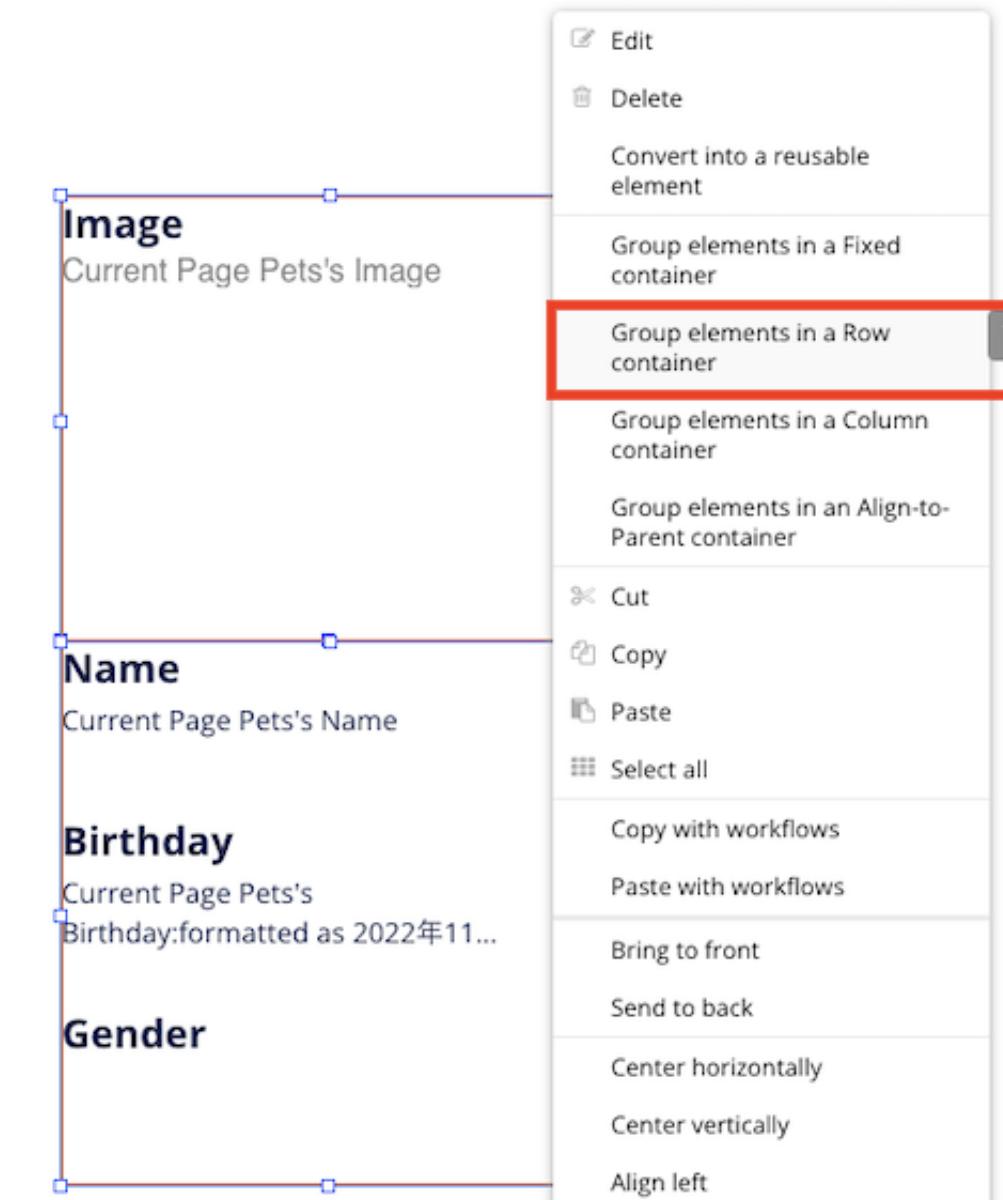
Also, if the group and the element are exactly overlapping, it will be difficult to select the group later when you want to select it, so let's expand the group a little.

- Click a group from the `Elements tree` to bring up the settings window
- Drag the squares on the edges of the Group's elements to widen them



Next, since we want to create a column with image areas and text areas side by side, select **Image Group** and **Text Group** to create more groups.

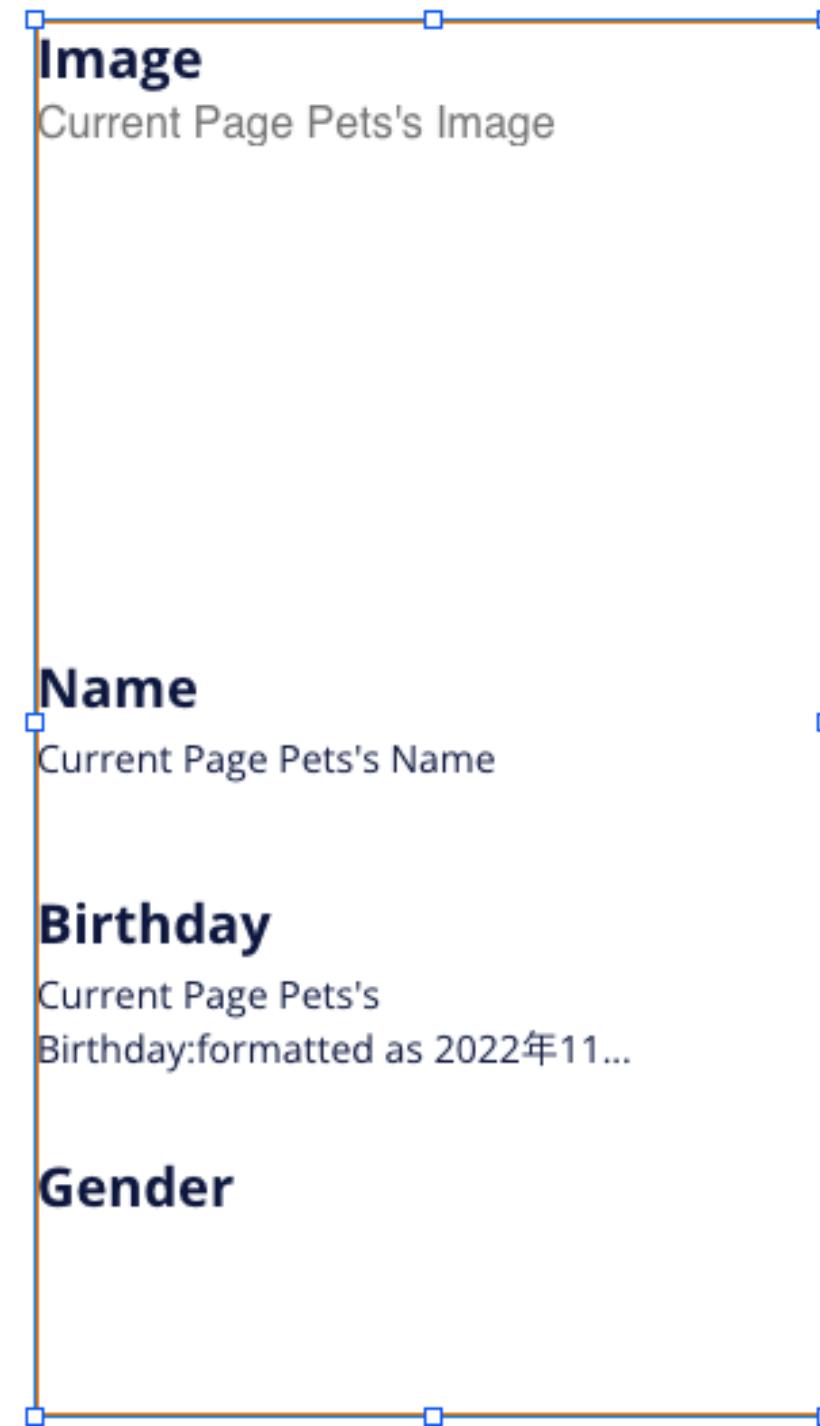
- Select **Image Group** (I made it a little bigger so it's easier to select)
- Select **Text Group** while holding down Shift (two groups are selected)
- Right-click (or double-tap) to bring up the menu
- Specify **Group elements in a Row container**.



Let's spread it out a bit again so that it's easier to select the group later.

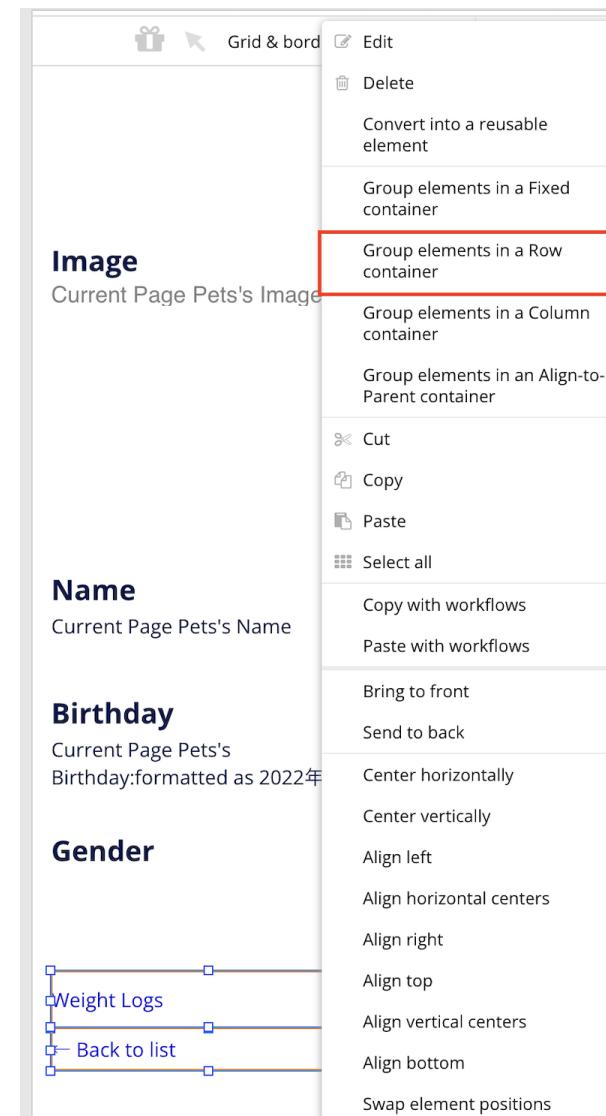
By specifying `Row` for the group, it becomes a group that arranges child elements in the row direction (horizontal direction).

Lines are automatically wrapped, and in the state created here, the width of the group is small, so it will be wrapped. If you widen the width enough to test, it will line up in the row direction.



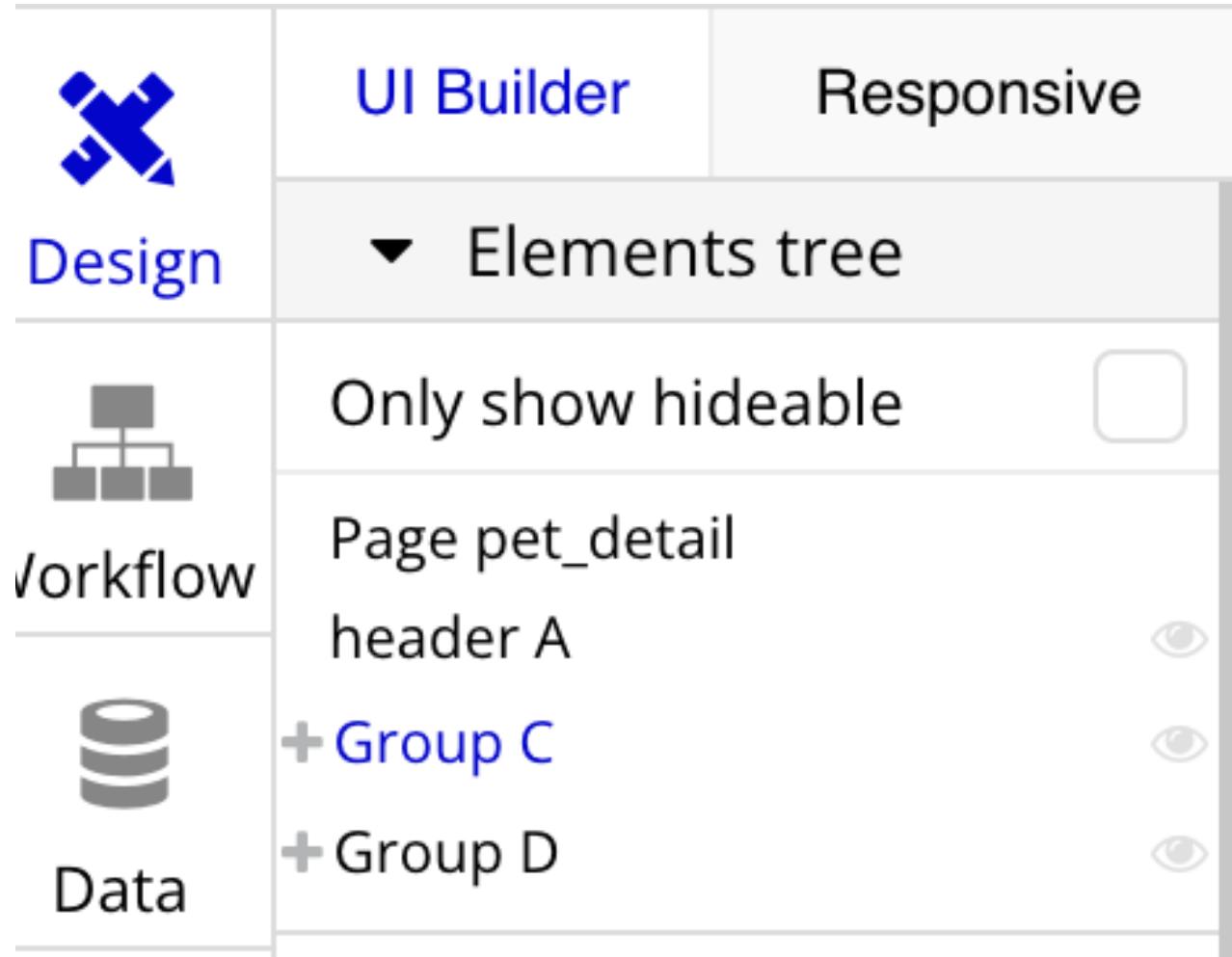
We want to create a column so that the **Weight Logs** link and the **Back to list** link line up side by side, so we will create a group.

- Select the **Weight Logs** link
- Shift-select the **Back to list** link
- Right-click (or double-tap) to bring up the menu
- Specify **Group elements in a Row container**.
- Spread it out a little more



Give the created group a name for easy identification later.

- Click a group from the **Elements tree** to bring up the settings window
- Click the title part of the setting window to change the name
 - Group C → **Contents Group**
 - Group D → **Navigation Group**



I've created a lot of groups, and if all went well, they should look like the one on the right.

Group (Row Container)

Group (Fixed Container)
Image

Current Page Pets's Image

Group (Fixed Container)

Name

Current Page Pets's Name

Birthday

Current Page Pets's
Birthday:formatted as 2022年11...

Gender

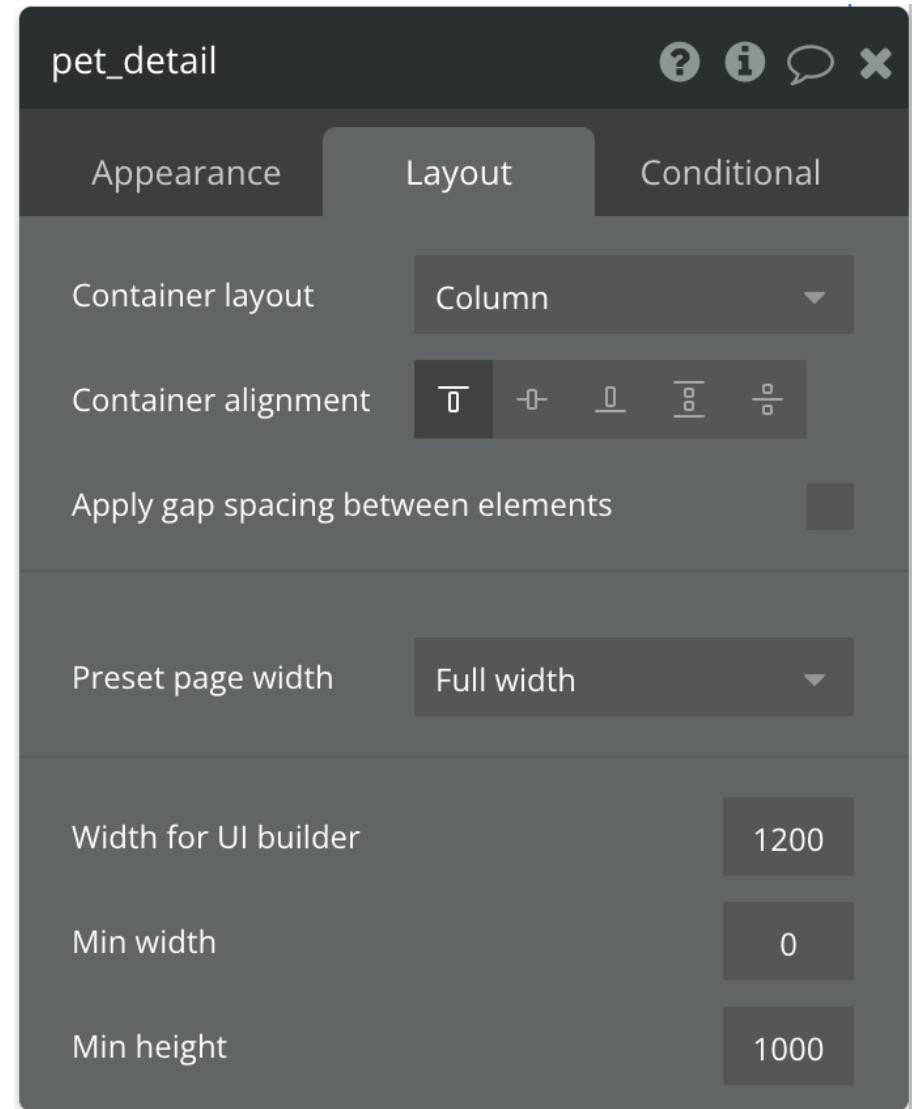
Group (Row Container)

Weight Logs

← Back to list

Specify the `pet_detail` page itself as the `Column`.

- Click an empty part of the screen to select `pet_detail`
- Open `Layout` tab
- Specify `Column` for `Container layout`



PetLog

Image

Current Page Pets's Image

Name

Current Page Pets's Name

Birthday

Current Page Pets's
Birthday:formatted as 2022年11...

Gender

Weight Logs

← Back to list

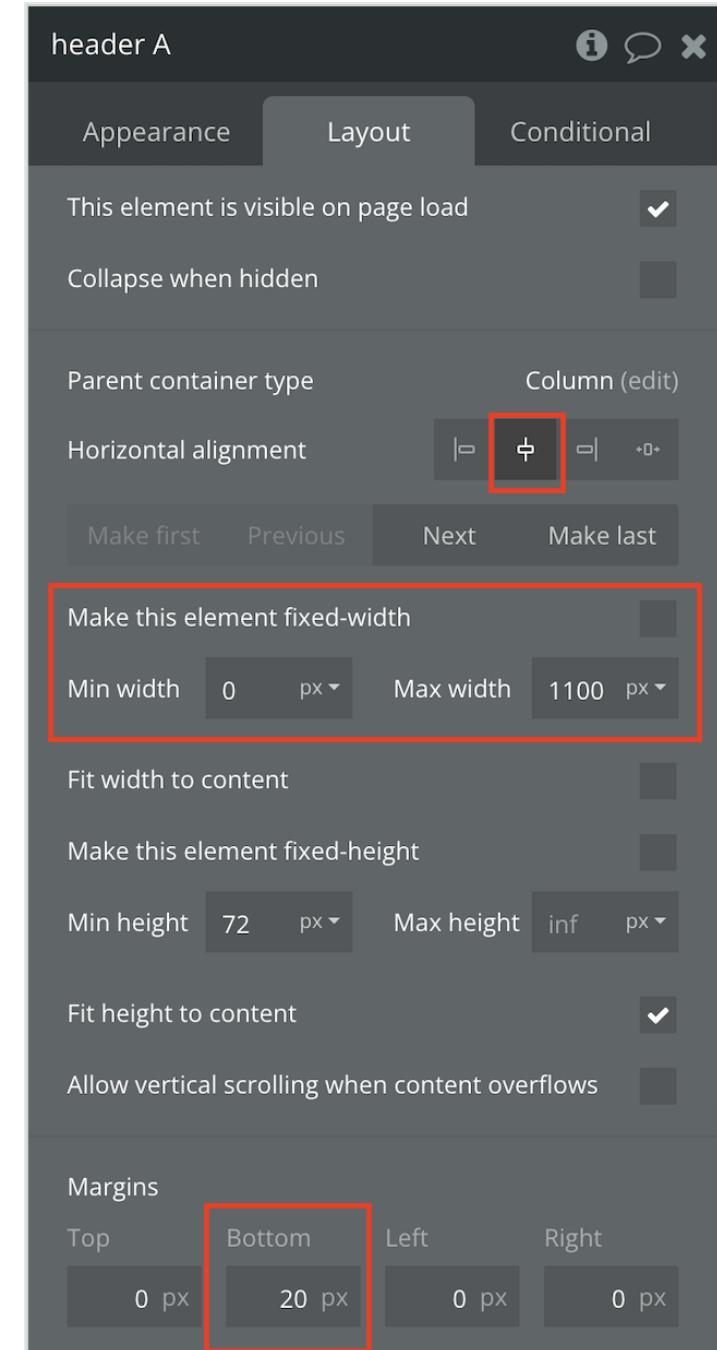
Then the elements should be aligned vertically by the left side.

By specifying `Column`, it is in a state of being aligned in the column direction.

Select the header (header A) and specify the Layout as shown on the right.

I understand what you mean by settings.

- When aligning in the column direction, align to the center with respect to the parent element
- Width expands and contracts up to 1100px to match the parent element.
- Leave a 20px margin on the bottom.

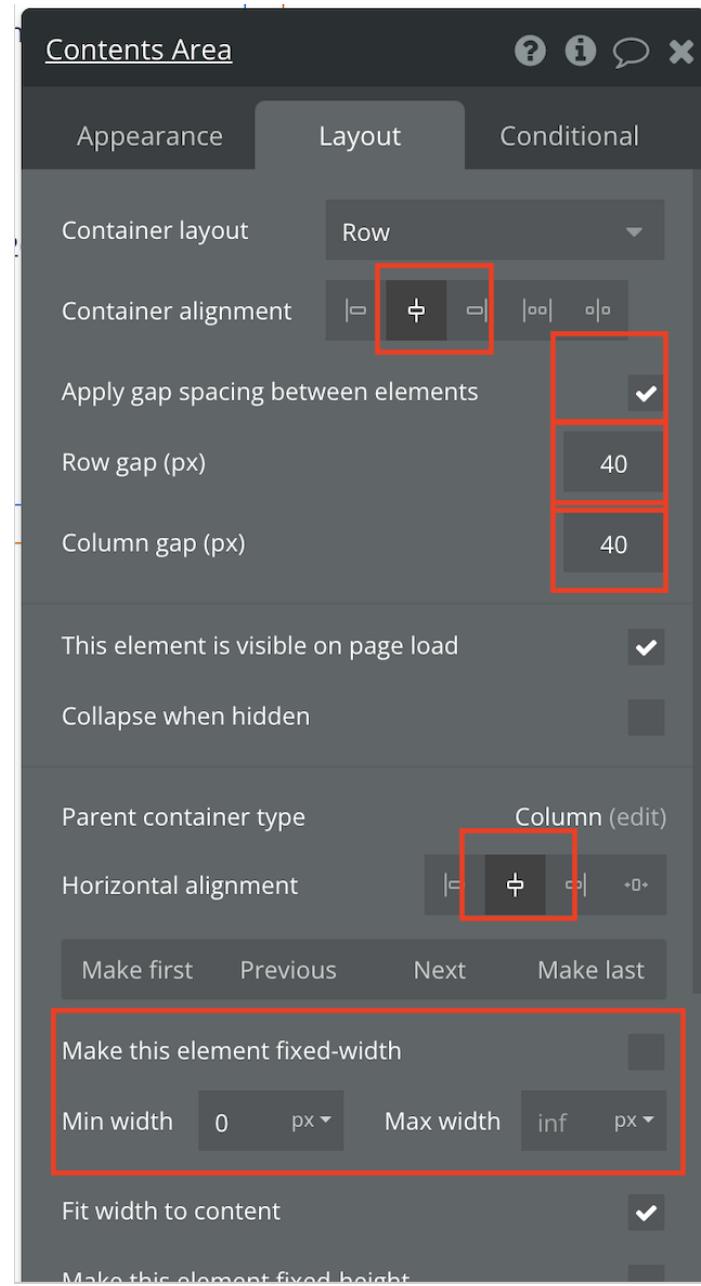


Select **Contents Area** and specify

Layout as shown on the right.

