

MAI4CAREU

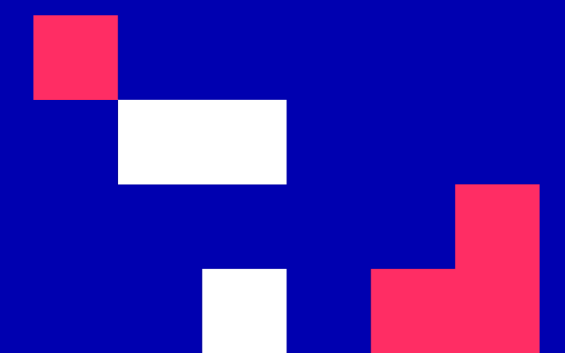
Master programmes in Artificial
Intelligence 4 Careers in Europe

University of Cyprus

HUMAN-CENTERED INTELLIGENT USER INTERFACES - MAI648

Marios Belk

2022



LAB 4

Intelligent User Interface Design Prototyping – Part 2

CONTENTS

- User interface widget libraries
- Justinmind pre-made assets
- Custom libraries and design systems
- Designing user interactions on the web and mobile

LAB 4

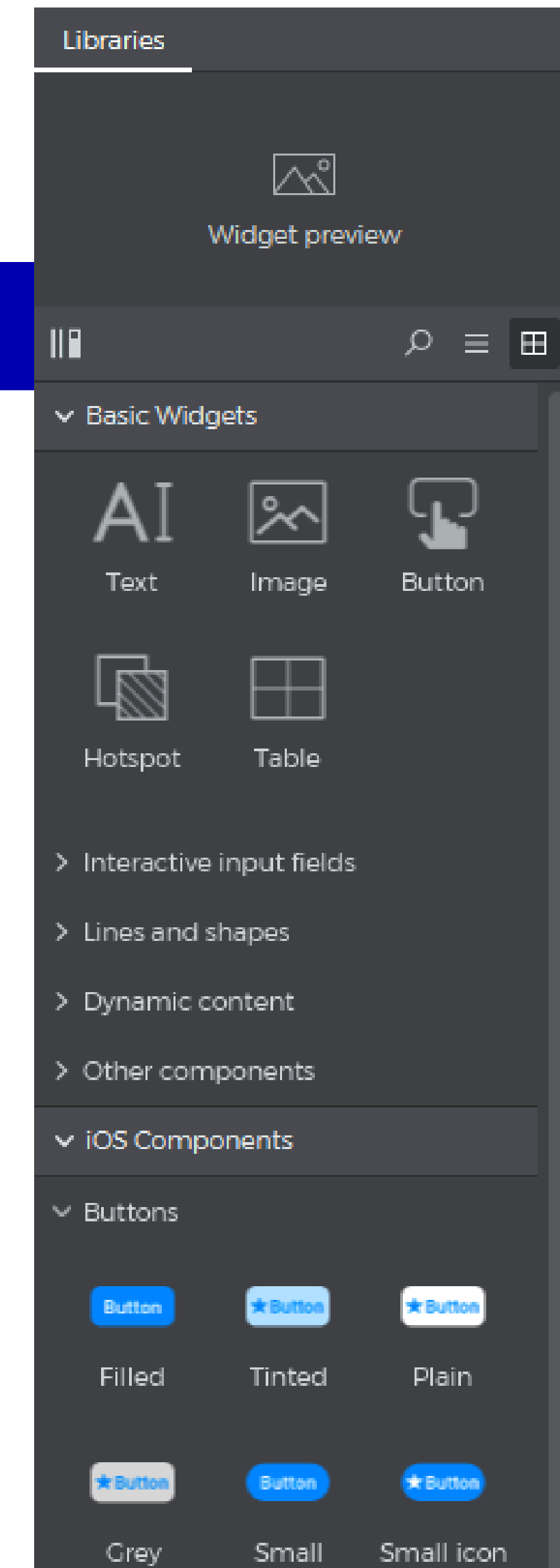
Justinmind pre-made assets

- Pre-installed libraries
- Downloadable libraries

LAB 4

Pre-installed libraries

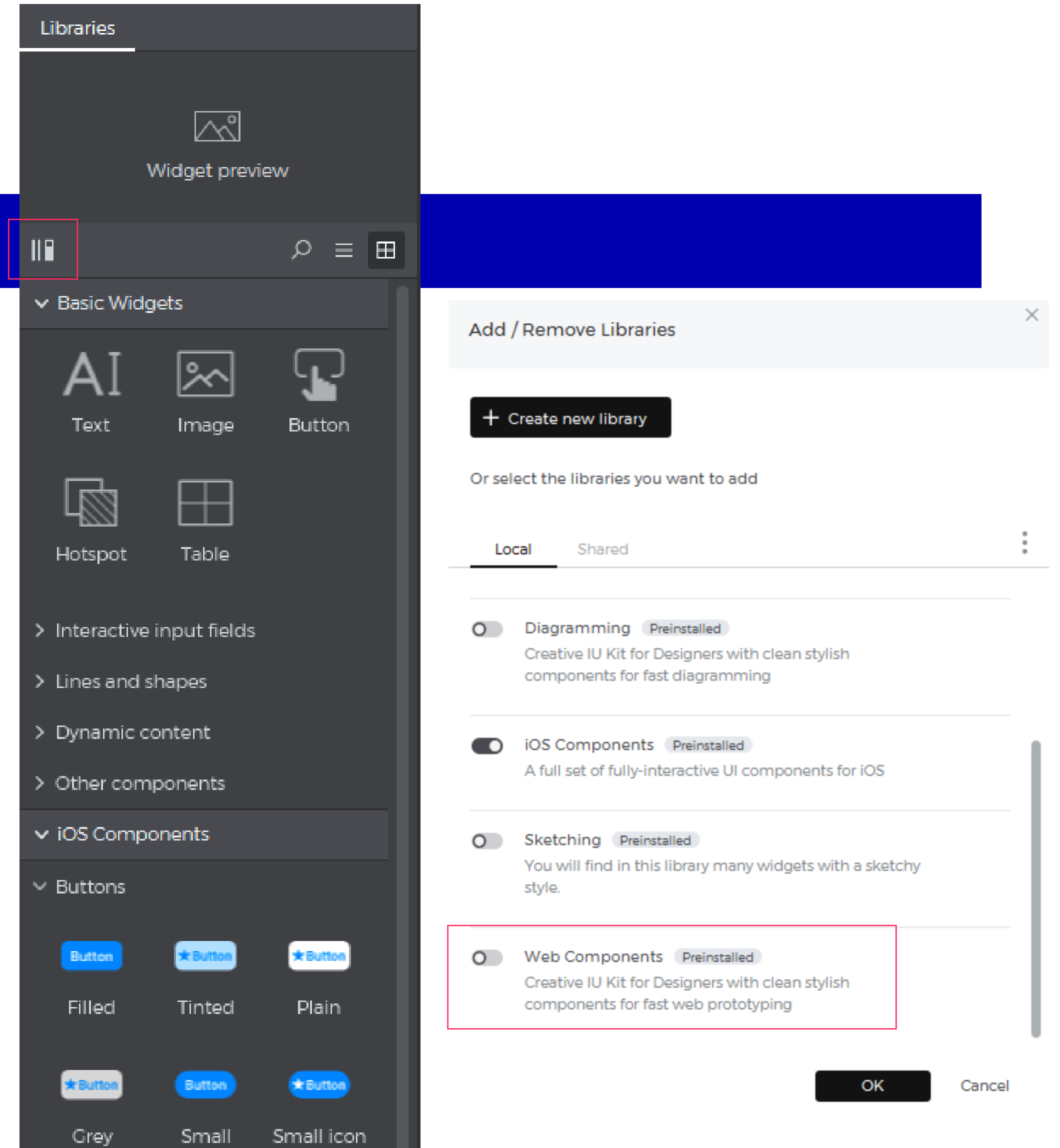
- Justinmind has created dozens of interactive widget libraries you can include in your prototypes
- Check the Libraries palette
- You may find a few libraries already listed here depending on which device you're prototyping for