You've got a new setting. It has the following meanings.

- When aligning in the row direction, the child elements (**Image Area** and **Text Area** here) should be centered.
- Use 40px line and column spacing between elements when aligning child elements.
- Align to the center when aligning in the column direction with respect to the parent element.
- The width expands and contracts according to the parent element.



Appearance

Layout

Conditional

Parent container type

Column (edit)

Horizontal alignment



Make first Previous Next Make last

Make this element fixed-width

Min width 0 px Max width inf px

Fit width to content

Make this element fixed-height

Min height 0 px Max height inf px

Fit height to content

Allow vertical scrolling when content overflows

Margins

Top	Bottom	Left	Right
20 px	20 px	20 px	20 px

Padding

edit style →

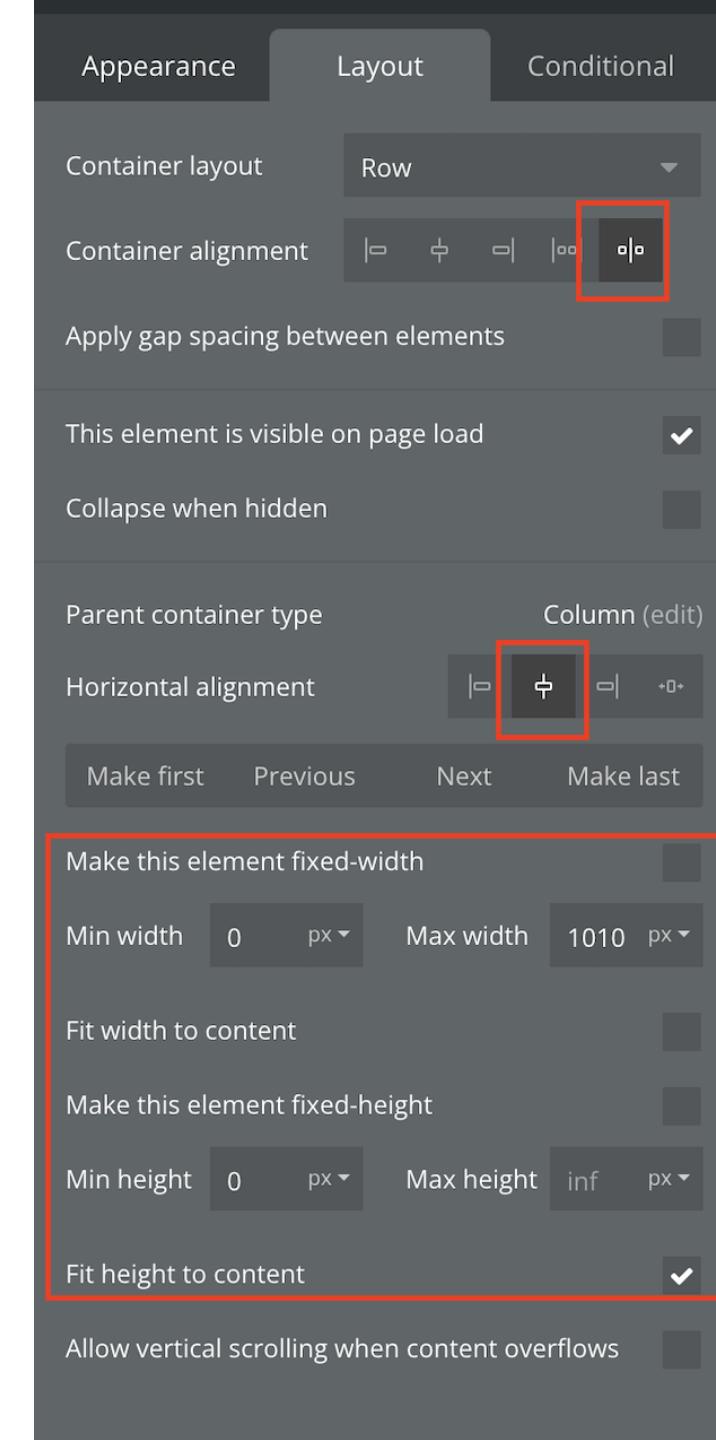
Top	Bottom	Left	Right
0 px	0 px	0 px	0 px

Also specify margins.

Next, select **Navigation Area** and specify Layout as shown on the right.

It has the following meanings.

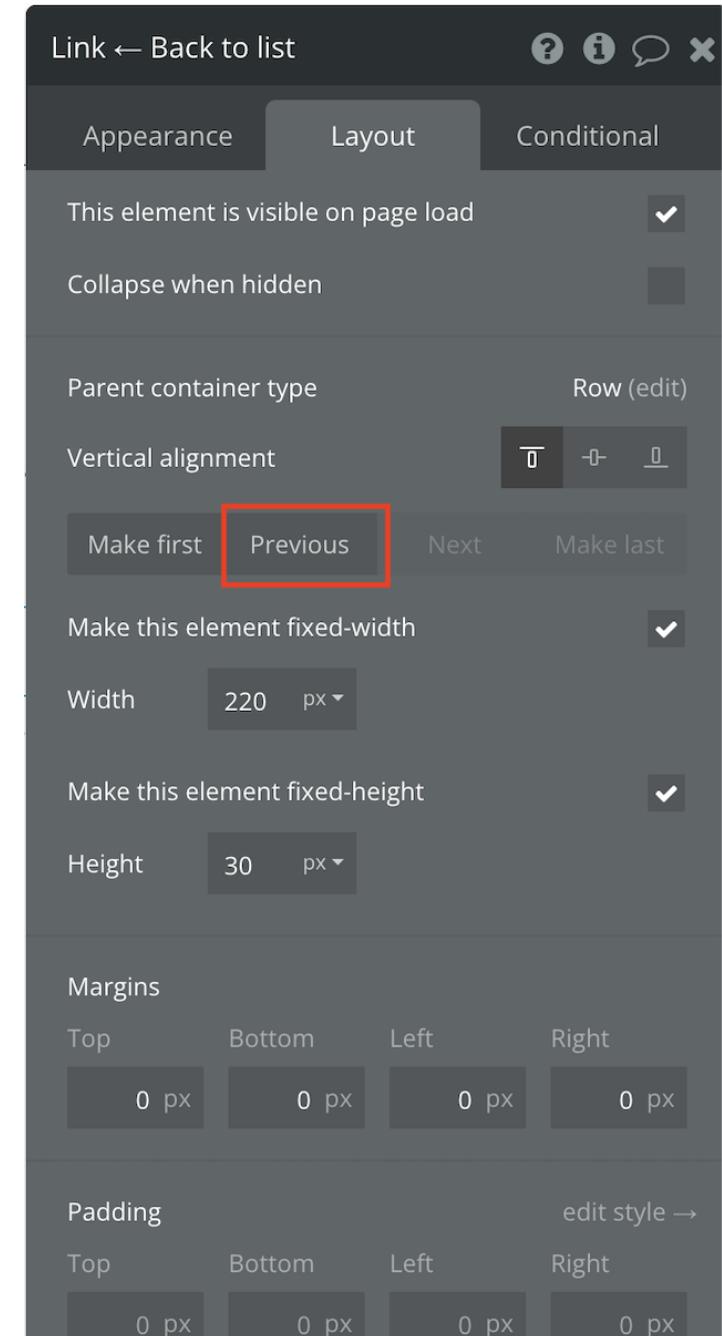
- Spread child elements horizontally when aligned horizontally.
- Align to the center when aligning in the column direction with respect to the parent element.
- Width expands and contracts according to the parent element.
- Vertical width stretches and shrinks according to the content.

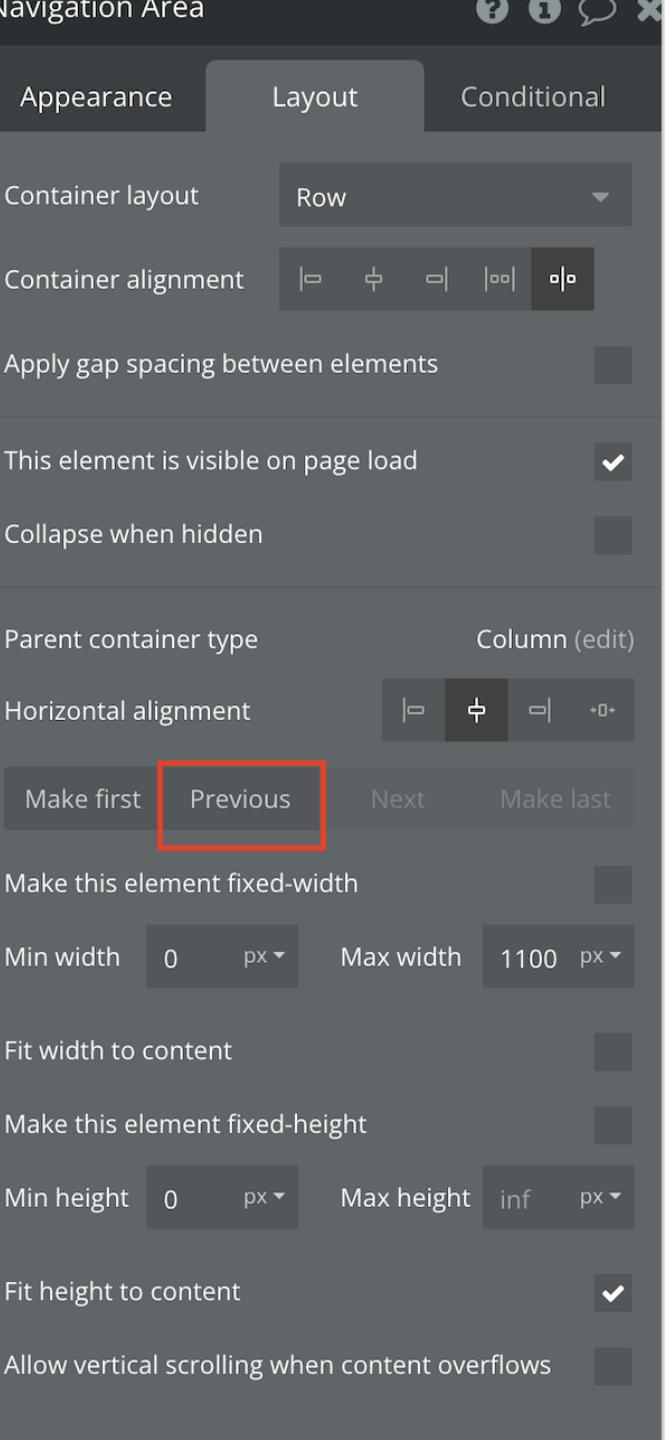


Rearrange the positions of the `Back to list` and `Weight Logs` links.

- Select the `Back to list` link to open the settings window
- Open `Layout` tab
- Press the `Previous` button

In this way, you can change the sort order within the parent element specified by `Row` or `Column`. You can also change it by dragging, but this is easier to specify because it may be moved outside the group.





Similarly, rearrange the positions of the **Contents Group** and **Navigation Group**.

- Select the **Navigation Group** link to open the settings window
- Open **Layout** tab
- Press the **Previous** button

Let's preview.

I'm a little worried about the details, but I've created a multi-column layout.

Smartphones are arranged vertically.

PetLog

[← Back to list](#)

Image



Name

pochi

Birthday

2020年8月18日

Gender

男の子

[Pet Register](#)

[Log out](#)

[Weight Logs](#)

PetLog

[← Back to list](#)

[Weight Logs](#)

Image



Name

pochi

Birthday

2020年8月18日

Gender

男の子

<Excercercises>

If you are concerned about the subtleties of the layout, try the following.

- Make the width of `Back to list` link and `Weight Logs` link expand and contract according to the content.
- Leave margins on the left and right of the `Navigation Area`.
- Increase image size and align text

I feel like this.

PetLog

[← Back to list](#)



Name

pochi

Birthday

2020年8月18日

Gender

男の子

[Pet Register](#)

[Log out](#)

[Weight Logs](#)

PetLog

[← Back to list](#)

[Weight Logs](#)



Name

pochi

Birthday

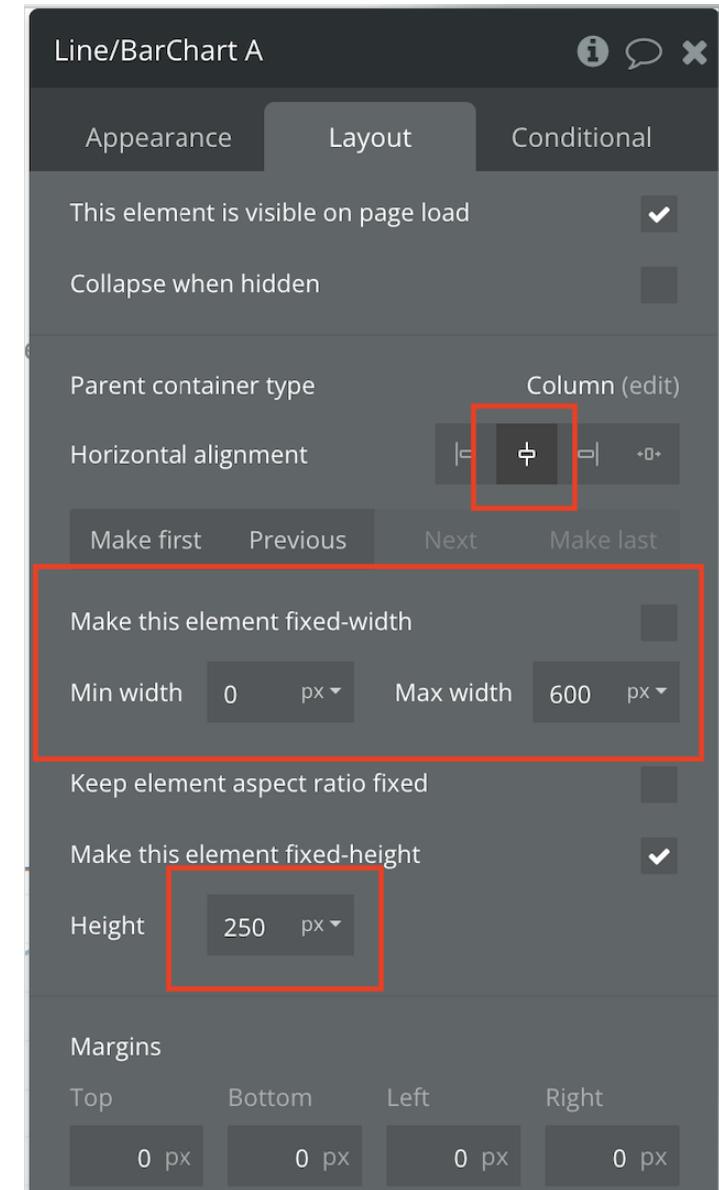
2020年8月18日

Gender

男の子

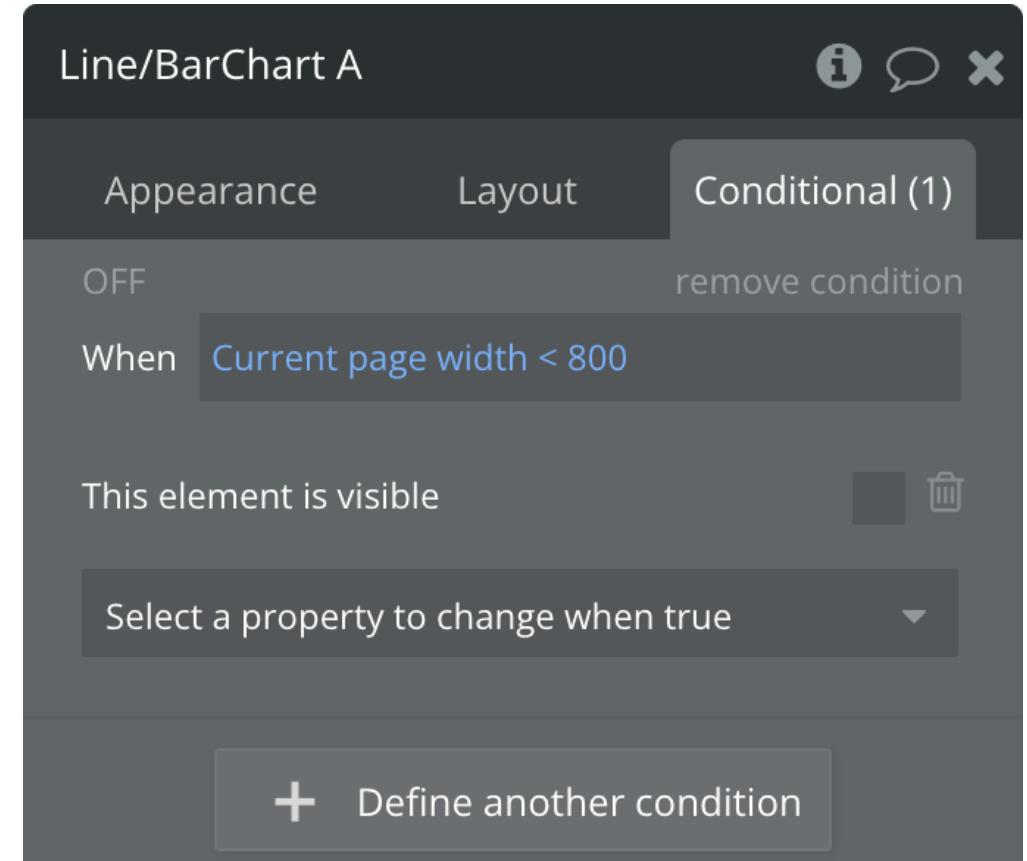
Next comes the weight graph

- On the pet_weight_register screen, click and copy the graph
- paste on pet_detail screen
- Press **Next** in **Layout** to place it at the bottom
- In addition, specify other items of **Layout** as shown in the right figure



It's cramped to display the graph on one screen on a smartphone, so when the screen width is small, it's not displayed.

- Open the graph settings window and open the **Conditional** tab
- Create a new condition and specify **Current page width**, **<, 800** in **When**. It means that the current screen size is smaller than 800.
- Define what changes to make in that case. Select **This element is visible** and leave it unchecked



Let's preview.

PetLog

[← Back to list](#)



Name

pochi

Birthday

2020年8月18日

Gender

男の子



[Pet Register](#)

[Log out](#)

[Weight Logs](#)

PetLog

[← Back to list](#)



[Weight Logs](#)



The graph is not displayed on the smartphone display.

Frequently used rules (review)

In order to achieve responsive design with Bubble, there are the following rules that are often used.

1. Placement rules within parent elements
2. Element sizing rules
3. Display presence/absence rules

I combined these and applied a responsive design.

Let's use Style

Let's use Style

- Up until now, we've been using the styles that Bubble provides as standard.
- For the actual product, we draw and apply the design concept that matches the product.
- I will explain how to change the style from here

There are three ways to apply Style

- Edit existing styles
- Apply styles individually
- add new styles

let's go in order

edit an existing style

I would like to modify an existing style to change the color of buttons and links.

PetLog

[Pet Register](#)

[Log out](#)

[← Back to list](#)

[Weight Logs](#)

Image



Name

pochi

Birthday

2020年8月18日

Gender

男の子



Let's use Style variables

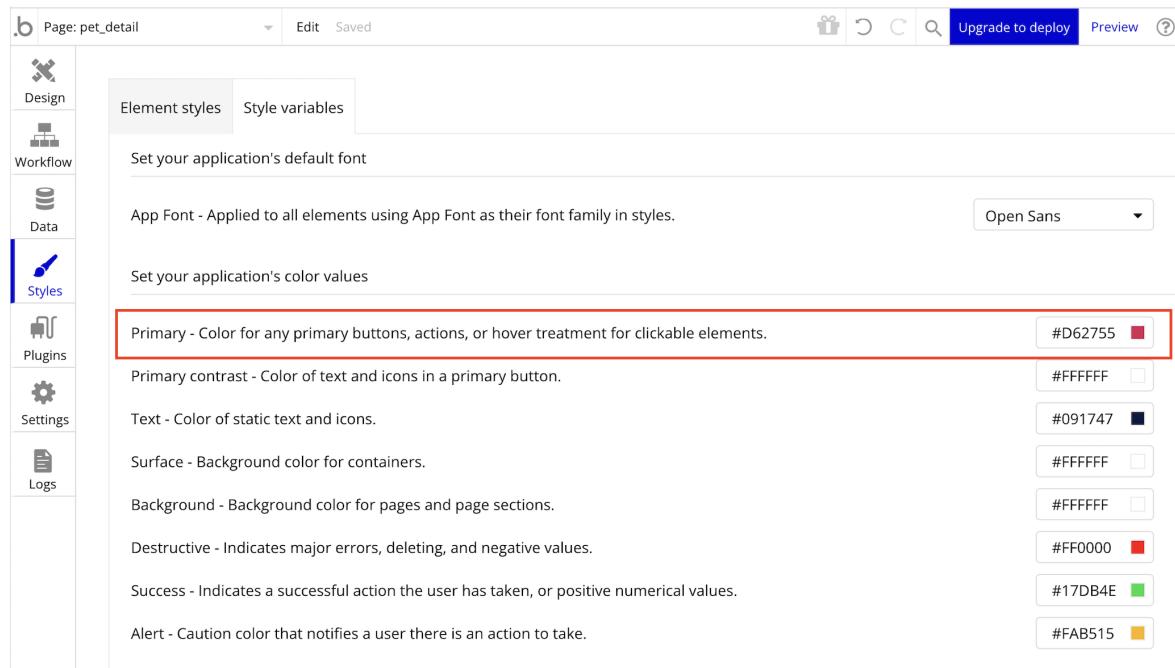
Bubbles have their base colors and fonts set as **Style variables**.

Go to **Styles** in the left menu > **Style variables** in the tab at the top of the screen. The colors specified here can be used when creating or editing styles. For example, the Primary color setting is used by the Primary button.

The screenshot shows the Bubble UI Styles variables page. The left sidebar has tabs for Design, Workflow, Data, Styles (which is selected), Plugins, Settings, and Logs. The main area has tabs for Element styles and Style variables, with Style variables selected. Under Element type, 'Button' is chosen. A search bar and two buttons ('Apply theme' and '+ Add style') are present. On the left, there are three buttons listed: 'Button - Flat Button', 'Primary Button' (selected), and 'Button - Outline Button'. Below them is a link 'Find all elements using this style'. On the right, the 'Primary Button' style is detailed. It shows conditions for 'OFF' and 'When This Button is hovered'. Under 'When' is a section for 'Background color' which is set to 'Primary (#0205D3)'. This entire 'Background color' row is highlighted with a red box. Below it are options to 'Select a property to change when true' and '+ Define another condition'.

If you change the `Primary` setting in the `Style variables`, the change will be applied everywhere it is used.

- Select `Styles` on the left menu > `Style variables` on the tab at the top of the screen
- Change Primary. (I want dark red eyes, so I specify it with `#D62755`.)



If you check the style of the Primary button, it has changed.

The screenshot shows the Figma style editor interface. At the top, there are two tabs: "Element styles" (selected) and "Style variables". Below the tabs are filters for "Element type" (set to "Button") and a "Search by name" input field. There are also "Apply theme" and "Add style" buttons. On the left, a sidebar lists three button styles: "Button - Flat Button", "Button - Outline Button", and "Button - Primary" (which is currently selected). The main area displays the "Primary Button" style. It includes a preview box with a red background and the text "...edit me...". To the right of the preview is a conditional panel titled "Conditional (1)". The panel contains a single condition: "When This Button is hovered", which changes the "Background color" to "Primary (#D62755)".

Let's preview the screen.

The colors of the basic buttons and links, such as the login/logout buttons, have changed.

PetLog

[← Back to list](#)



Name

pochi

Birthday

2020年8月18日

Gender

男の子

[Pet Register](#)

[Log out](#)

[Weight Logs](#)



When to use Style variables

In this way, you can change the standard base color all at once by editing `Style variables`. Also, when creating or editing a new style, you can decide your own rules and use `Style variables` to make maintenance easier, such as batch changes later.

Next, let's specify the style individually

I would like to match the header logo with the base color and make the font a little more cute.

PetLog

[← Back to list](#)

Image



Name
pochi

Birthday
2019年11月18日

Gender
女の子

UPDATE

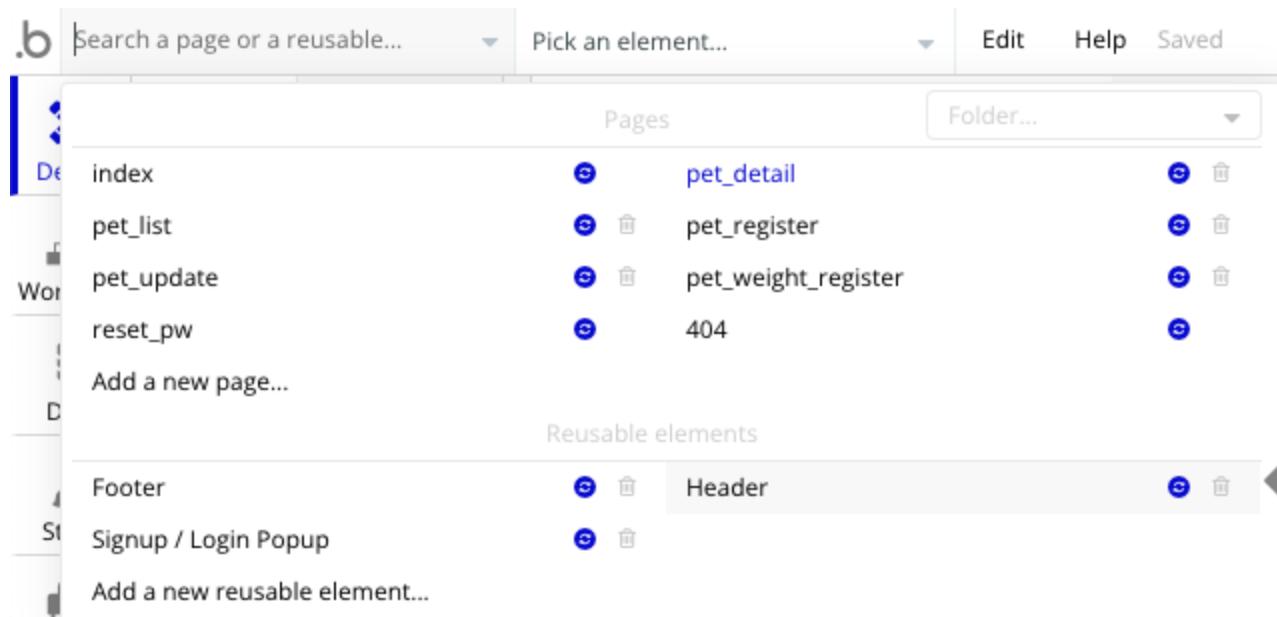


A line graph titled "Weight Logs" showing the weight of a pet over time. The y-axis represents weight from 0 to 5, and the x-axis shows dates from 11/17 7時 to 11/19 7時. The data points show a fluctuating trend:

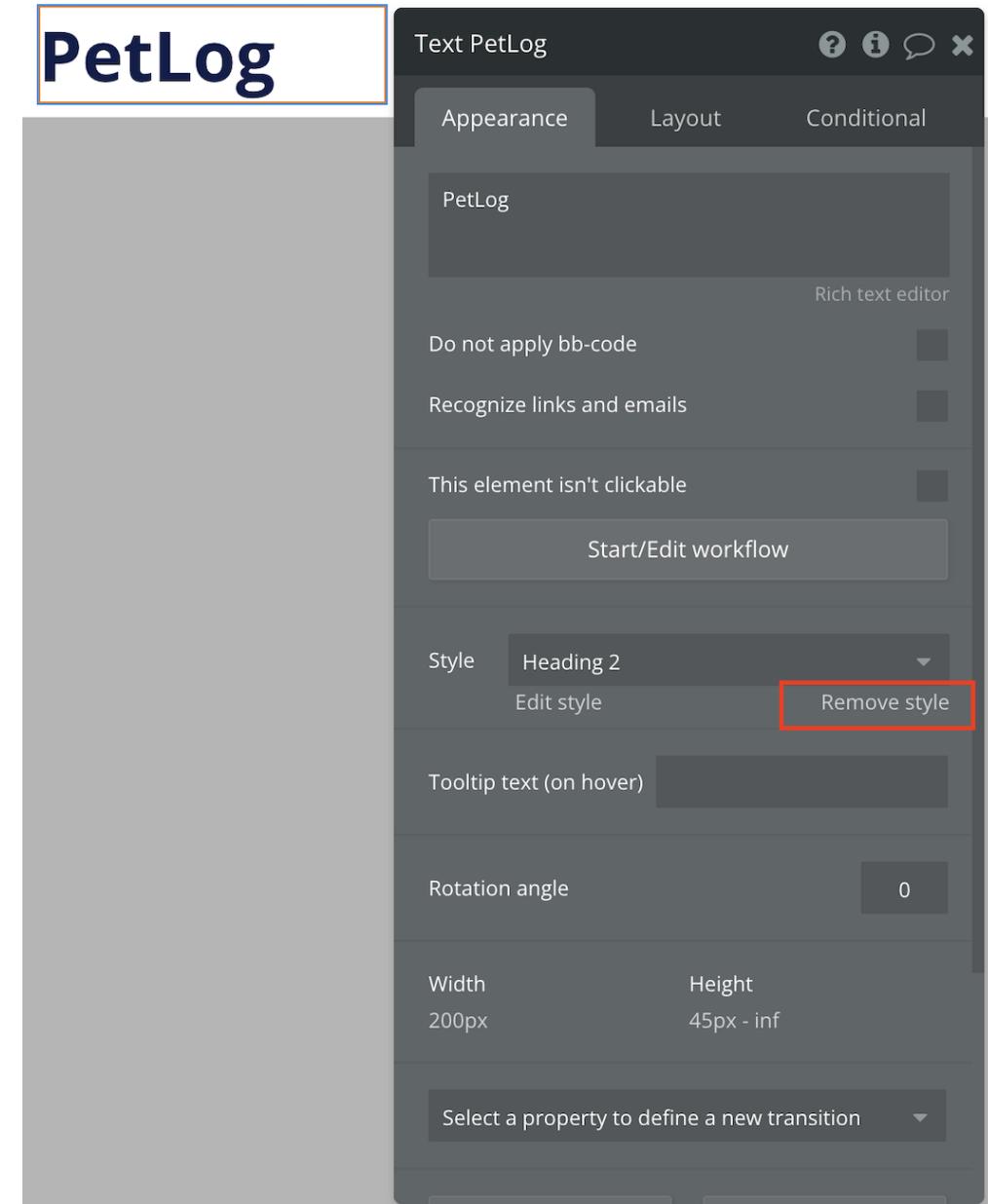
Date	Weight
11/17 7時	4.0
11/17 7時	4.0
11/17 7時	5.0
11/17 7時	3.0
11/17 7時	5.0
11/17 7時	3.0
11/19 7時	5.0

Weight Logs

b Open the menu to the right of the logo and select Header

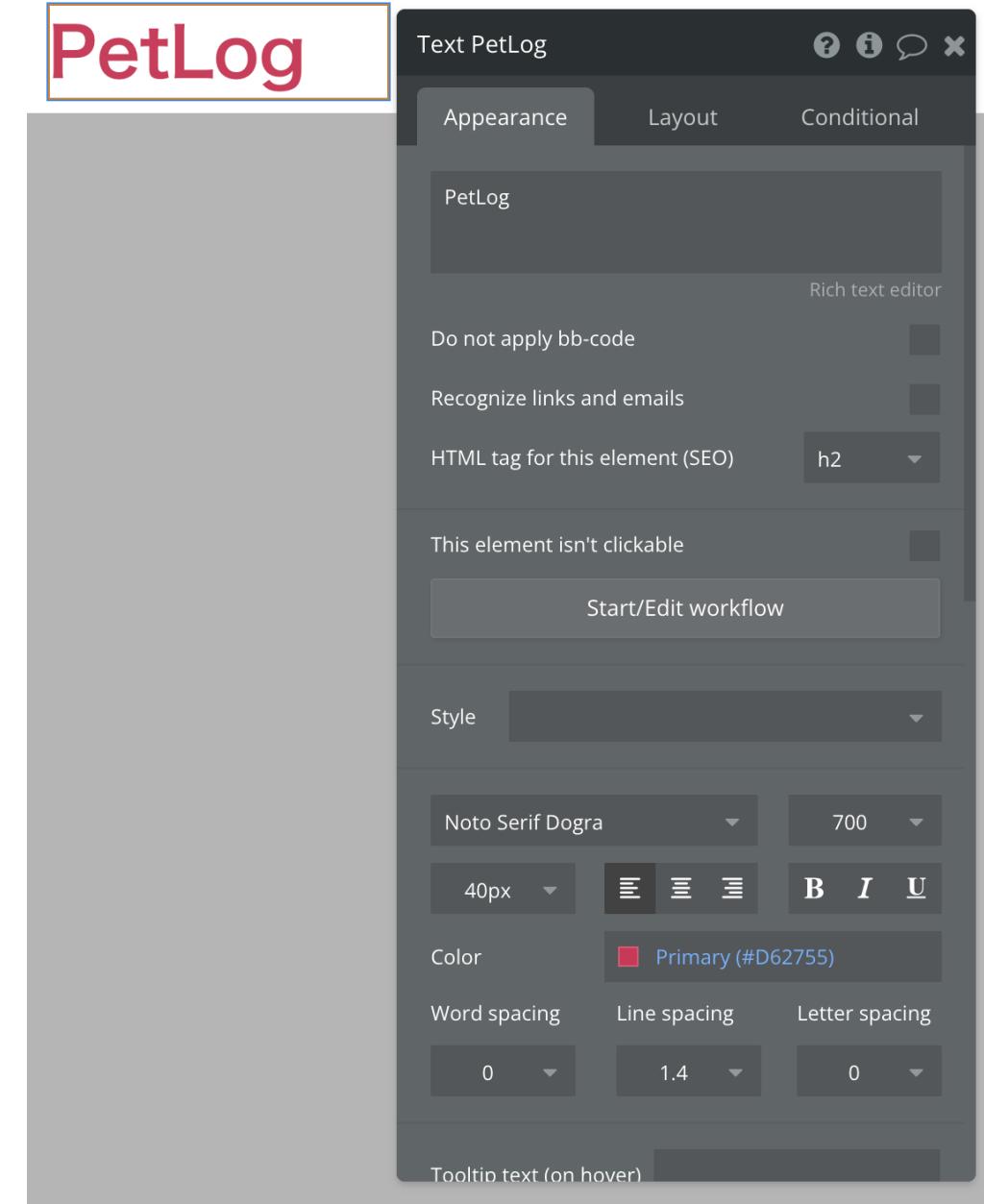


- Double click the logo to open settings
- Go to the **Style** part of the settings window
- Click **Remove style** in the lower right corner of the pull-down
 - Instead of applying the defined Style, you can specify it individually



specify the style you want

- I set the font color to the Primary color specified in the **Style variables**
- I like **Noto Serif Dogra** for the font, so I will specify it
- If you change the font, the logo may be cut off, so please adjust the width accordingly



Let's preview

You've changed.

PetLog

Pet Register

Log out

← Back to list

Weight Logs

Image



Name

pochi

Birthday

2020年8月18日

Gender

男の子



Now let's add a new style

The label is too big and I'm worried about it, so I'm going to create a style for the label.

PetLog

Pet Register

Log out

← Back to list

Weight Logs

Image



Name

pochi

Birthday

2020年8月18日

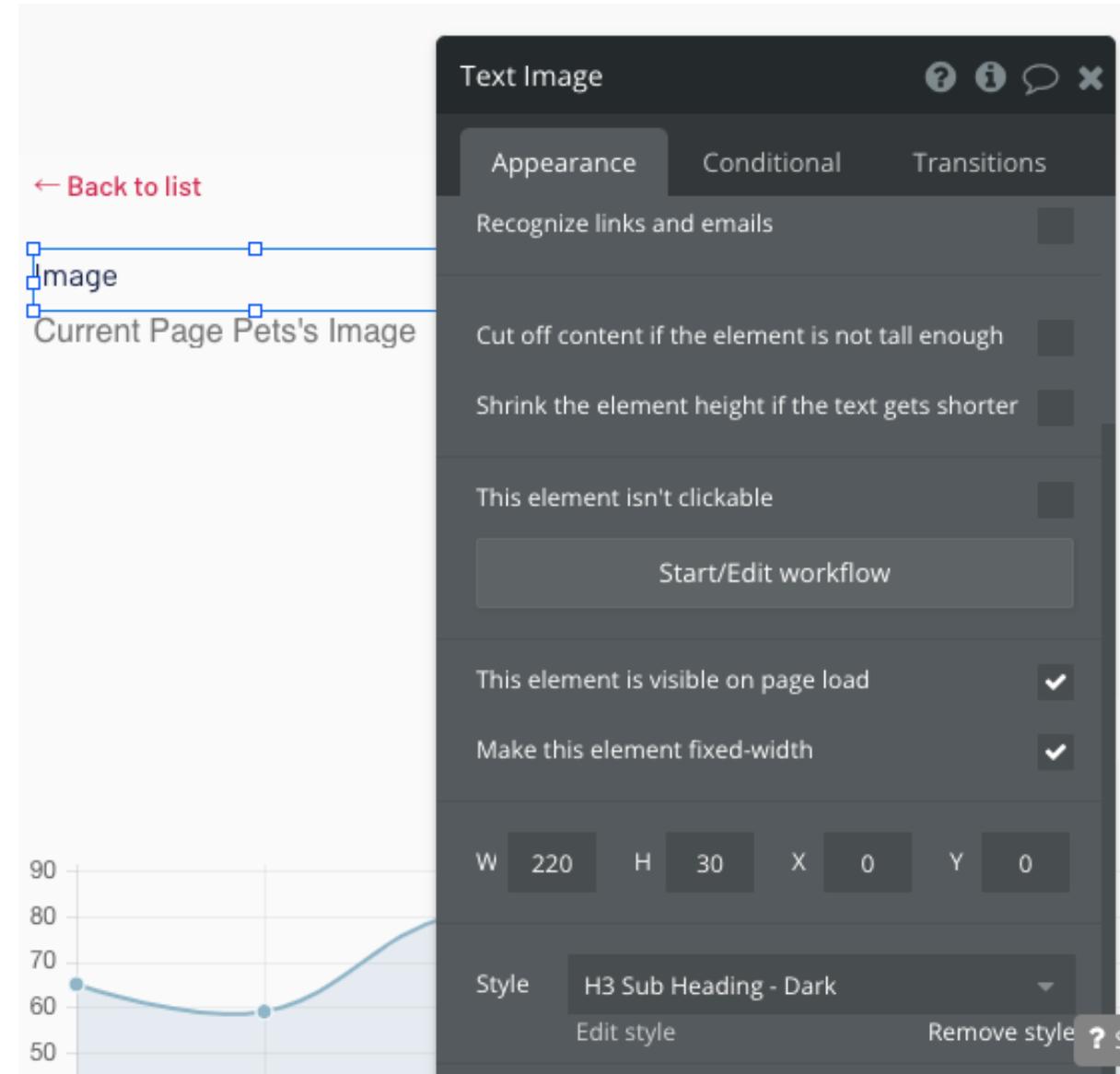
Gender

男の子



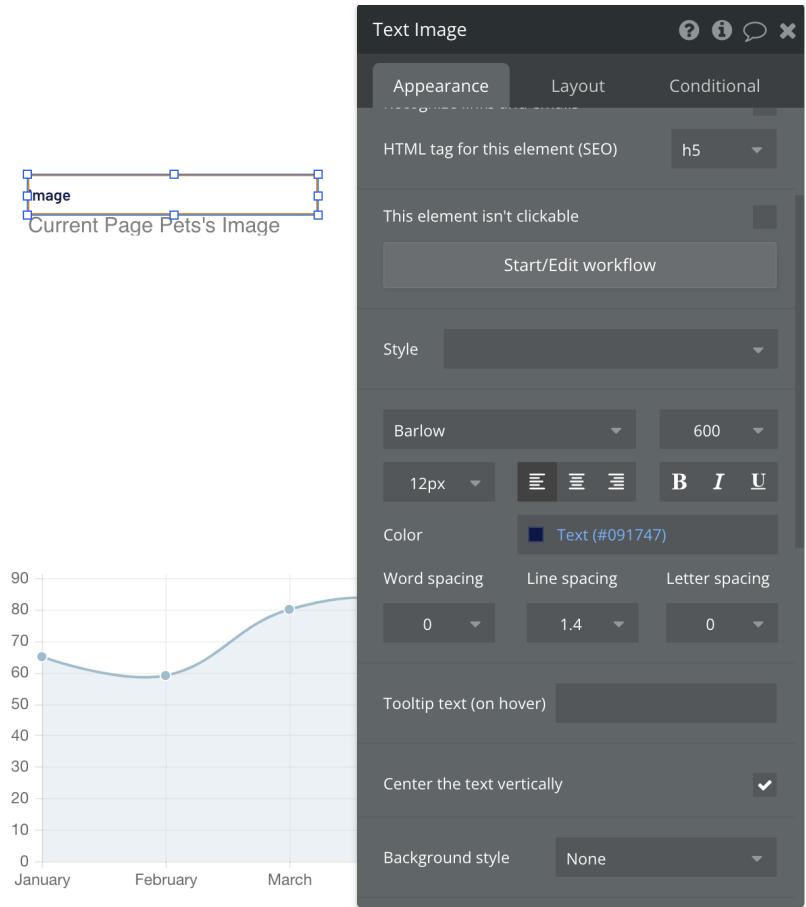
First, specify the style individually.

- Open pet_detail and double click on **Image** text to open settings
- Click **Remove style** at the bottom right of **Style** pull-down



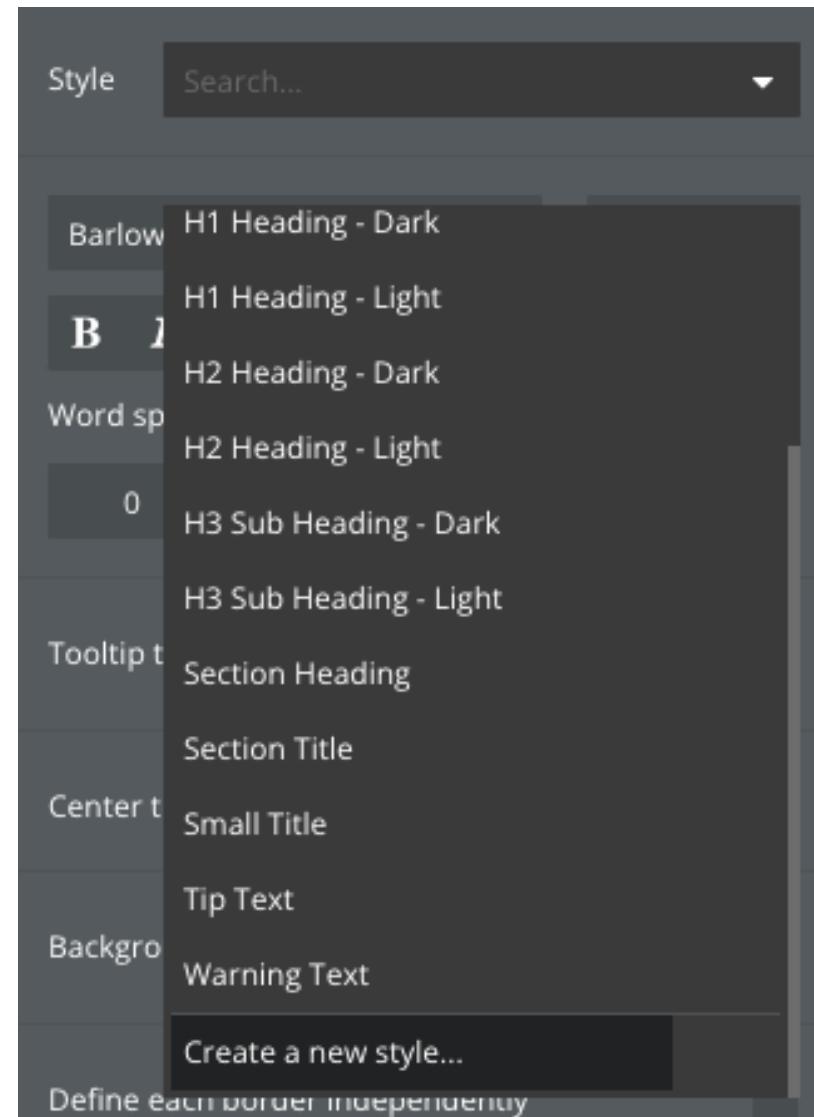
Make the following settings

- Font is Barlow
- font weight is 600
- Font size is 12
- Check Center the text vertically

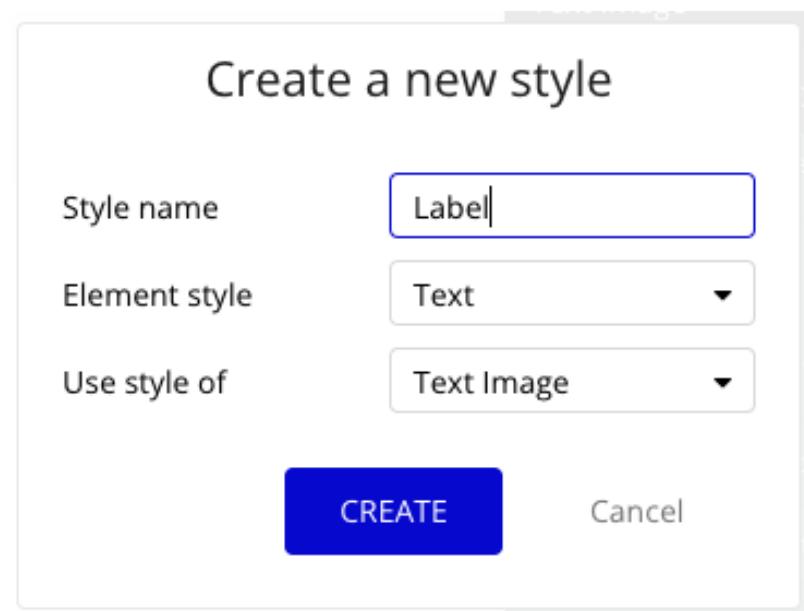


Then define the specified individual styles as the common style

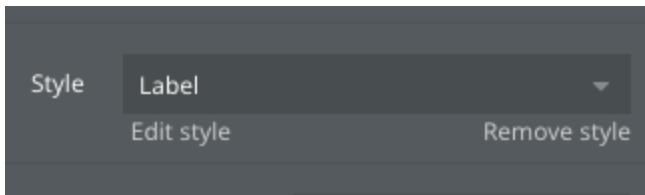
- Open the **Style** pull-down in the **Image** setting
- Click **Create a new style..** at the bottom



- Enter `Label` in Style name
- Element style remains `Text`, indicating that it is the style of the text element
- Use style of remains `Text Image` and creates a style based on `Text Image`



Label should now be specified in the style.



Rather than defining the individual specified styles as a common style,
There is also a way to define the style first, but you can define the style individually
It is better to set the specified one as the common style
It is easy to work because you can create while checking the image in the design view.

Now let's apply the defined style to other labels.

- pet_detail: Name, Birthday, Gender
- pet_register: Image, Name, Birthday, Gender
- pet_weight_register: Weight

It's a little long and time consuming.

If you had separate styles from the beginning, you only had to change the style in one place, so if you come across screen elements with different meanings, you should be conscious of defining styles.

Let's preview

PetLog

Pet Register

Log out

← Back to list

Weight Logs

Image



Name

pochi

Birthday

2020年8月18日

Gender

男の子



That's it for Style.

Create logic

Create logic

Logic is embedded in various places in the application.

- Give feedback on screen operations
- Extract and process data
- Switch screens by authority, etc.

Bubble can also embed logic in various places, so let's do it together.

Return feedback for screen operation

Return feedback for screen operation

Bubble can embed logic for screen elements.

It can be used to create and mix feedback for screen operations.

When you hover over the pet list, let's add a movement so that a red frame is attached.

PetLog

Pet Register Log out

pochi

shiro

kuro

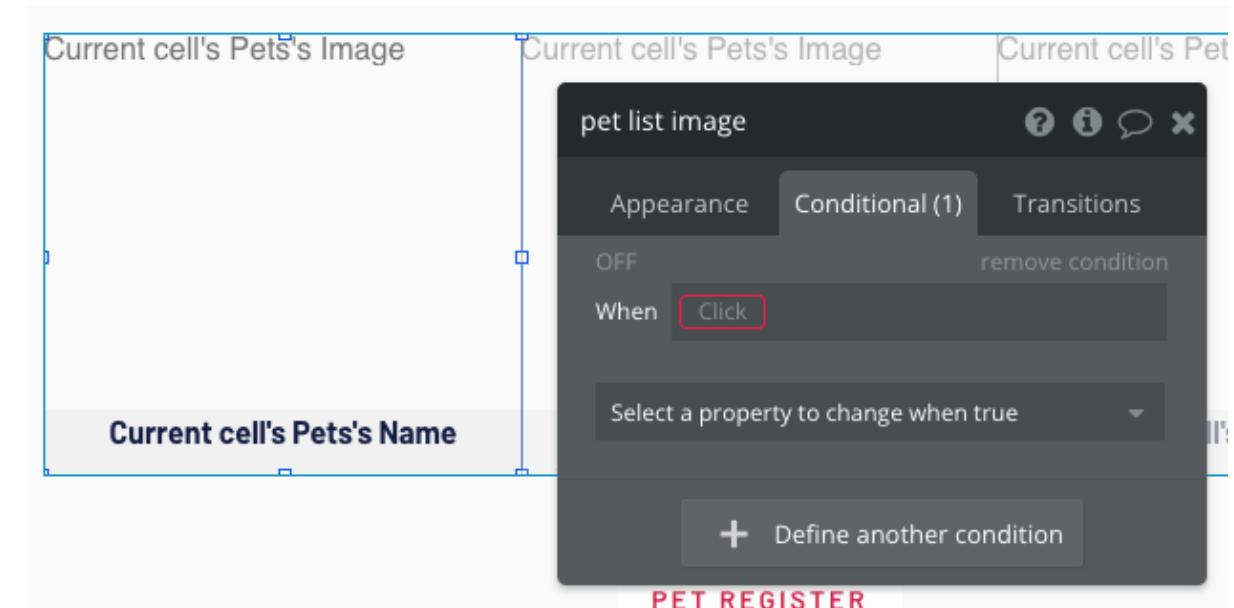
pochi2

pochi

We will embed the logic in the image

Element

- open pet_list
- Double-click the image Element of the pet image to open the settings
- Specify Conditional from the tab
- Click the Define another condition button

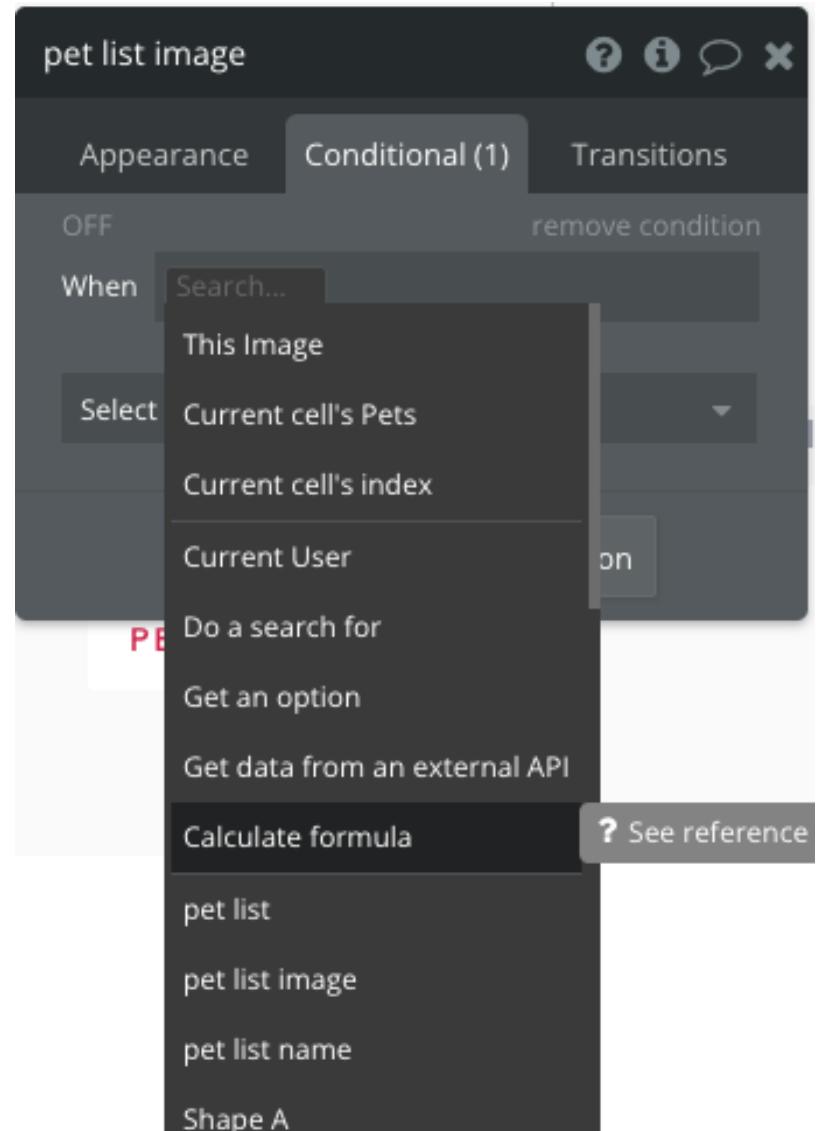


As I mentioned in specifying rules for whether or not to display responsive, here you can define how to change the property when the conditions and conditions are met.

First, let's see what conditions can be specified.

- The corresponding image element, its parent element and other elements in the screen
- Login user
- New data search
- Current status such as current date, current position, page width, scroll position, etc.

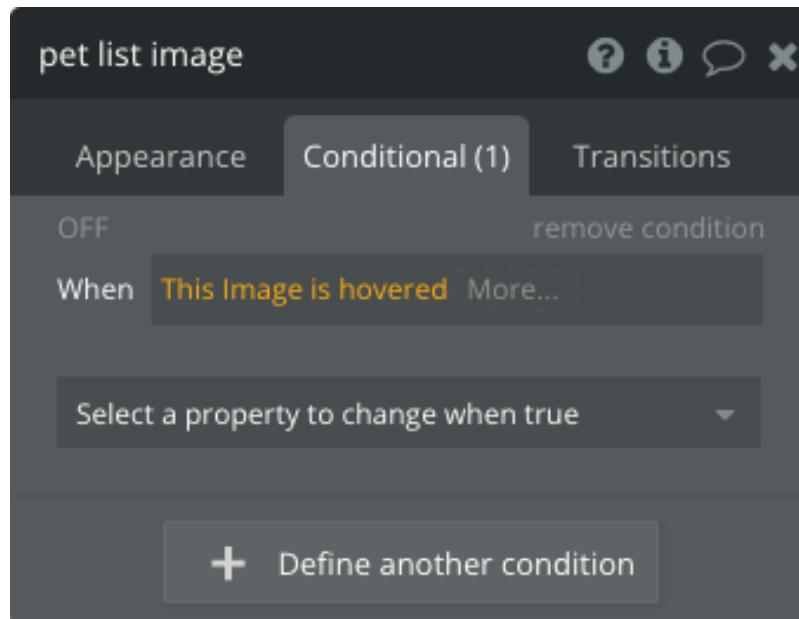
In this way, you can see that various conditions can be specified.



This time, let's simply select the corresponding image `This Image`.

Then, the image states are listed next. There are many options here, but this time, select `is hovered`.

Now the condition is that the image in question is hovered over.



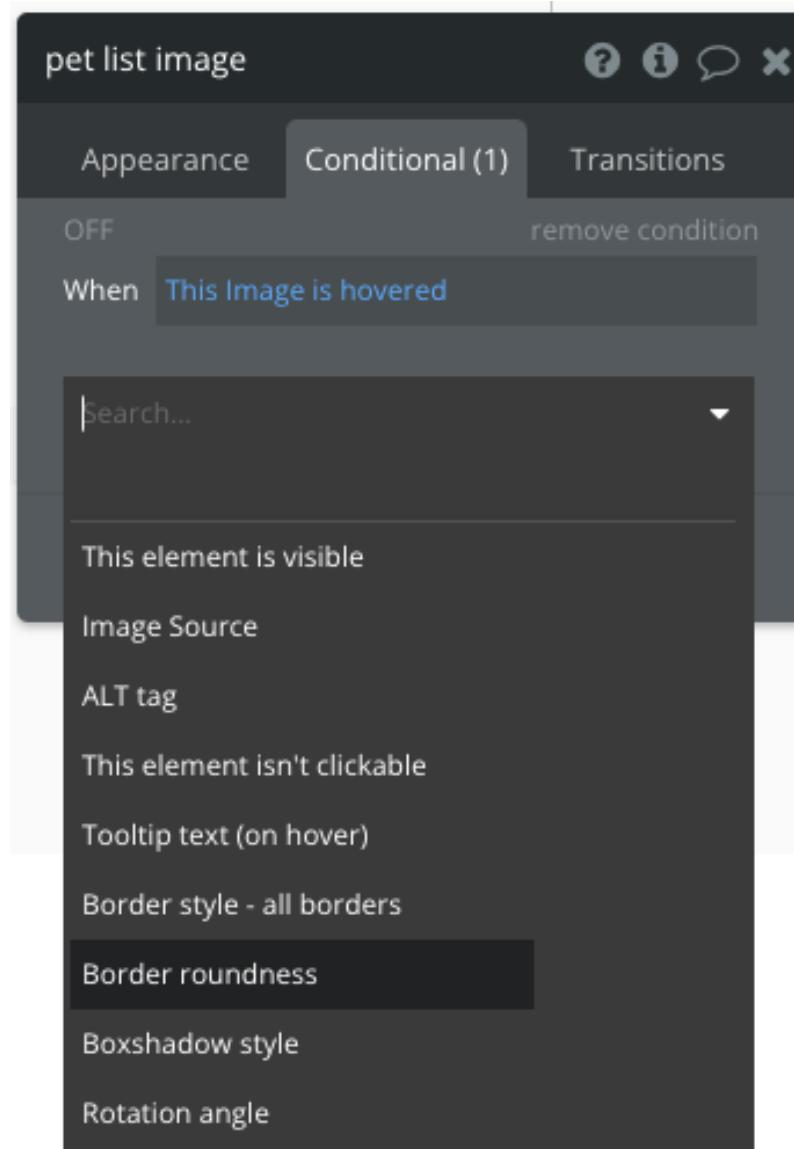
Next, specify which properties to change when the conditions are met.

Click on `Select a property to change when true` and take a look inside.

- image source, alt attribute
- clickable, borders, etc.

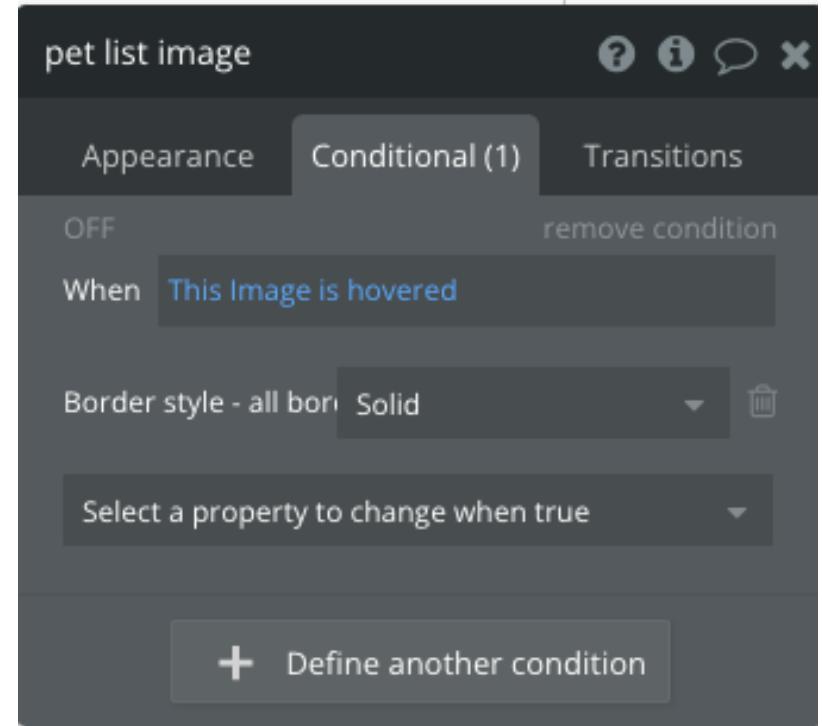
I know that things can change.

What is listed here depends on the type of Element.

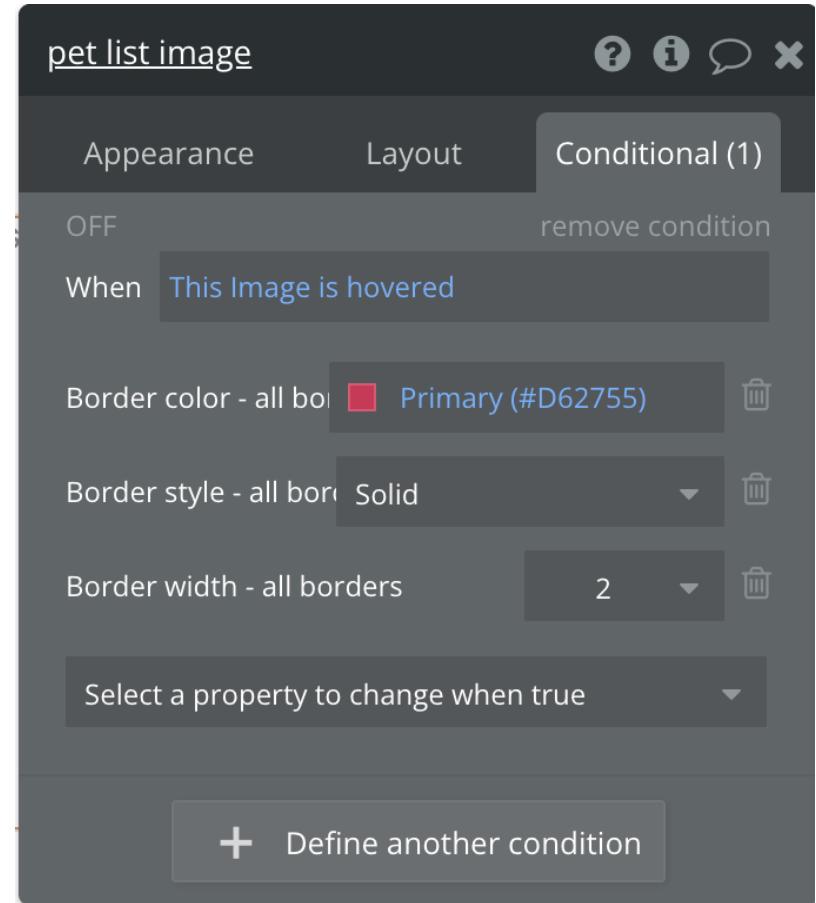


This time, when it is hovered, it will have a red border.

- Click Border style – all borders
- Change None to Solid
- It means that the border is changed from none to show solid line.



- Select **Select a property to change when true**
- Click **Border color - all borders**
- You will be able to specify the color, so select the defined Primary
- Similarly, next, specify **Border width - all borders** and set **2**



This completes the settings.

Let's preview

When I hover, a red frame appears.

PetLog

Pet Register

Log out



In this way, you can create products by embedding logic such as returning easy-to-understand feedback for user operations and switching screen decorations depending on the state.

Extract and process data

Extract and process data

You can extract only specific data or process or calculate the acquired data. Make sure to display your pet's initials, age, and most recent weight.

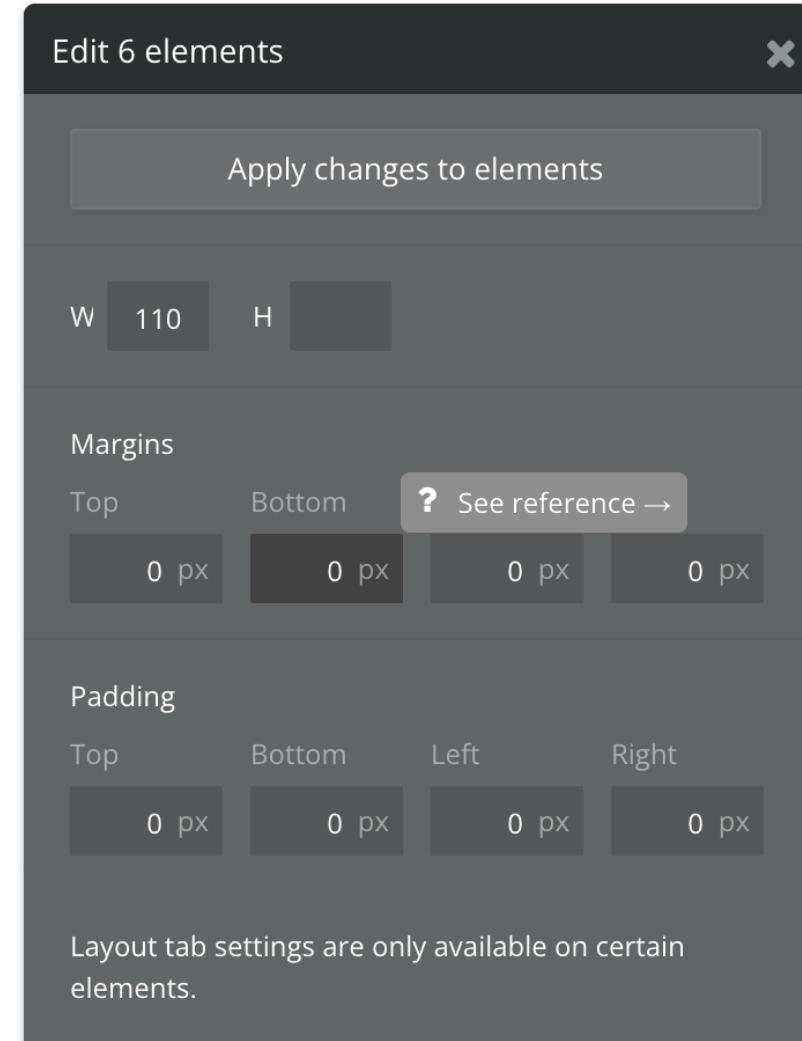
Image		Name (Initial)	pochi(P)
Birthday	2020年8月18日	Age (as Dog/Cat)	2(24)
Gender	男の子	Latest Weight	9kg



Advance preparation

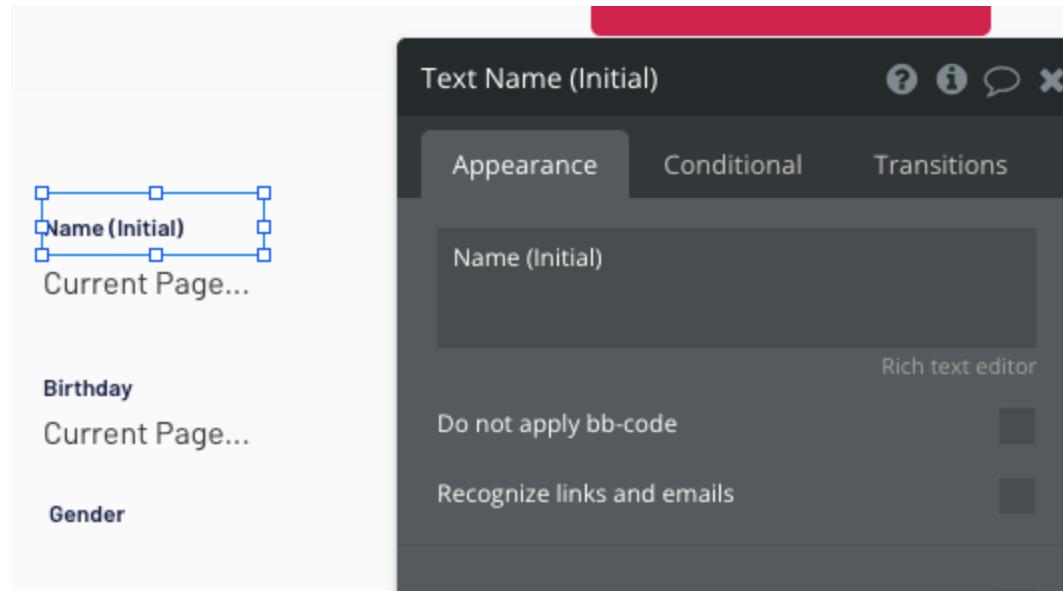
Since we will be adding elements from now on, let's shorten the width of Name, Birthday, and Gender.

- In pet_detail, double click Name to open settings
- Hold down Shift and select from the Name label to the Gender text element
- Click the part where Width is displayed on the screen
- Specify 110 for W (width)
- Press the Apply changes to elements button



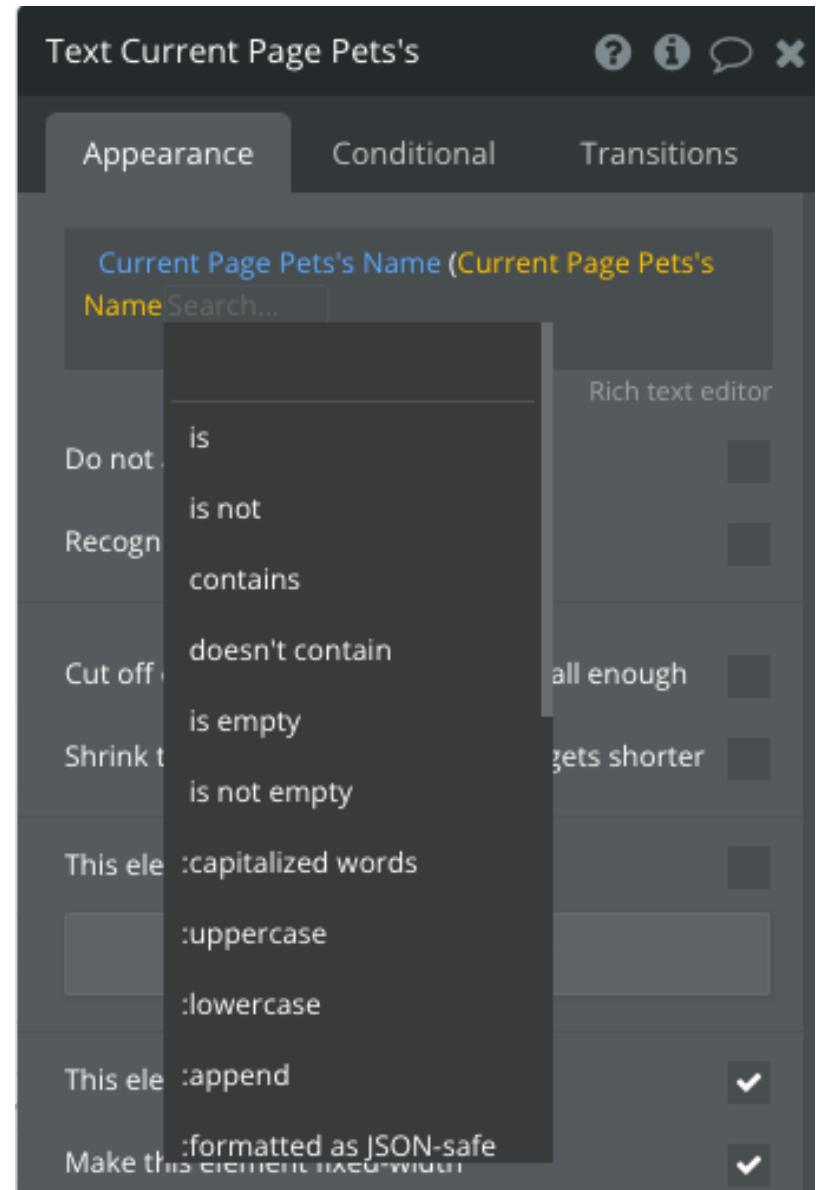
display initials first

- Change the content of the Name label to **Name (Initial)** to indicate that it contains initials

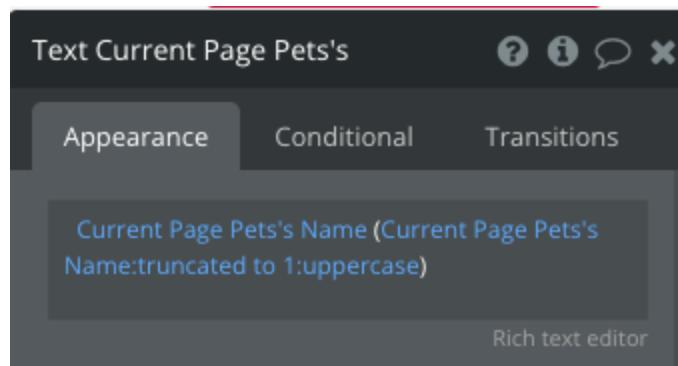


- Select the text that gives the content of Name
- Click on the empty part of the text input field to give it focus
- type (
- Select Insert dynamic data
- Select Current Page Pets > 's Name
- More... should appear faintly, so click it

Various processing methods can be selected here. Let's take a look.



- Select truncated to
 - This means cut up to the specified number of characters
- Type 1 and confirm with Enter key
- Click on ``More'' again
- Select :uppercase
 - this means convert to upper case
 - (It doesn't make sense for those who have Japanese names)
- Click on the empty part of the text input field and enter)



Let's preview

Image



Name (Initial)

pochi(P)

Birthday

2020年8月18日

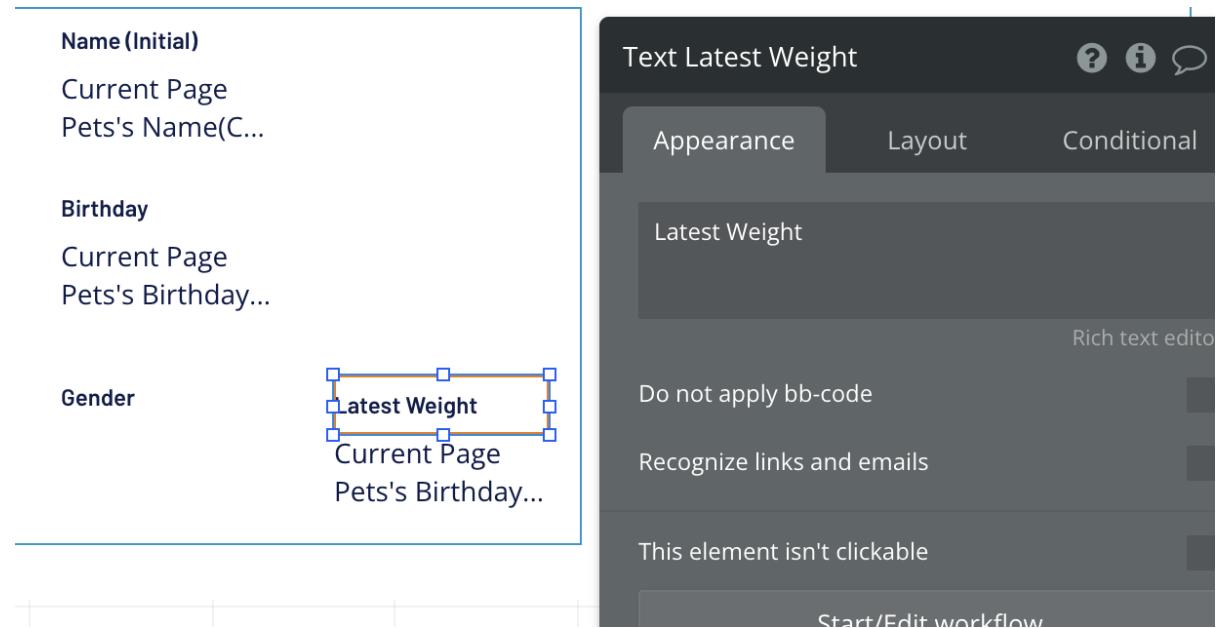
Gender

男の子

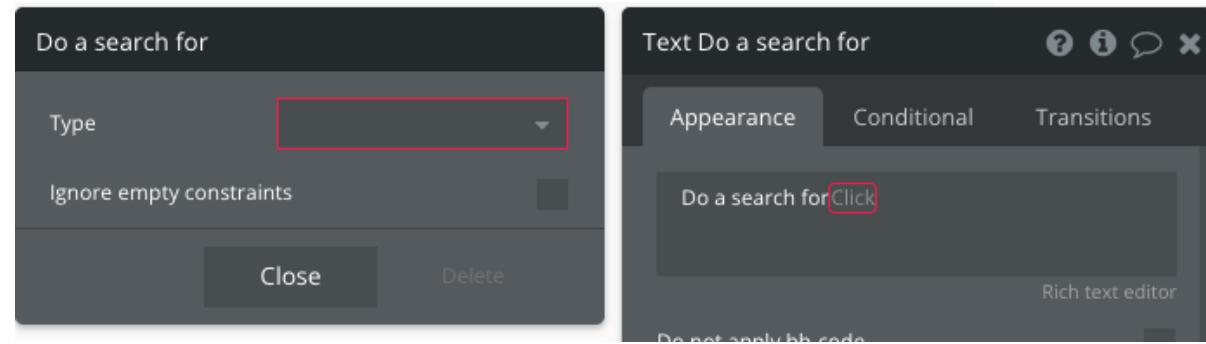


Display latest weight

- Copy and paste Birthday labels and text to place them
- Change the label to **Latest Weight**



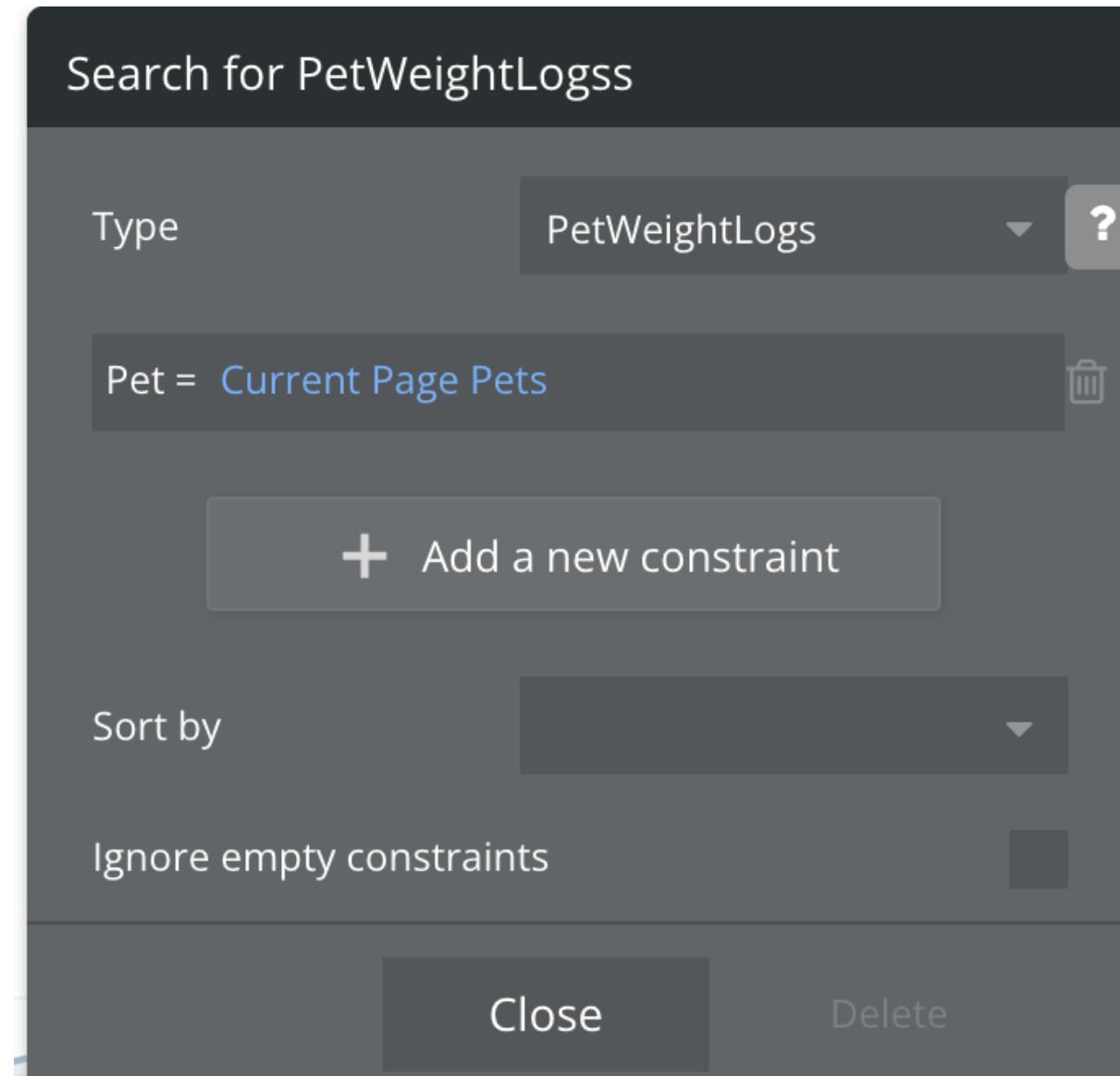
- Open the setting of the text to reveal the Latest Wight and empty the text input area
- Focus and click **insert dynamic data**
- Click on **Do a search for**
 - You mean to search data



Specifies to get the weight of the pet currently displayed on the page

- Specify `PetWeightLogs` for Type
- Click the Add a new constraint button
- Click the condition input field that appears, and specify `Pet`, `=`, and `Current Page Pets` in that order

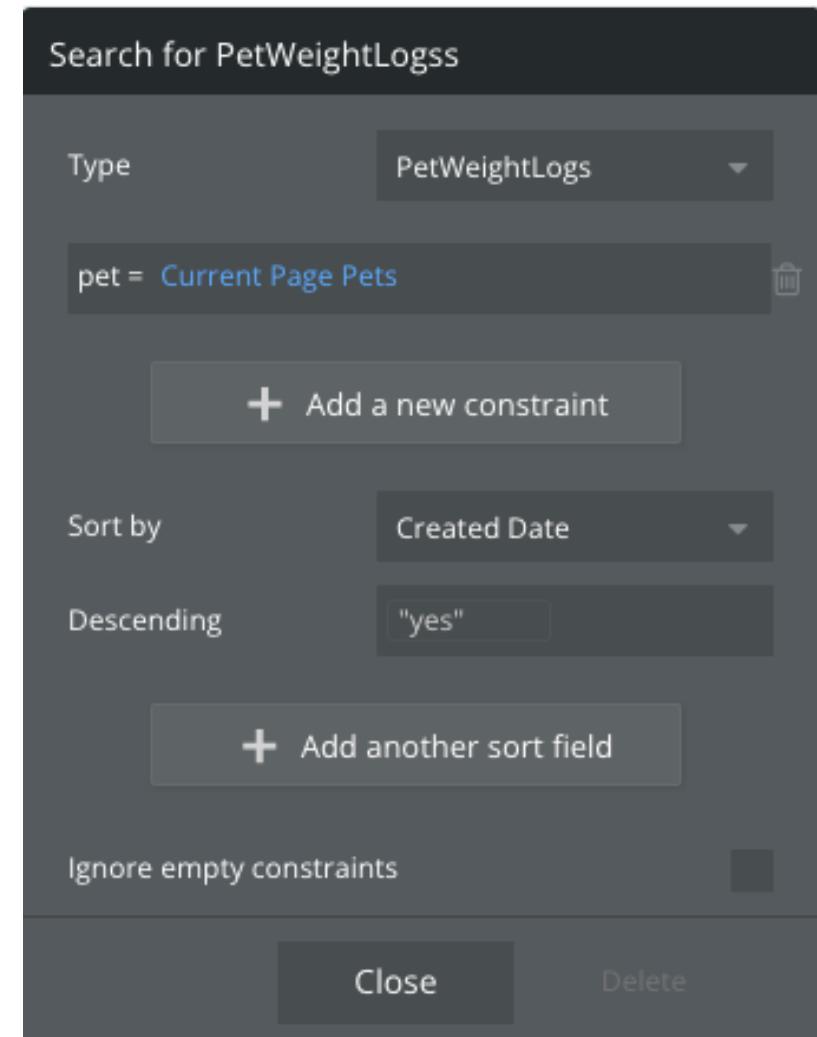
You can get it under various conditions, so let's take a look at what conditions there are



Specifies to sort in descending order of creation date, that is, in order of newest creation.

- Specify **Created Date** for Sort by
- Specify **yes** for Descending
- Close

It is easy to forget to specify the sort order, but it is often important.

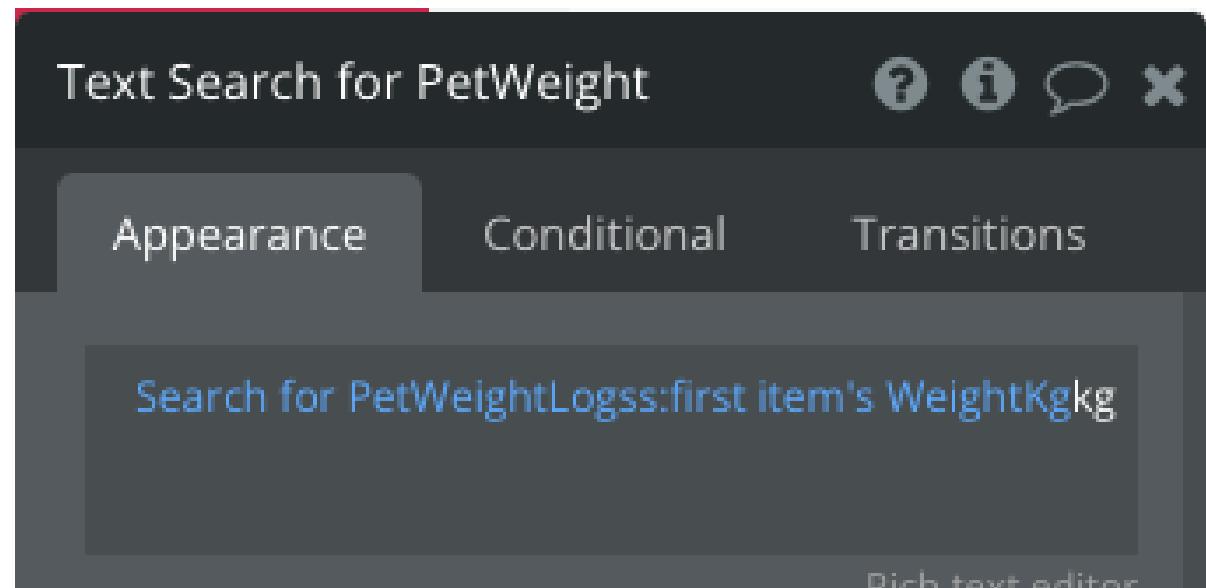


Display the latest 1 weight

- Click `More` in the text entry field to see what's inside
- Since we want to get the first item, specify `:first item`
- Next, specify `'s WeightKg`
- Click on the blank space and enter `kg`

This completes setting the latest weight.

Let's remember it as a method of data extraction and list processing.



Let's preview.

Image



Name (Initial)

pochi(P)

Birthday

2020年8月18日

Gender

男の子

Latest Weight

9kg



<Advanced>

A little sidetrack,

Let's take a look at Number More and Date More.

Bubble provides various processing and calculation methods for numbers and dates as well.

<Advanced>

calculate age

Next, give your age. As you saw earlier, you can process and calculate numbers and dates, but age calculation seems a little difficult, so I'm thinking of embedding the code directly.

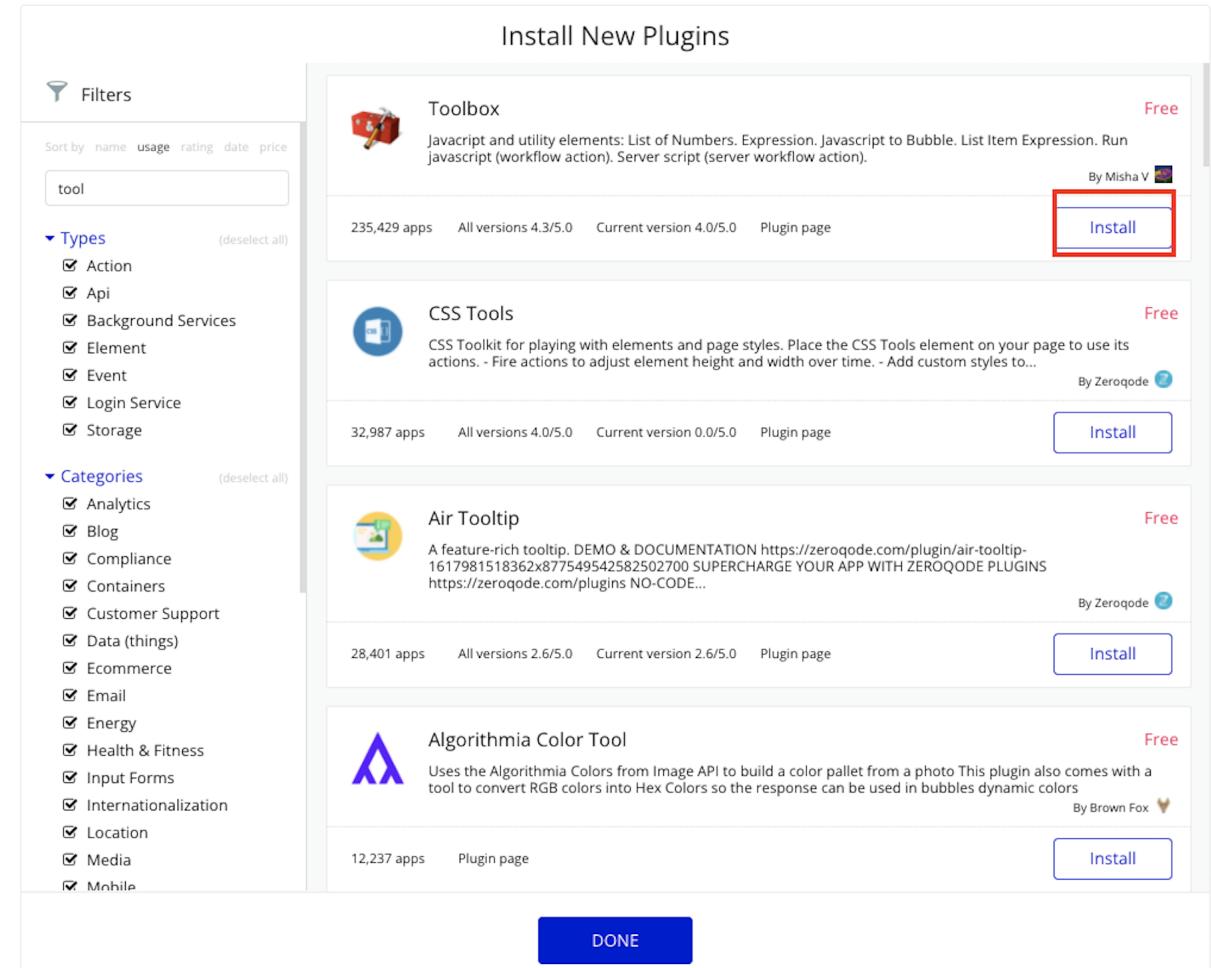
By introducing a plugin in Bubble, you can operate simple processing using a programming language called javascript.

<Advanced>

To embed javascript code, use a plugin called **Toolbox**.

Let's install it.

- Specify **Plugins** in the left menu
- Enter **tool** in the search text box (searching will take some time)
- Press the **Install** button of **Toolbox** that appears at the top of the search results



<Advanced>

There are two ways to embed code in Toolbox.

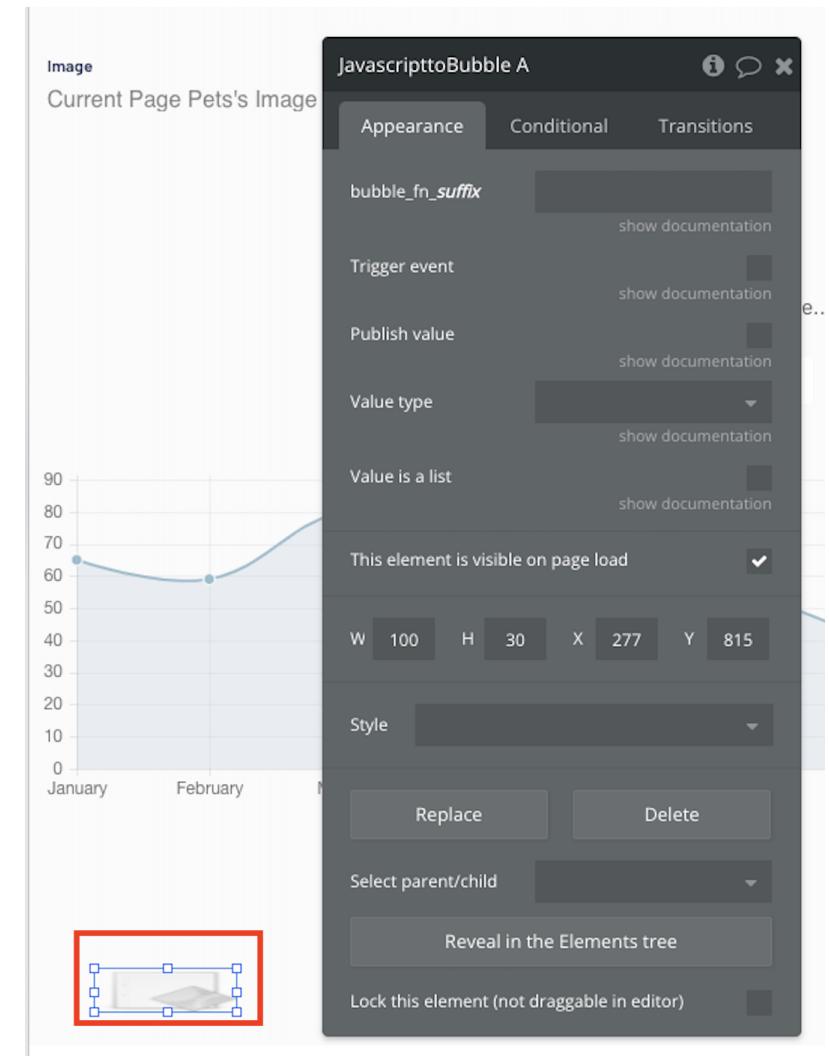
- Execute with `Run javascript` on Workflow / Receive with `Javascript to Bubble` on Design
 - Used for complex processing that spans multiple lines
- Execute and receive with `Expression` on Design
 - Used for processing that ends in a single shot

<Advanced>

Now let's calculate your age.

Do it with Run javascript / Javascript to Bubble . First, put Javascript to Bubble on the pet_detail screen.

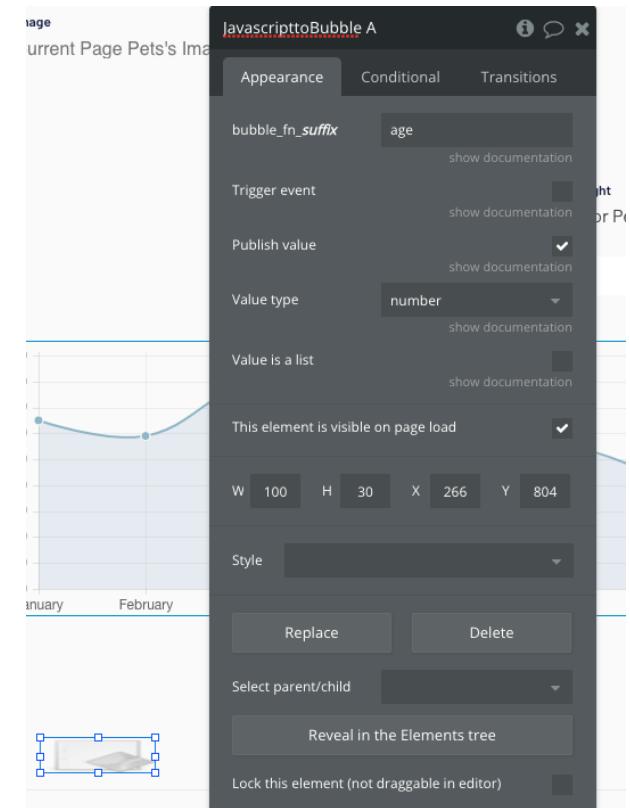
- Select javascript to Bubble from Visual elements on the left menu
- Put it in an unobtrusive place such as the bottom of the screen
- Since it is for receiving the result of javascript, it is not displayed at the time of execution such as preview



<Advanced>

- Specify age for bubble_fn_suffix
- Check Publish value
- Specify number for Value type

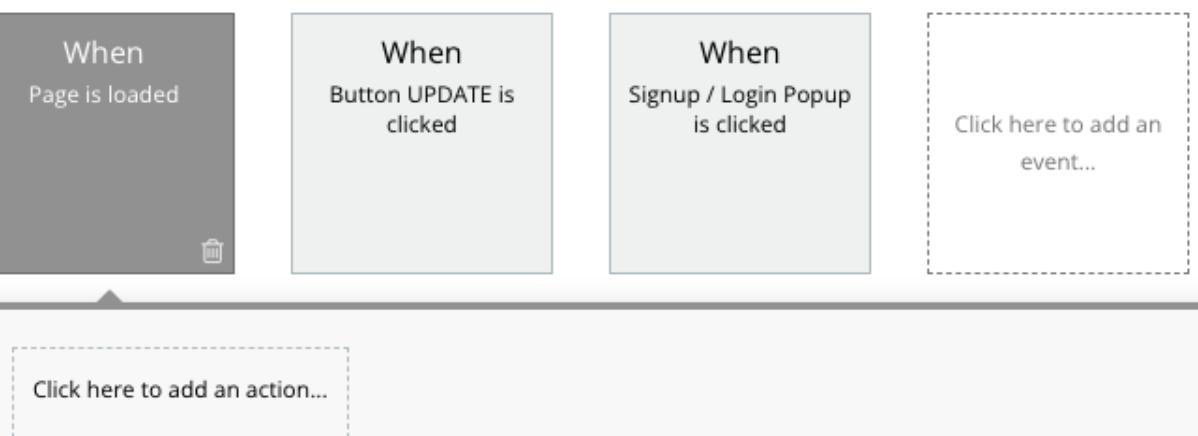
Now, if you pass a value from javascript to the bubble_fn_age function (block of processing), you will be able to receive it with this screen element.



<Advanced>

Next, define where to execute javascript.

- Select Workflow from the left menu
- There are squares, select the rightmost **Click here to add an event...**
- Select **General > Page is loaded**



<Advanced>

- Click Click here to add an action...
- Click Plugins > Run javascript
- Since the setting opens, paste the code of the next page in the Script field



The screenshot shows a 'Run javascript' dialog box. The script calculates the age based on a birthday object and the current date. It includes logic to handle cases where the birthday has not occurred yet in the current year.

```
Run javascript
Script. To use a return value, use in conjunction with
//生年月日
const birthday = {
  year: ,
  month: ,
  date: ,
};

function getAge(birthday){

  //今日
  let today = new Date();

  //今年の誕生日
  let thisYearsBirthday = new
Date(today.getFullYear(), birthday.month-1,
birthday.date);

  //年齢
  let age = today.getFullYear() - birthday.year;

  if(today < thisYearsBirthday){
    //今年まだ誕生日が来ていない
    age--;
  }

  return age;
}

bubble_fn_age(getAge(birthday));
```

Rich text editor
show documentation

Asynchronous
show documentation

<Advanced>

```
//Date of birth
const birthday = {
    year: ,
    month: ,
    date:
};

function getAge(birthday){

    //today
    let today = new Date();

    // this year's birthday
    let thisYearsBirthday = new Date(today.getFullYear(),birthday.month-1, birthday.date);

    //age
    let age = today.getFullYear() - birthday.year;

    if(today < thisYearsBirthday){
        // My birthday hasn't come yet this year
        age--;
    }

    return age;
}

bubble_fn_age(getAge(birthday));
```

<Advanced>

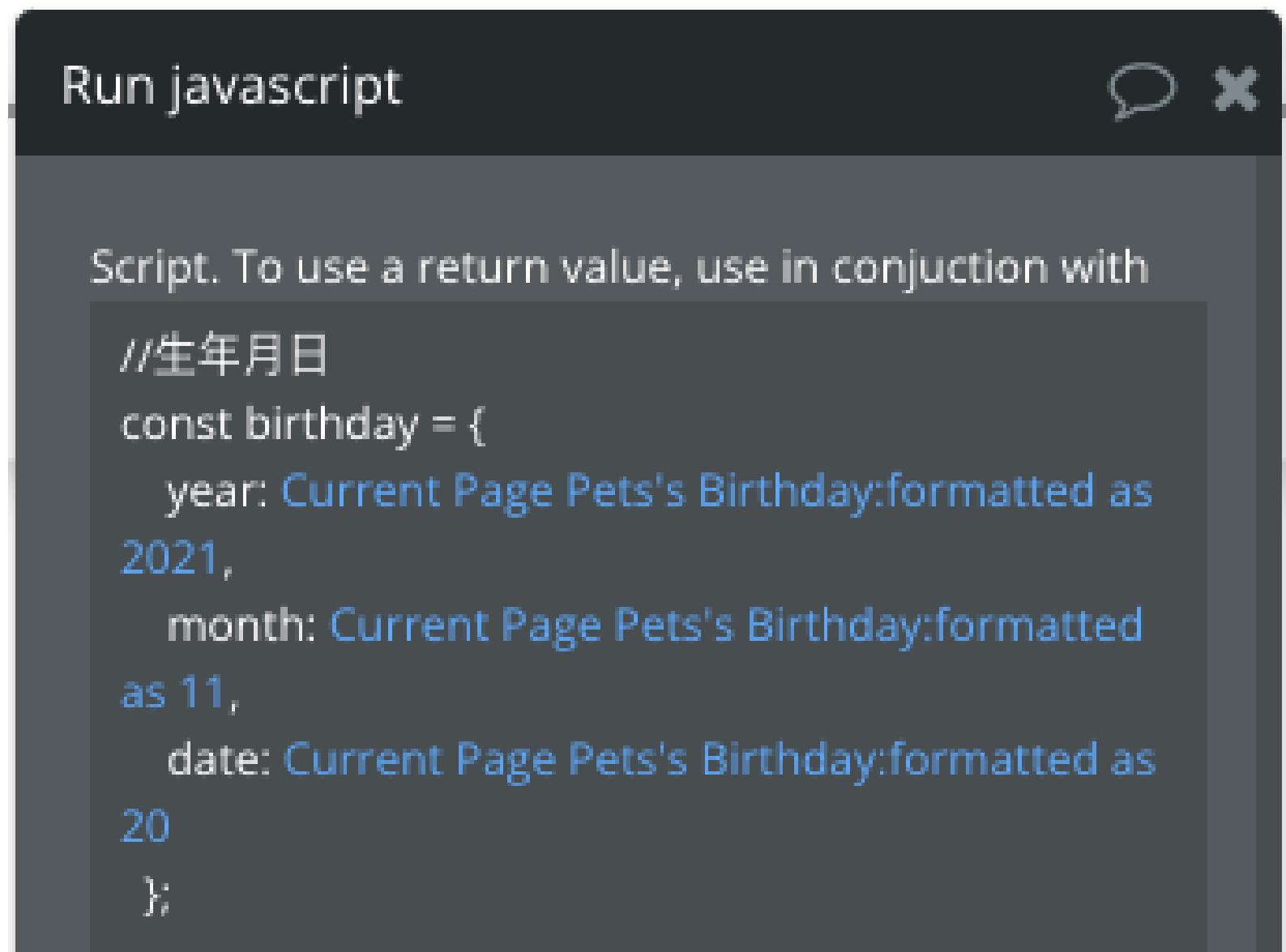
Insert the date with `insert dynamic data` after `year:`, `month:`, `date:` on the 3rd to 5th lines

- Place the cursor after `year:` (before `,`)
 - `insert dynamic data` > Current Page Pets > 's Birthday
 - More > formatted as 11/20/21
 - Specify Custom for Format type
 - Specify yyyy for Custom format
- Similarly, after `month:`, insert Custom format as m
- Similarly, after `date:`, insert Custom format as d

*The image after input is on the next page

<Advanced>

Image after input



The screenshot shows a dark-themed browser developer tools console window. At the top, there is a header bar with the text "Run javascript" on the left and two icons on the right: a speech bubble and a close button (an X). Below the header, the main area contains a message in white text: "Script. To use a return value, use in conjunction with". Underneath this message, there is a code editor area containing the following JavaScript code:

```
//生年月日
const birthday = {
  year: Current Page Pets's Birthday:formatted as
  2021,
  month: Current Page Pets's Birthday:formatted
  as 11,
  date: Current Page Pets's Birthday:formatted as
  20
};
```

<Advanced>

Let's arrange the screen elements to display

- Copy and paste Birthday labels and text
- Change label to Age
- Specify the contents of the text as `JavascripttoBubble A > 's value`

<Advanced>

Let's preview

Image



Name (Initial)

pochi(P)

Birthday

2020年8月18日

Age

2

Gender

男の子

Latest Weight

9kg

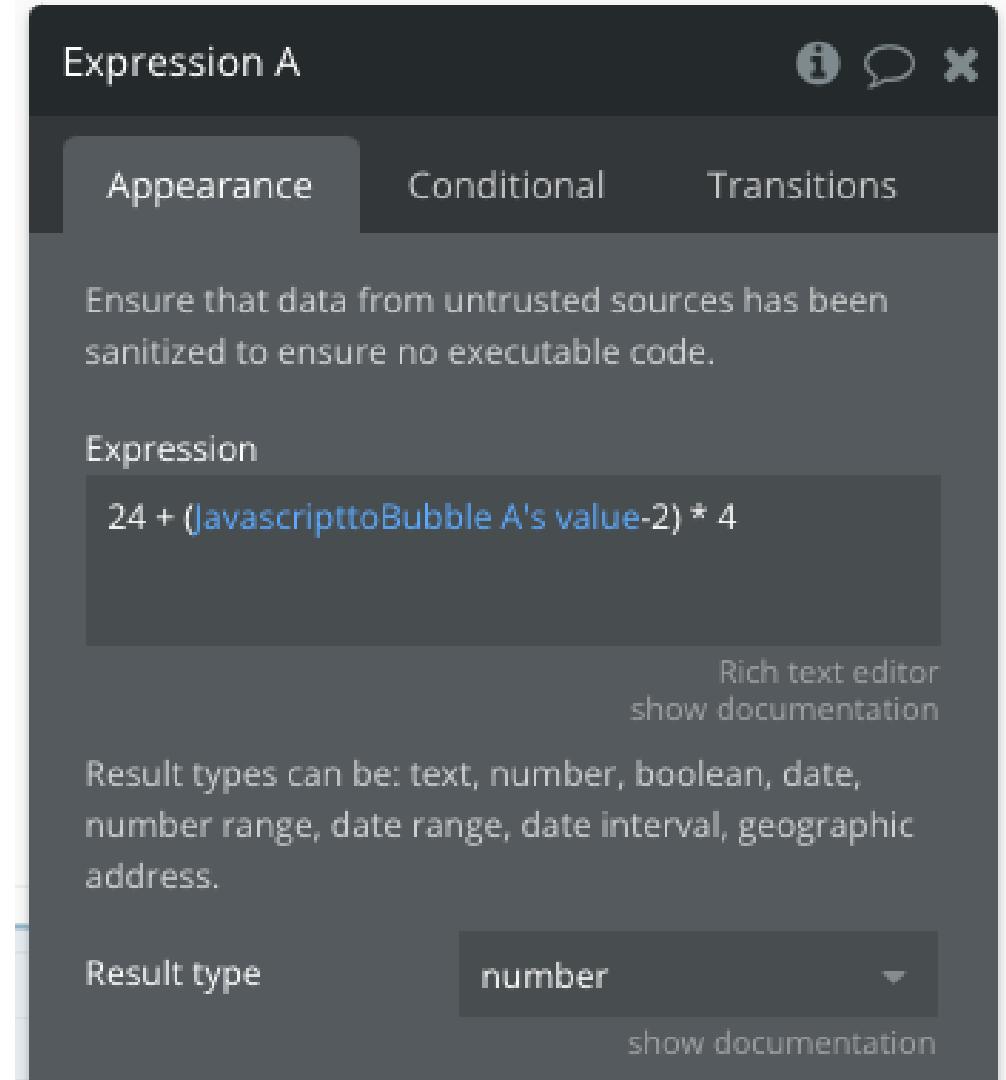


<Advanced>

Next, I would like to display how old dogs and cats are when converted to the age of cats and dogs.

Use **Expression**.

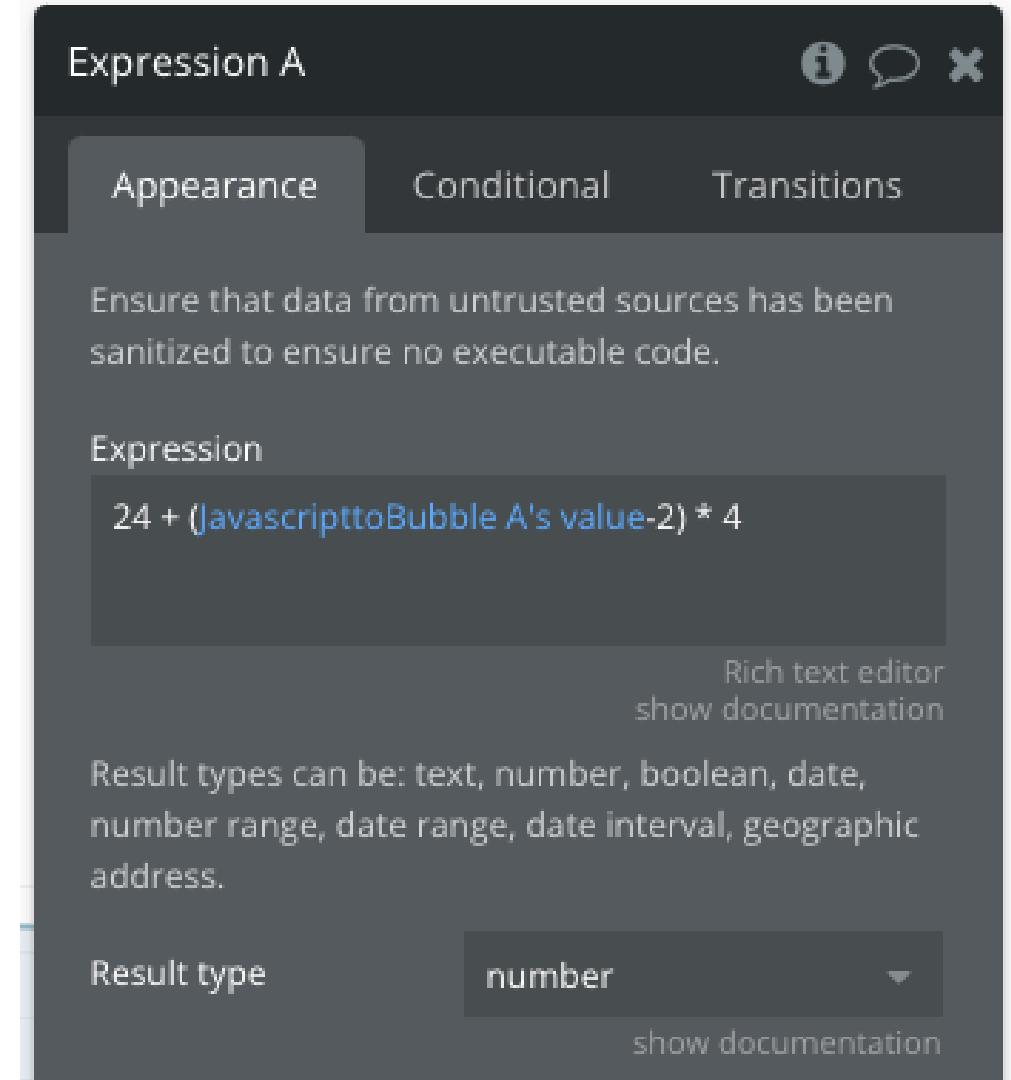
- Select **Expression** from Visual elements and place it next to **Javascript to Bubble**
- Enter **24 + (** in Expression
- Insert **JavascripttoBubble A > 's value** with **insert dynamic data**
- Then enter **-2) * 4**
- Specify **number** for Result type



<Advanced>

Make display settings.

- Change the Age label to Age (as Dog/Cat) so that it is easy to understand that it includes the age of dogs and cats
- Enter (after what was originally entered in the Age text content
- Insert Expression A > 's value with insert dynamic data
- type)



<Advanced>

Let's preview



Name (Initial)
pochi(P)

Birthday
2020年8月18日

Age (as Dog/Cat)
2(24)

Gender
男の子

Latest Weight
9kg



Switch screens by authority

Switch screens by authority

Up to this point, we have explained how to incorporate logic in parts such as feedback to screen operations and data extraction and processing.

Next, I would like to add logic that spans multiple functions.

Do the following:

- Divide users into Pet Owners and Pet Advisors
- The owner can use the screens and functions that have been created so far
- Advisors can use screens and functions dedicated to advisors

As a flow of development, it will be mixed in the following order.

- Add a field that can distinguish between owner and advisor to user information
- At the time of user registration, it is possible to select and register as an owner or an advisor
- Create advisor list screen and detail screen
- Switch the screen transition destination after login/sign-up depending on whether you are an owner or an advisor

It takes a lot of steps, but there are many products that handle multiple user types, so let's learn it.

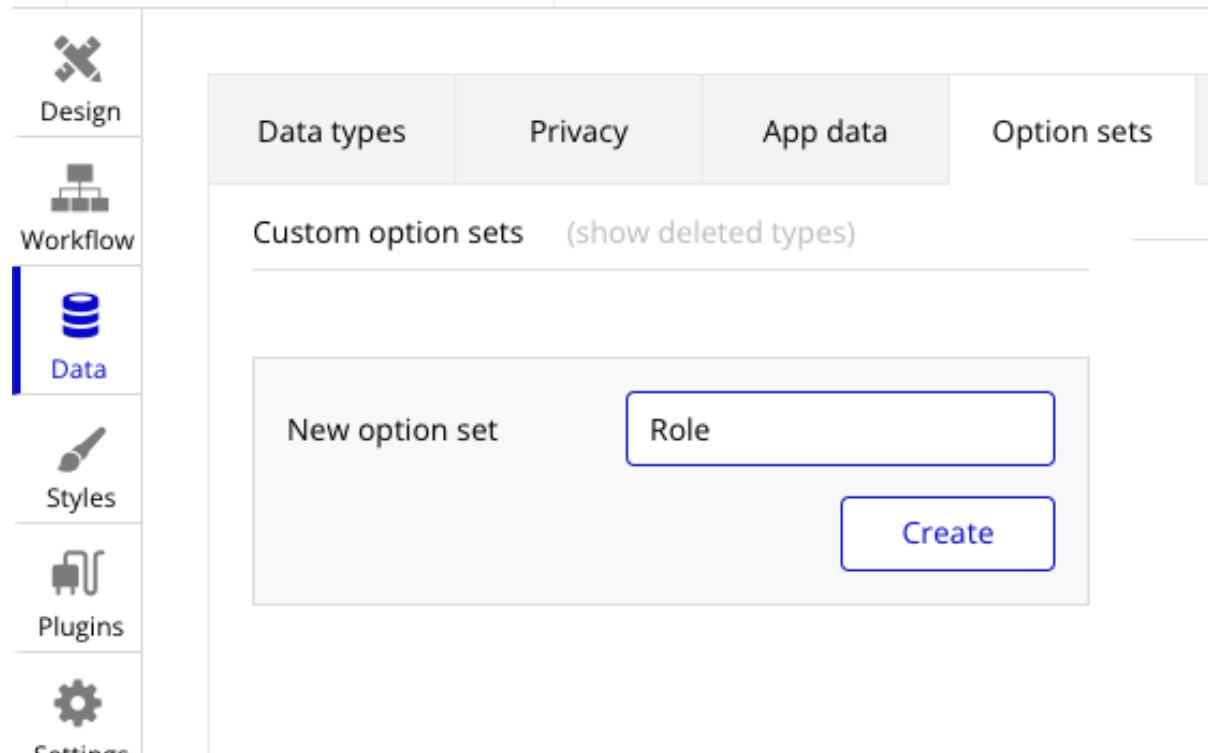
Add a field that can identify a user

First of all, we will make it possible to retain the difference in the role of the owner or the adviser in the data.

It can be stored in text like the male and female of pets, but for values that are specified from fixed options, it is easier to handle by defining options in advance and using them. Bubble provides a mechanism called Option set, so let's use it.

Let's set the Options

- Go to **Data** on the left menu > **Option sets** on the tab
- Enter **Role** in **New Option set** and press the **Create** button
- Role is created as a new Option set



We will add specific Options to the Option set called Role. This time, we will create a Pet Owner and a Pet Advisor.

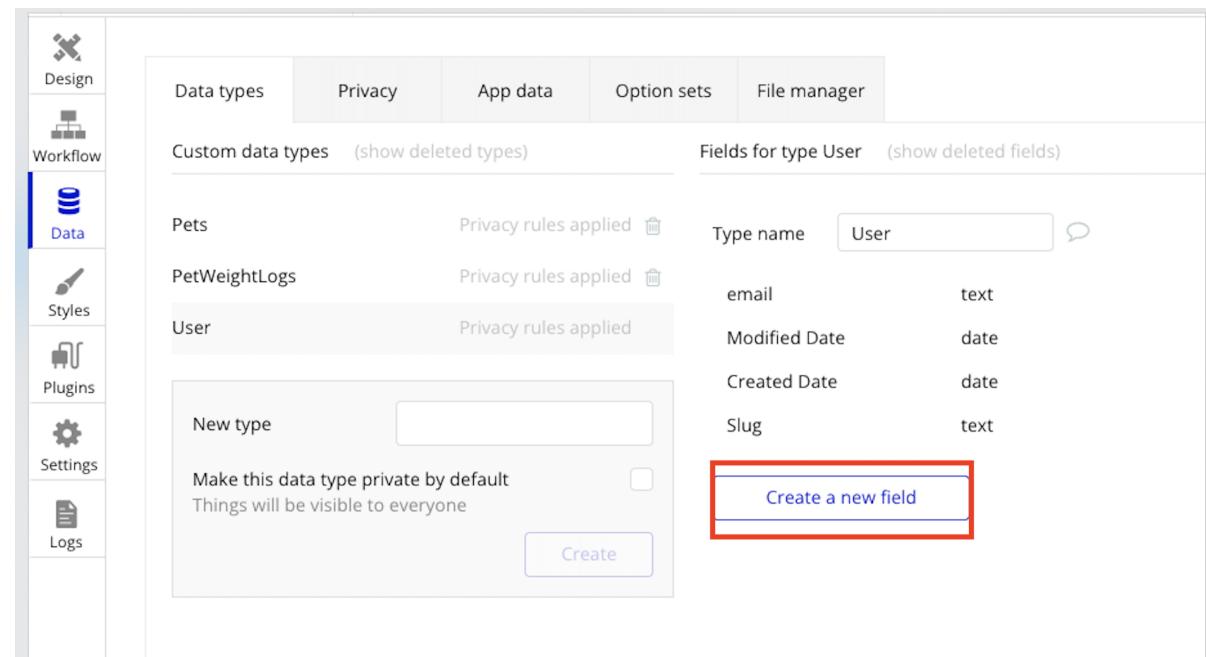
- Enter Pet Owner in the New Option at the bottom right of the screen and press the Create button
- Similarly, enter Pet Advisor in New Option and press the Create button

Settings are complete

The screenshot shows a user interface for managing custom option sets. At the top, there are tabs: Data types, Privacy, App data, Option sets (which is currently selected), and File manager. Below the tabs, there's a section for 'Custom option sets' with a link to 'show deleted types'. To the right, it says 'Attributes and options for set Role'. The 'Role' option set is listed with a delete icon. A 'New option set' input field contains 'Role' and a 'Create' button. On the right, there's a form for defining attributes: 'Option set name' is 'Role', 'Display' is 'text', and 'Attributes (fields that describe each option)' is empty. There's a 'Create a new attribute' button. Below this, under 'Options', there are two entries: 'Pet Owner' and 'Pet Advisor', each with a 'Modify attributes' link and a 'move down' or 'move up' link. At the bottom, there's a 'New option' input field and a 'Create' button.

Next, let's add the role as an attribute of the user

- Go to **Data** on the left menu > **Data types** on the tab
- Select **User**
- Click the **Create a new field** button on the bottom right of the screen



- Enter **Role** in **Field name**
 - This can be named anything as long as it is descriptive
- Select **Role** for **Field type**
 - What is specified here is the **Role** as the **Option set** created earlier.
- Press the Create button

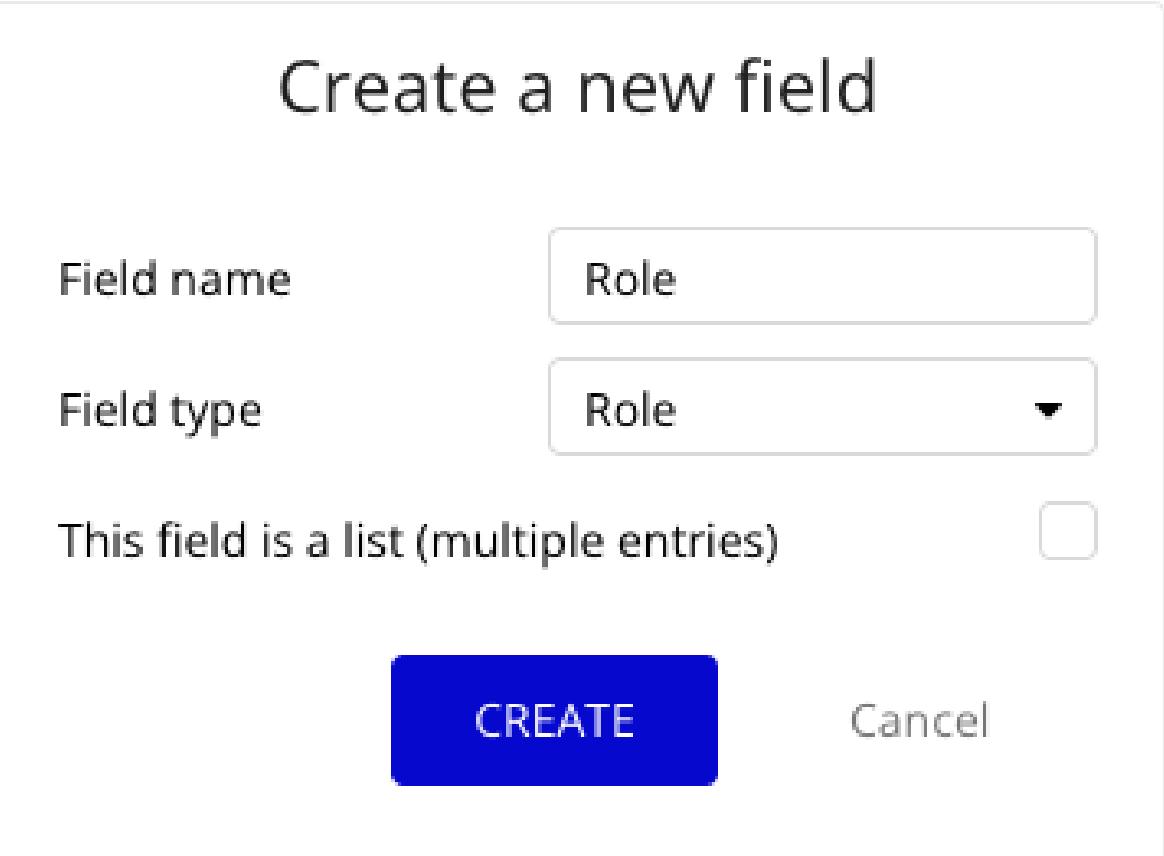
Create a new field

Field name

Field type ▾

This field is a list (multiple entries)

CREATE **Cancel**



Since we've added a new field, Roles will be empty for users we've already created. It will cause inconsistency later, so let's apply a patch (data correction) to the existing data.

- Go to the App Data tab and select All Users
- Since the table is displayed, click the pen icon on the left end of the table and edit one by one
 - All users created now should be owners, so specify Pet Owner for Role

Modify an existing database entry

Type of thing	User
Role	Pet Owner
Slug	
Email	kim+2@guildworks.jp
Unique id	1637274311987x540151212983663400
Created Date	Nov 19, 2021 7:25 am
Modified Date	Nov 19, 2021 7:25 am

SAVE **Cancel**

All PetWeightLogs Run as → kim@guildworks.jp Nov 16, 2021 7:19 pm Nov 19, 2021 6:25 am

It is OK if all lines in Users have Role set to Pet Owner

The screenshot shows a user interface for managing application data. On the left, there is a vertical sidebar with icons for Design, Workflow, Data (which is selected), Styles, Plugins, Settings, and Logs. The main area has tabs for Data types, Privacy, App data (selected), Option sets, and File manager. Below these tabs, there are sections for Database views and Application data - All Users - Development version. The Application data section shows a table with 6 entries (displaying 6). The columns are: Email, Role, Created Date, and Modified Date. All entries in the Role column are highlighted with a red box and show the value "Pet Owner". The table also includes a "New entry" button and a note about 2 additional fields.

Email	Role	Created Date	Modified Date
kim+2@guildworks.jp	Pet Owner	Nov 19, 2021 7:25 am	Nov 20, 2021 6:28 am
kim+advisor2@guildworks.jp	Pet Owner	Nov 19, 2021 6:32 am	Nov 20, 2021 6:28 am
kim+advisor@guildworks.jp	Pet Owner	Nov 19, 2021 5:35 am	Nov 20, 2021 6:28 am
kim@guildworks.jp	Pet Owner	Nov 16, 2021 7:19 pm	Nov 20, 2021 6:28 am
kyogoku+bubble_test2@guildw	Pet Owner	Nov 12, 2021 10:10 am	Nov 20, 2021 6:28 am
kyogoku+bubble_test@guildw	Pet Owner	Oct 31, 2021 8:51 pm	Nov 20, 2021 6:28 am

Allow specifying a role when registering a user

Now, let's make it possible to register by specifying whether it is an owner or an advisor when registering a user.

I've been using the registration screen prepared by Bubble, but I'll put my hand on it.

- Go to login page `index`
- Select `Dropdown` from `Input forms` in the `Design` menu and place it below the password input field
- The login screen is a mixture of signup and login and may not be well placed. Let's add it while checking in the Elements tree.
- To select values in a group, hold down `Ctrl` (`Cmd` for Mac) and double-click to select.

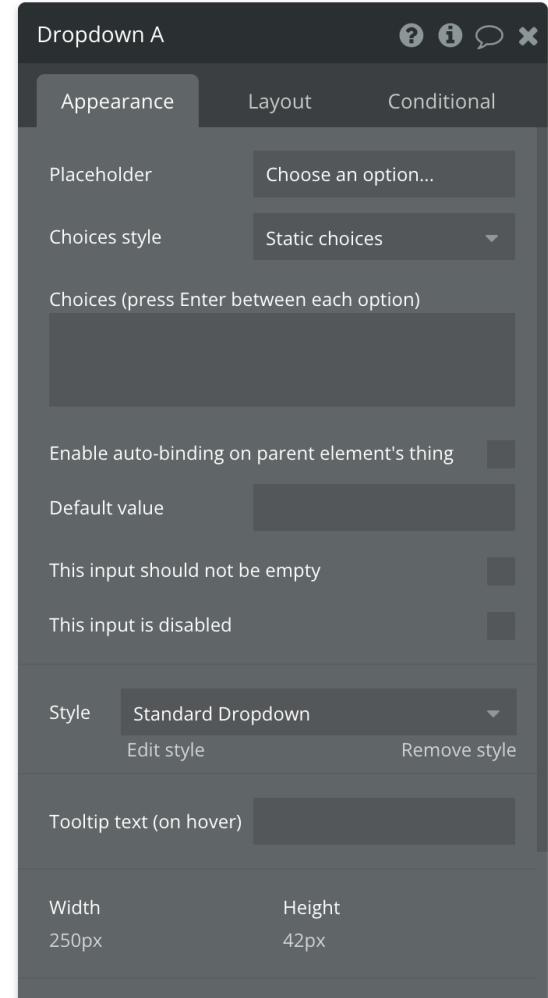
Sign up for My App

Choose an option...

Choose an option...
▼

Sign up

Already have an account? [Login](#)



- Match the width of the Dropdown to make it look nice
- Dropdown settings are as follows
 - Element name: Dropdown Role
 - Placeholder: Choose a role...
 - Choice style : Dynamic choices
 - Type of choices : Role
 - Choices source : All Roles
 - Option caption : Current option > 's Display
 - Default value : Pet Owner
 - Check This input should not be empty :

*Screen image on the next page

Image after input

Sign up for My App

Email

Password

Confirmation

Choose a role

Sign up

Already have an account? [Login](#)

Dropdown Role

Appearance Layout Conditional

Placeholder Choose a role

Choices style Dynamic choices ▾

Type of choices Role ▾

Choices source All Role

Option caption Current option's Display

Enable auto-binding on parent element's thing

Default value Pet Owner

This input should not be empty

This input is disabled

Style Standard Dropdown ▾

Edit style Remove style

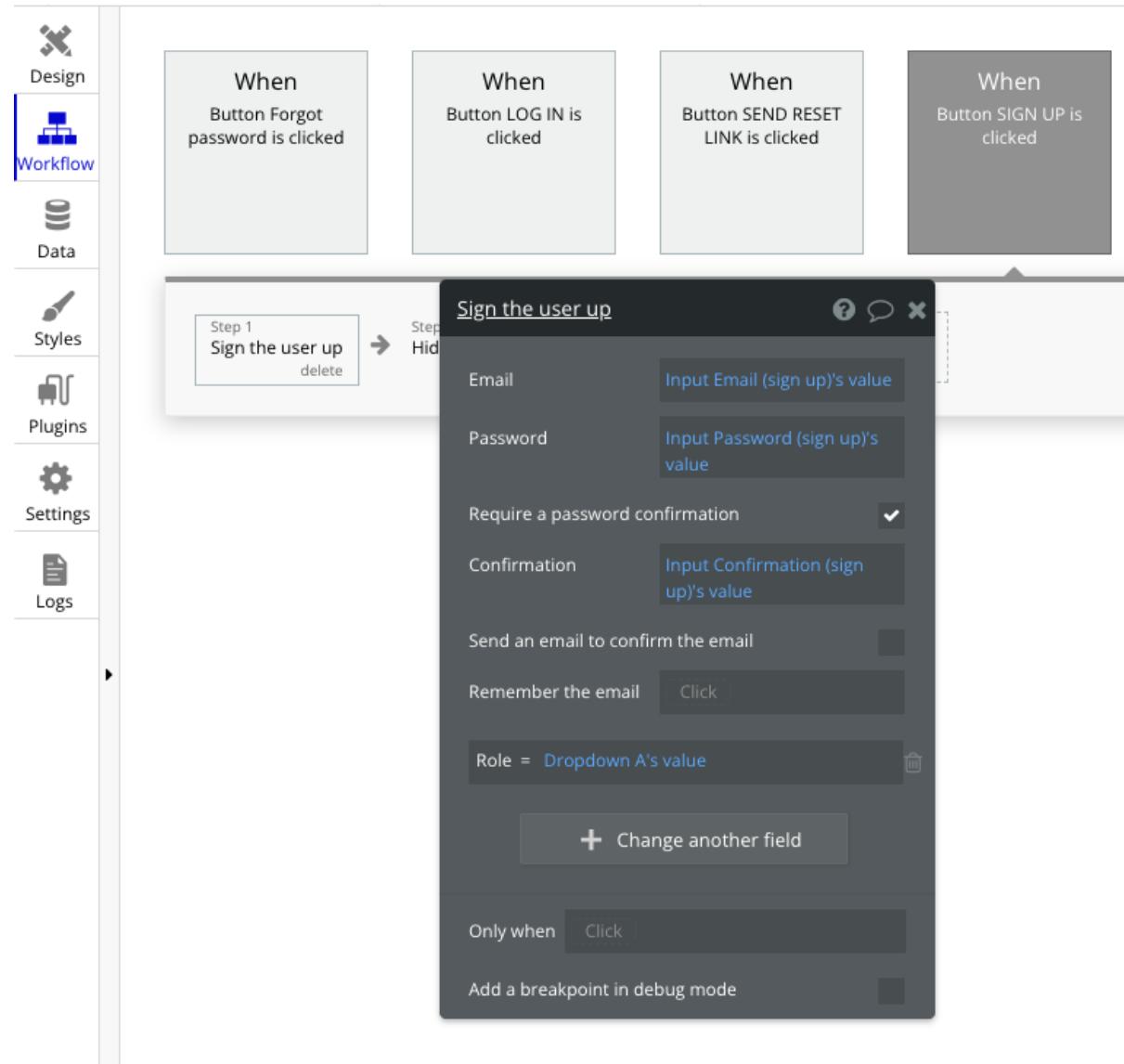
Tooltip text (on hover)

Width 250px

Height 42px

Next, make sure that the entered Role is set at the time of user registration

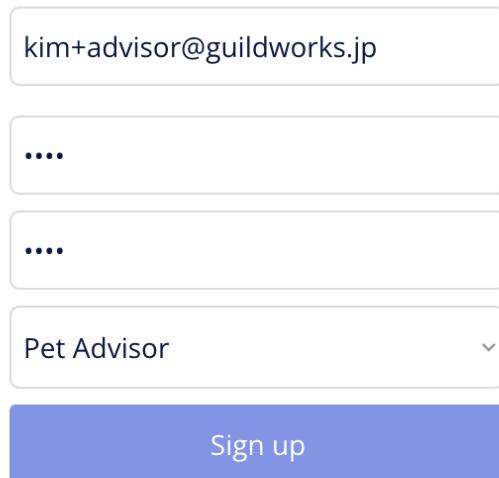
- Go to Workflow from the left menu > Button Sign up is clicked from the lined squares > Sign the user up from the lined Actions
- Click the Change another field button in the Action settings screen
- Since the input field appears, select Role = Dropdown Role's value



Let's preview and check the operation

You have successfully registered an account as an advisor! (No dedicated screen yet)

Sign up for My App



A screenshot of a sign-up form for "My App". The form consists of several input fields and a button. The first field contains the email address "kim+advisor@guildworks.jp". The second field is empty and contains four dots ("...."). The third field is empty and contains four dots ("...."). The fourth field is a dropdown menu set to "Pet Advisor". Below the form is a large blue "Sign up" button. At the bottom left, there is a link "Already have an account? [Login](#)".

kim+advisor@guildworks.jp

....

....

Pet Advisor

Sign up

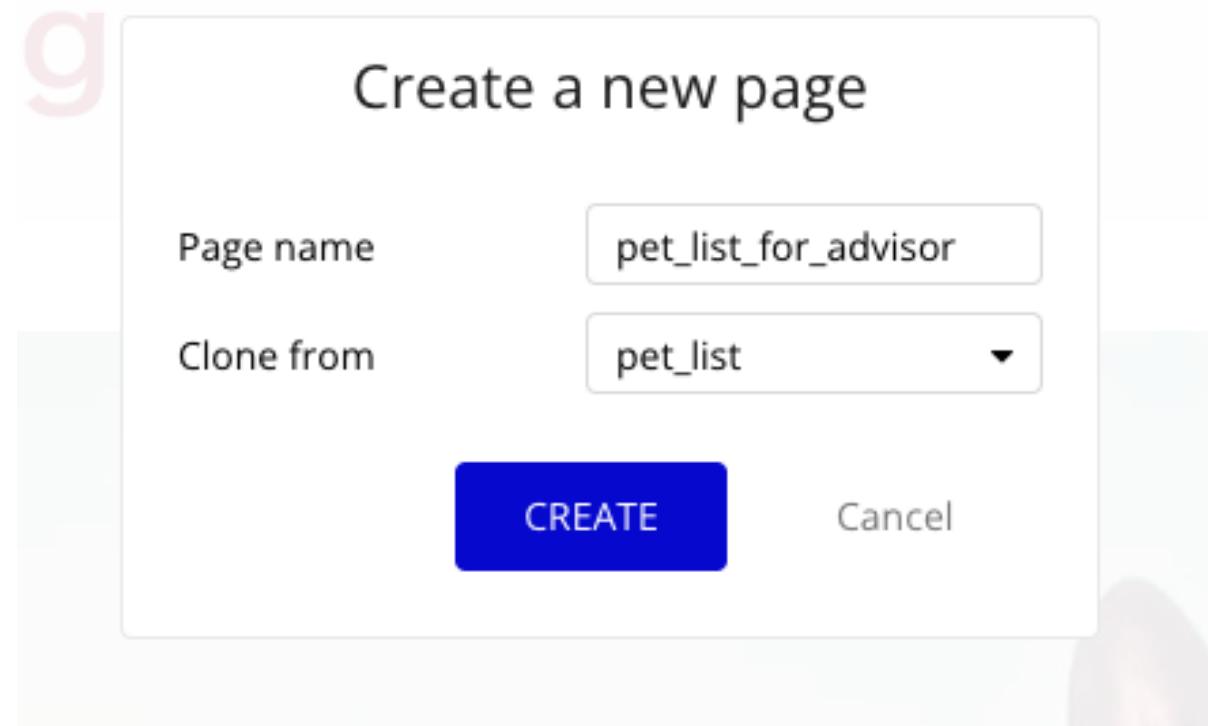
Already have an account? [Login](#)

		Email	Role	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Run as → kim+advisor@guildworks.jp	Pet Advisor	

Create Advisor list screen

Let's create an advisor list screen

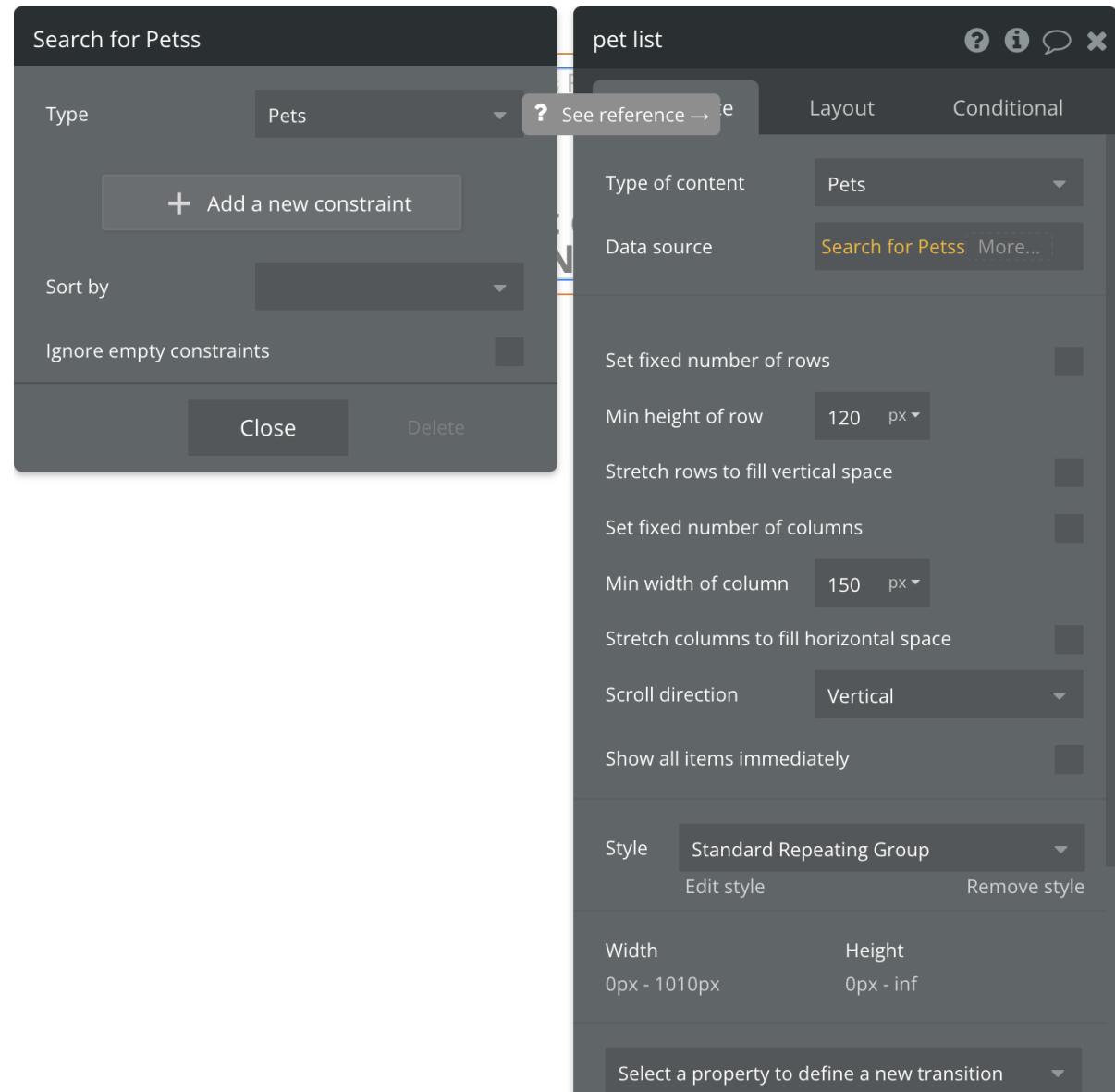
- Open the menu next to the logo and select `Add a new page...`
- Enter `pet_list_for_advisor` in `Page name`
- Select `pet_list` in `Clone from`
- A new screen is created



Advisors can see all registered pets.-

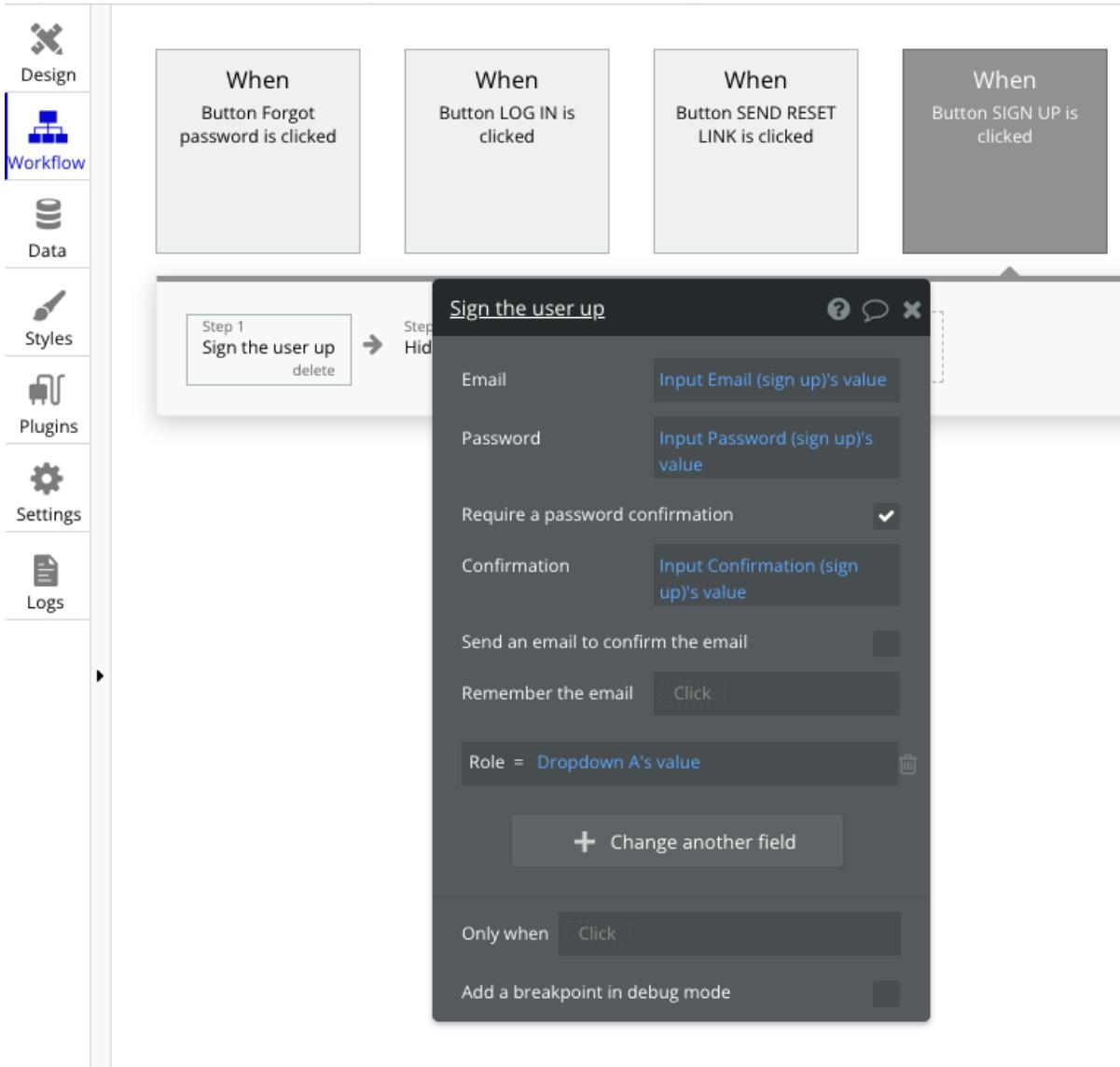
Delete original search criteria

- Click **Do search for** in Data source
- Click the trash can icon to delete the part that specifies **Created By = Current User**
- Advisors need to view many pets, so keep the size of each cell small.
 - Specify 150px for **Min width** and 120px for **Min height**



When an advisor logs in, transition to the advisor list screen

- open index page
- Go to Workflow from the left menu > Button Sign up is clicked from the lined squares > Sign the user up from the lined Actions
- Click the Change another field button in the Action settings screen
- Since the input field appears, select Role = Dropdown Role 's value



Let's preview

Nothing comes out! ? why? ?

The screenshot shows a web-based application titled "PetLog". At the top right is a red "LOG OUT" button. Below the title, there is a table with four columns: "Name", "Gender", "Birthday", and "Owner". The table is currently empty, with no data rows present.

Because you don't have the authority.

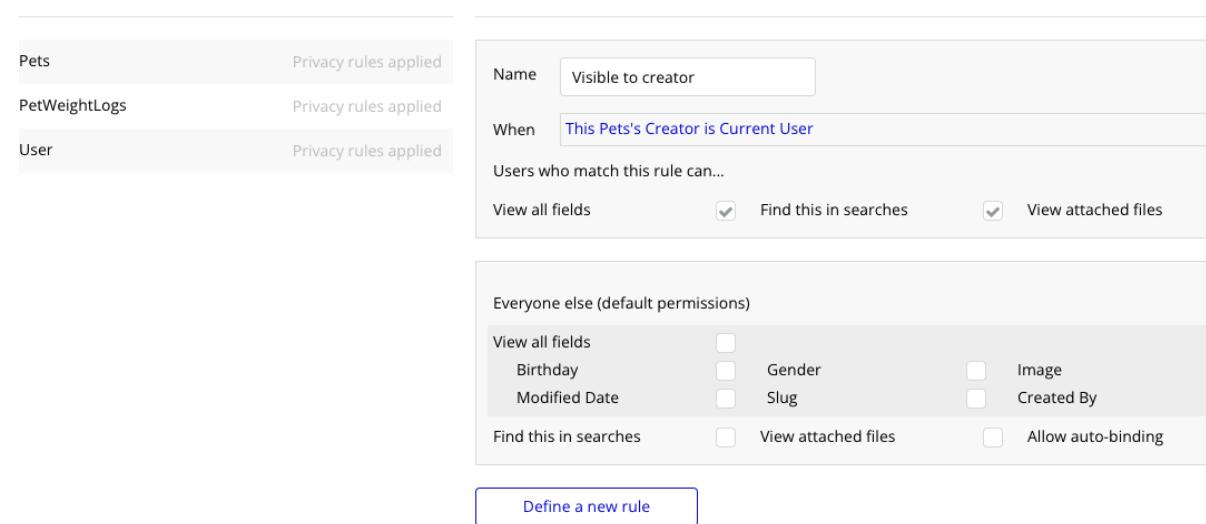
Permission control in Bubble

I'm glad I didn't realize it until now, but
Bubble strictly restricts access to Data.

Go to **Data** on the left menu >
Privacy on the tab.

By default, data is only accessible to
the creator.

Naturally speaking, it is natural.



The screenshot shows the privacy settings for three data models: Pets, PetWeightLogs, and User. Each model has a status bar indicating "Privacy rules applied". Below the models, there is a general rule configuration:

- Name:** Visible to creator
- When:** This Pet's Creator is Current User
- Users who match this rule can...**: View all fields (checkbox checked), Find this in searches (checkbox checked), View attached files (checkbox checked)

Below this, under "Everyone else (default permissions)", the following fields are listed with their checkboxes:
View all fields (unchecked), Birthday (unchecked), Modified Date (unchecked), Find this in searches (unchecked)
Gender (unchecked), Slug (unchecked), View attached files (unchecked)
Image (unchecked), Created By (unchecked), Allow auto-binding (unchecked)

A blue button at the bottom right says "Define a new rule".

Now, if you're an advisor, we'll add permissions that allow you to see all the data.

- In the Privacy tab, select Pets
- Click the Define a new rule button
- Enter Visible to advisor in the Rule name
- Select Current User 's Role is Pet Advisor for When
 - The condition is that the user was an advisor

Now if you're an Advisor, you'll be able to see stats for all your pets.

It is also possible to limit the fields that can be referenced for each rule, but we will not use it this time.

*Screen image on the next page

Data types Privacy App data Option sets File manager

Custom data types

Pets	Privacy rules applied
PetWeightLogs	Privacy rules applied
User	Privacy rules applied

Data rules for type Pets

Pets

Name: Visible to advisor

When: Current User's Role is Pet Advisor

Users who match this rule can...

View all fields Find this in searches View attached files Allow auto-binding

PetWeightLogs

Name: Visible to creator

When: This Pet's Creator is Current User

Users who match this rule can...

View all fields Find this in searches View attached files Allow auto-binding

User

Everyone else (default permissions)

View all fields	<input type="checkbox"/>	Birthday	<input type="checkbox"/>	Gender	<input type="checkbox"/>	Image	<input type="checkbox"/>	Name	<input type="checkbox"/>	Created Date	<input type="checkbox"/>
		Modified Date	<input type="checkbox"/>	Slug	<input type="checkbox"/>	Created By	<input type="checkbox"/>				

Find this in searches View attached files Allow auto-binding

[Define a new rule](#)

Now add a rule to **PetWeightLogs** in the same way.

Advisors should now be able to see all the data.

Let's preview

yay

PetLog

[Pet Register](#)[Log out](#)

もふこ



はな



ぴよんきち



うさまる



pochi



shiro



kuro
ups



pochi2

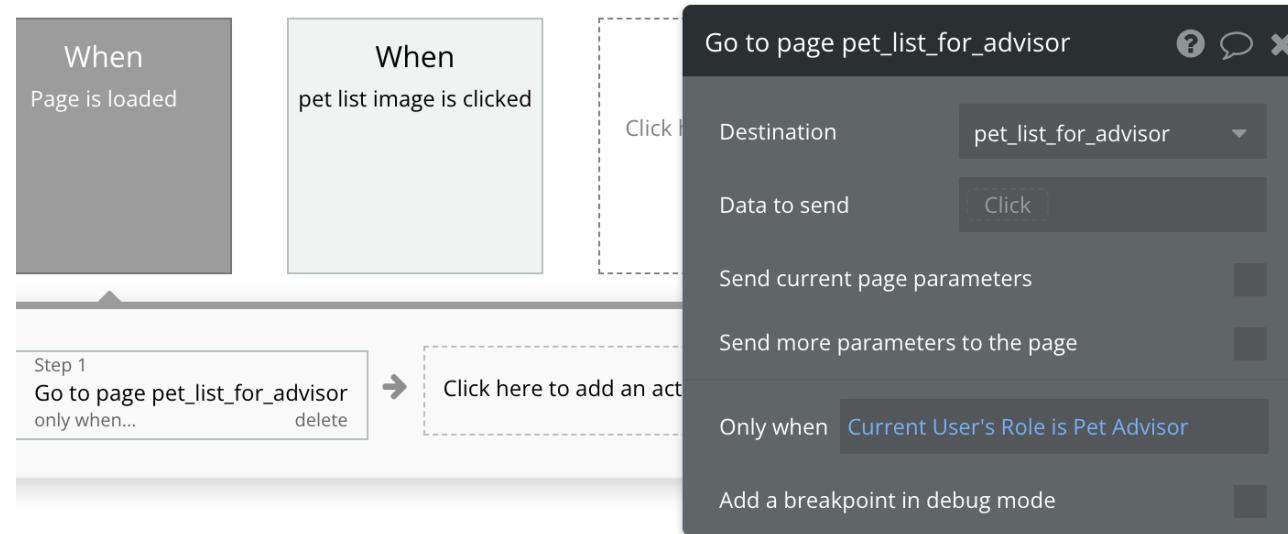


pochi

Next, control the transition destination at login.

For advisors, add an Action to transition to pet_list_for_advisor when transitioning to pet_list

- Open Workflow on index page
- Click Click here to add an event..
- Select General > Page is loaded
- Click Click here to add an action..
- Click Navigation > Go to page..
- Open Settings, select pet_list_for_advisor for Destination
- Select Current User sRole is Pet Advisor for Only when



Let's preview & check the operation

Login as Advisor

PetLog

Pet Register

Log out



After logging in as owner

PetLog

[Pet Register](#)[Log out](#)

good good

<Advanced>

An account was created without permission with an advisor,

Is it okay to see information without permission?

<Advanced>

Let's make it so that you can't start using it unless the system administrator approves it

<Advanced>

will do the following

- Add a field to user information indicating whether they are approved as advisors
- Access to data must be approved as well as being an advisor
- Advisor pet list shows message under review if unapproved

Add a field to user information whether they are approved as advisors

- From the left menu, click Data > Data types > User
- Click the Create a new field button on the bottom right of the screen
- Enter Approved As Advisor in Field name
- Select yes/no for Field type
- Click the Create button

Create a new field

Field name	Approved As Advisor
Field type	yes / no
This field is a list (multiple entries) <input type="checkbox"/>	
CREATE Cancel	

<Advanced>

Since there is a column called `default` in the added field, set `no` (or `no`).

At the time it is created, it will be in an unapproved state.

The screenshot shows the 'Data types' section of a CMS interface. On the left, there's a sidebar with 'Custom data types' (show deleted types) and a 'New type' input field. A checkbox for making the type private by default is checked, with a note below stating 'Things will be visible to everyone'. A 'Create' button is at the bottom of the sidebar. The main area shows 'Fields for type User' (show deleted fields). A table lists fields: 'Approved As Advisor' (yes / no, default: no), 'Role' (Role, default dropdown), 'email' (text, Built-in field), 'Modified Date' (date, Built-in field), 'Created Date' (date, Built-in field), and 'Slug' (text, Built-in field). A red box highlights the 'Approved As Advisor' row. At the bottom is a 'Create a new field' button.

Type name	Field Name	Type	Default
User	Approved As Advisor	yes / no	default no
User	Role	Role	default
	email	text	Built-in field
	Modified Date	date	Built-in field
	Created Date	date	Built-in field
	Slug	text	Built-in field

<Advanced>

For existing users, leave all Approved As Advisor to no
(Troublesome and depressed... but important!)

	Email	Approved As Advisor	Role	
<input type="checkbox"/>	Run as → kim+advisor3@guildworks.jp	no	Pet Advisor	Ni
<input type="checkbox"/>	Run as → kim+2@guildworks.jp	no	Pet Owner	Ni
<input type="checkbox"/>	Run as → kim+advisor2@guildworks.jp	no	Pet Owner	Ni
<input type="checkbox"/>	Run as → kim+advisor@guildworks.jp	no	Pet Owner	Ni
<input type="checkbox"/>	Run as → kim@guildworks.jp	no	Pet Owner	Ni
<input type="checkbox"/>	Run as → kyogoku+bubble_test2@guildw	no	Pet Owner	Ni
<input type="checkbox"/>	Run as → kyogoku+bubble_test@guildwo	no	Pet Owner	Oi

<Advanced>

also see if permission to access data is authorized

- From the left menu, click Data > tab Privacy > Pets
- Click Pet Advisor at the end of the part that describes When condition of Visible to advisor
- More'' will appear, so click More''
- Select and Current User 's Approved As Advisor is "yes"
- Do the same for PetWeightLogs

<Advanced>

Let's check the operation

Try logging in as a user whose Approved As Advisor is no

PetLog

Pet Register

Log out

<Advanced>

What if Approved As Advisor is yes ?

PetLog

Pet Register

Log out



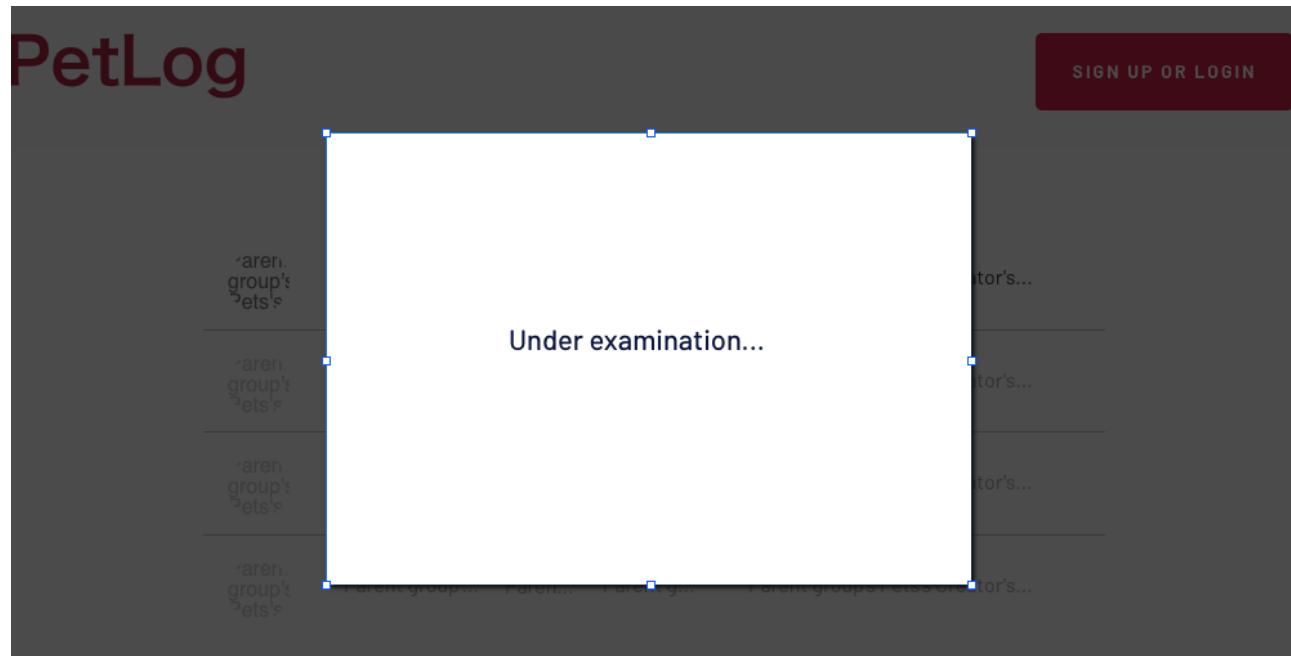
good

184

<Advanced>

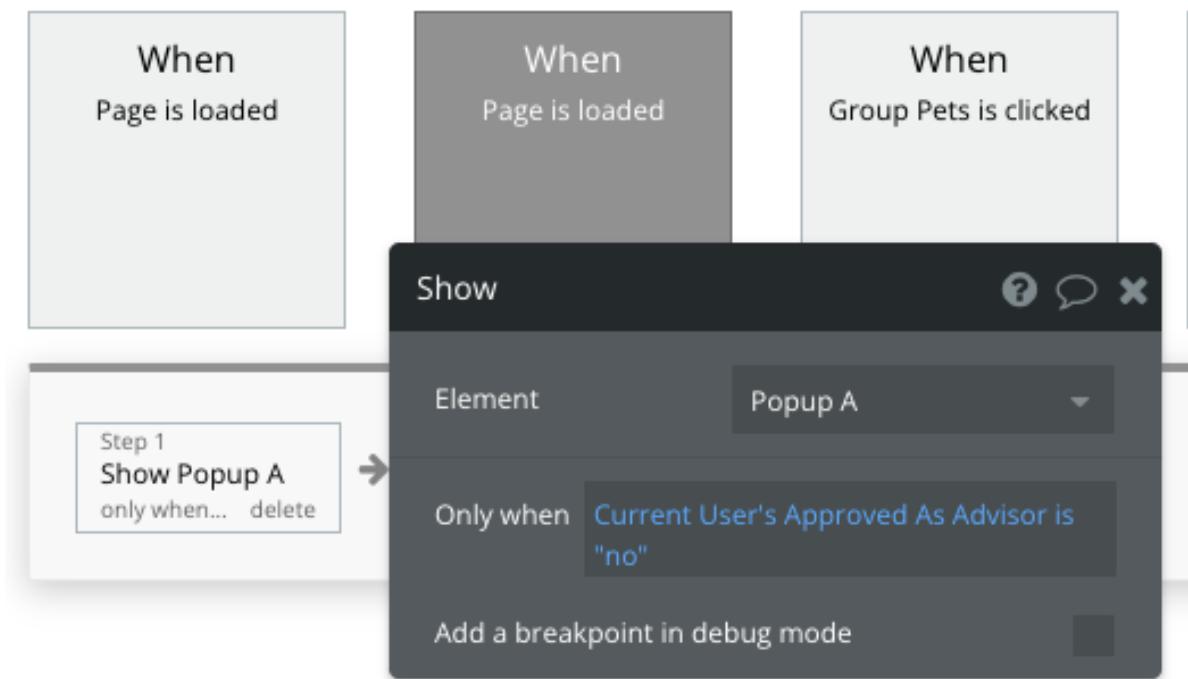
If unapproved, output a message that it is under review

- Open the Design menu on the pet_list_for_advisor screen
- Add Popup
- Add a text Element above the Popup with a message that it is under review



<Advanced>

- Go to Workflow from menu
- Click **Click here to add an event.. > Page is loaded**
- Click here to add an action.. > Element Actions > Show`
- Specify **Popup A** for Element
- Specify **Current User** ``'s Approved As Advisor is "no"`` for Only when



Let's check the operation

yes adviser

PetLog

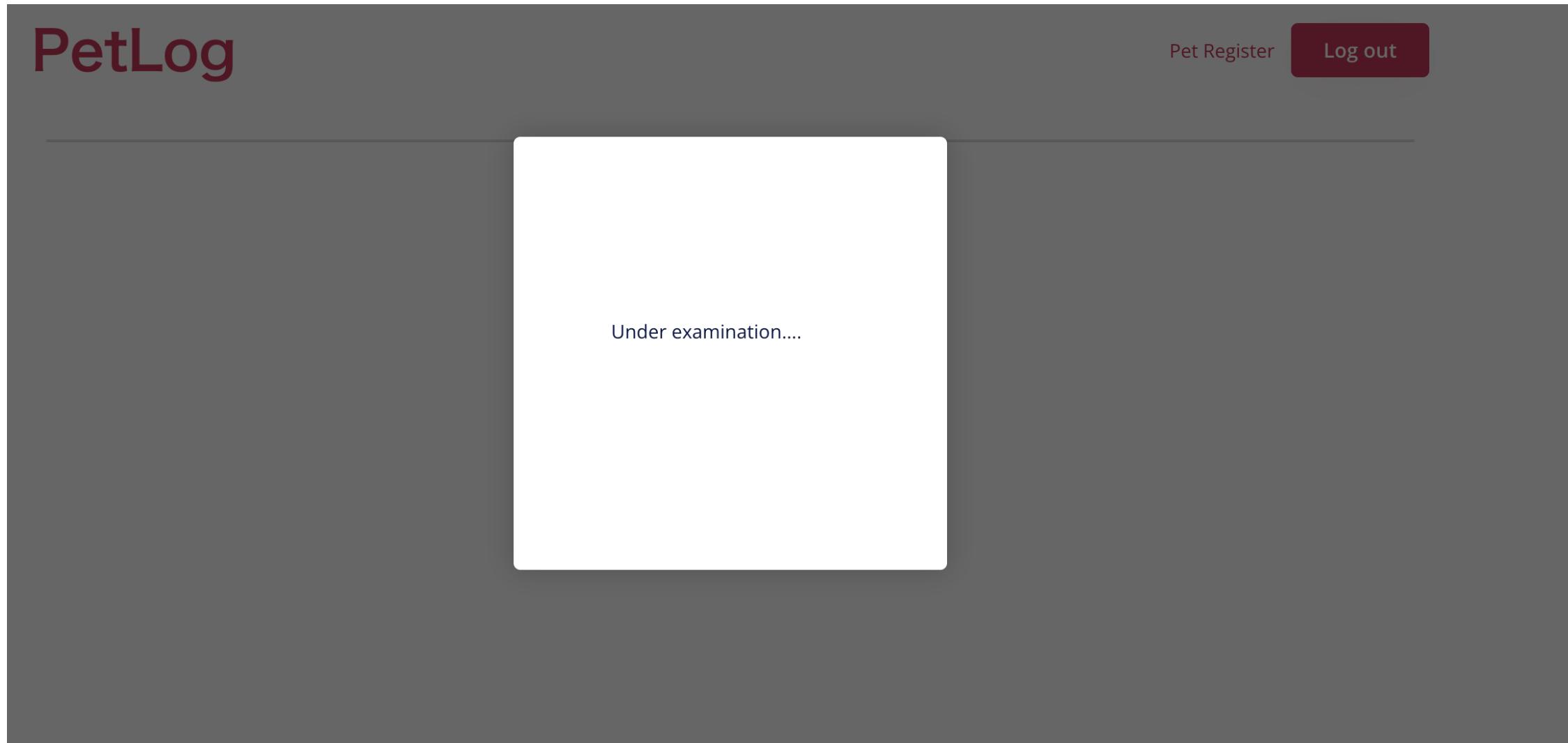
Pet Register

Log out



<Advanced>

if no



<Advanced>

How do sysadmins find out?

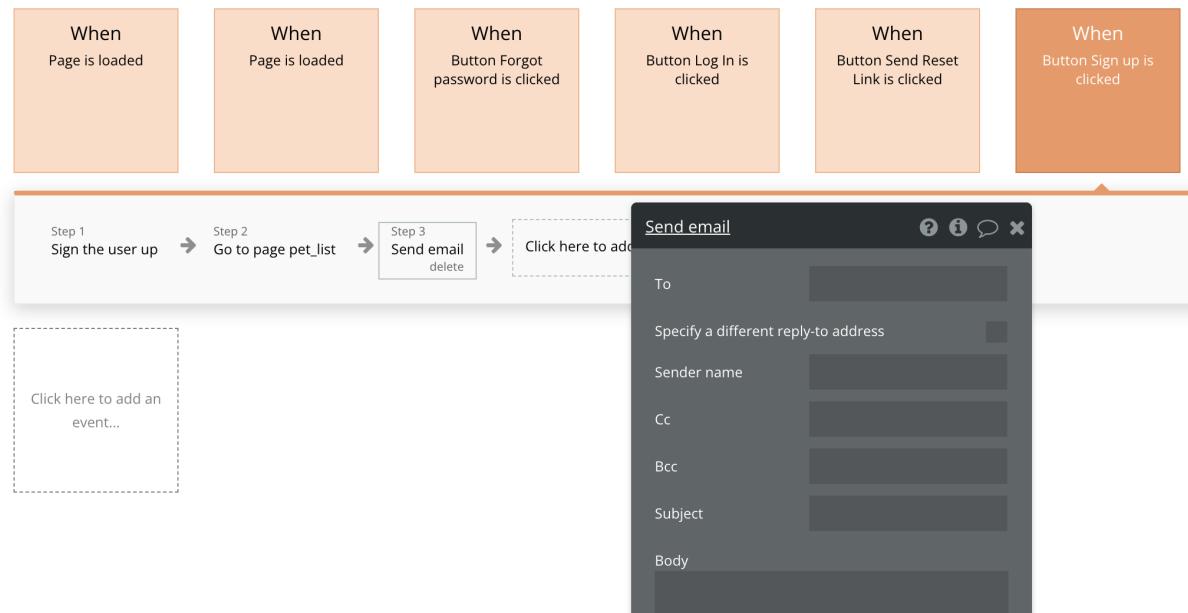
<Advanced>

Let's notify the system administrator by e-mail when the advisor is registered

<Advanced>

Let system administrators be notified by email

- open index page
- Go to Workflow from the menu and select Button Sign up is clicked
- Click Click here to ad an action... > Email > Send Email
- Drag the position of Action before Go to page pet_list to move it

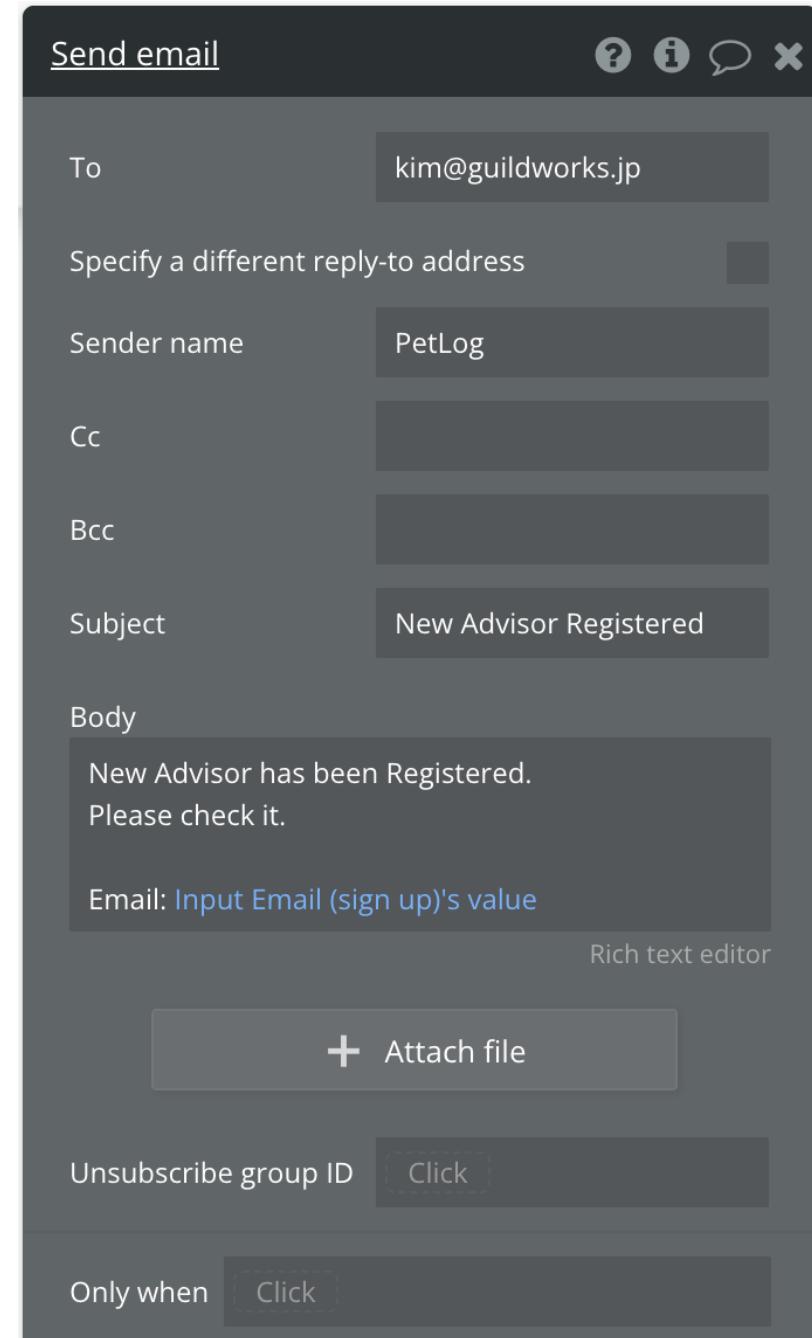


<Advanced>

- Set your own email address in To
- Sender name is PetLog
- Subject is New Advisor Registered
- For Body, select Input Email(sign up)'s value with dynamic data insert at the end of the body below

New Advisor has been Registered.
Please check it.

Email:



<Advanced>

- Select `Dropdown Role`'s
`value` is `Pet Advisor` for
Only When

Only when `Dropdown Role's value is Pet Advisor`

Add a breakpoint in debug mode

<Advanced>

Let's check the operation

After signing up as an advisor

PetLog

New Advisor Registered

宛先: kim@guildworks.jp,

返信先: titech-bubble-2-suburi-2021119-no-reply@bubbleapps.io

New Advisor has been Registered.

Please check it.

Email: kim+advisor4@guildworks.jp

<Advanced>

if the owner

Yeah, no. Yay

<Advanced>

Exercises

An opportunity for the advisor to approach the owner, or the owner to approach the advisor
Let's create a Noh performance

- Example: You can send advice to the owner
- Example: You can advertise
- Example: You can ask your advisor for advice, etc.

Today's Review

I made a design

- Created a screen that fits the display size
 - Using a technique called responsive web design, we used the following rules to control the appearance according to the display size.
 - Placement rules within parent elements
 - element sizing rules
 - Display presence/absence rule
- I tried using Style
 - Edit and add styles, and apply styles individually

I made logic

- Feedback on screen operation was returned
- Extracted and processed data
- Switched screens by authority

Together we saw how you can embed logic in various places with Bubble

At the end

This concludes the Basic Lecture on Bubble.

After this, it will be an application version of Bubble.

There are many features that I haven't touched on yet.

Bubble has plenty of manuals and references, so

If you adopt Bubble, please take advantage of it.

Here is the manual.

<https://manual.bubble.io/>

References appear when you hover over something on the screen that you don't understand.

For most features, links to references pop up.

Thank you for your hard work