LAB 4

Pre-installed libraries

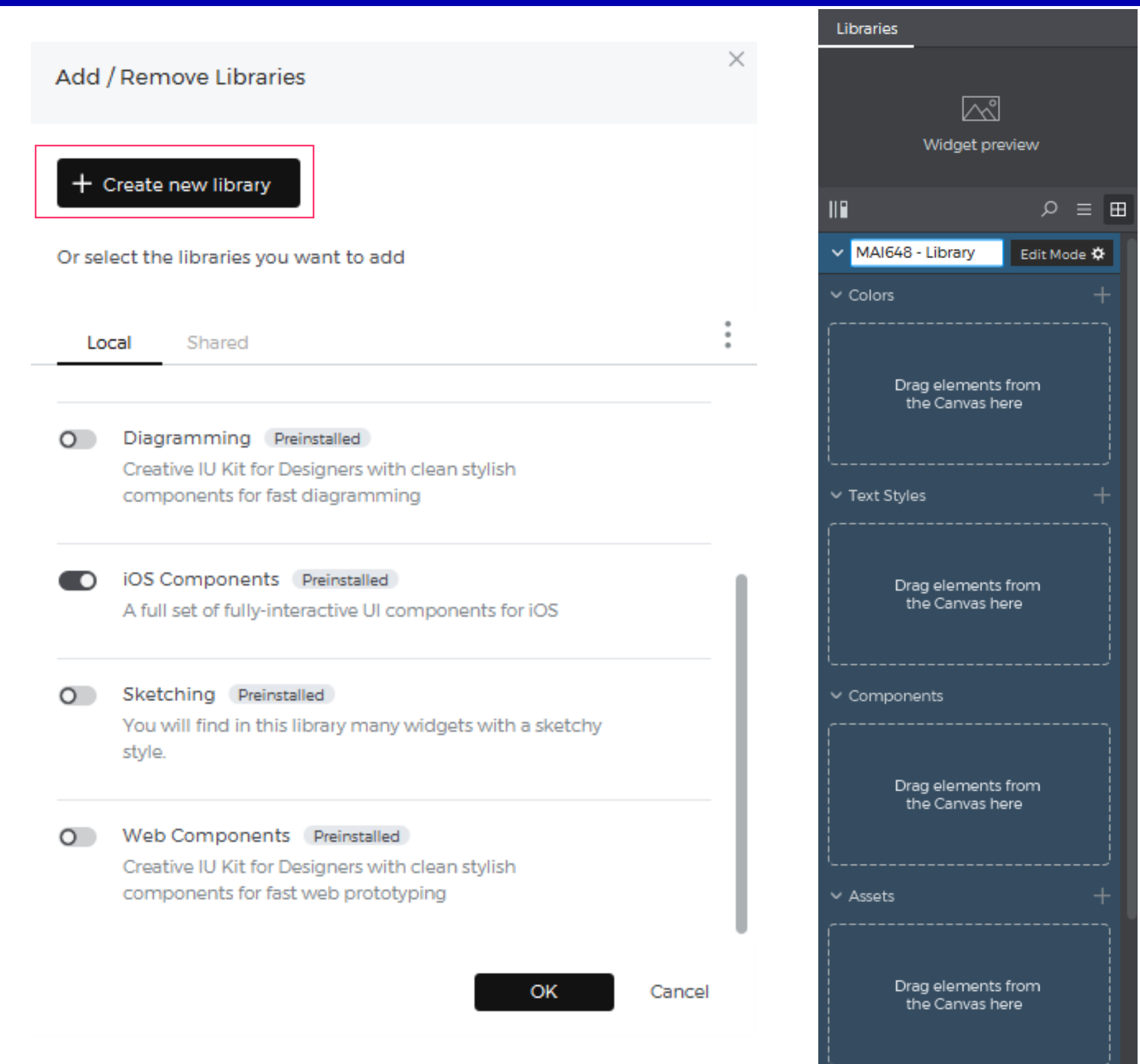
- Click on the 'New Library' text link, which will open a pop-up list of libraries, like iOS icons, Diagrams, and Web Components. Tick the check boxes of the libraries you'd like to add and click "OK". They'll be imported into the Libraries palette.



LAB 4

Create a custom library

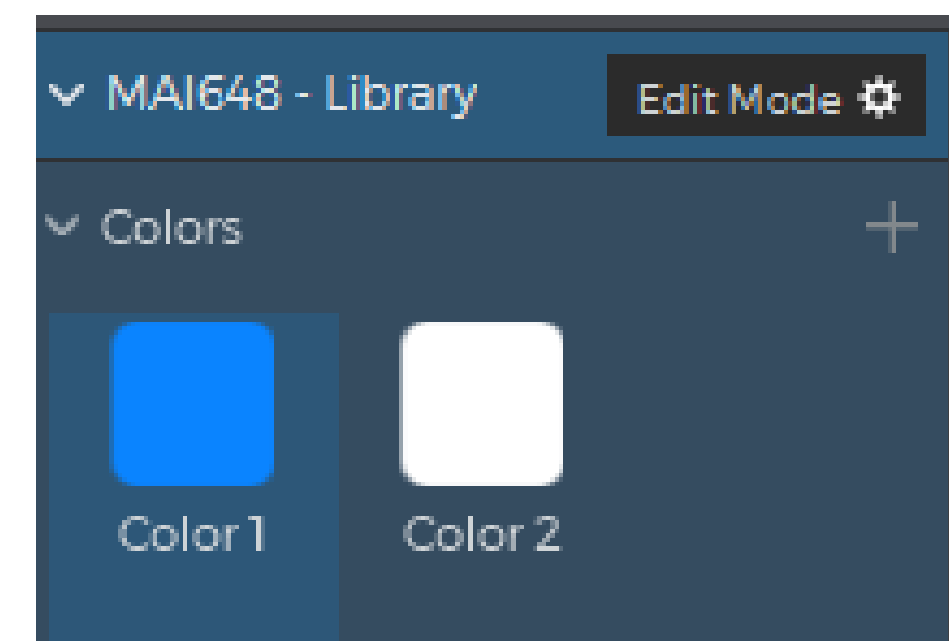
- Click on the “Create new library” button
- Give a name to your library
- Libraries have four different categories that you can define: Colors, Text Styles, Components and Assets



LAB 4

Adding colors in a library

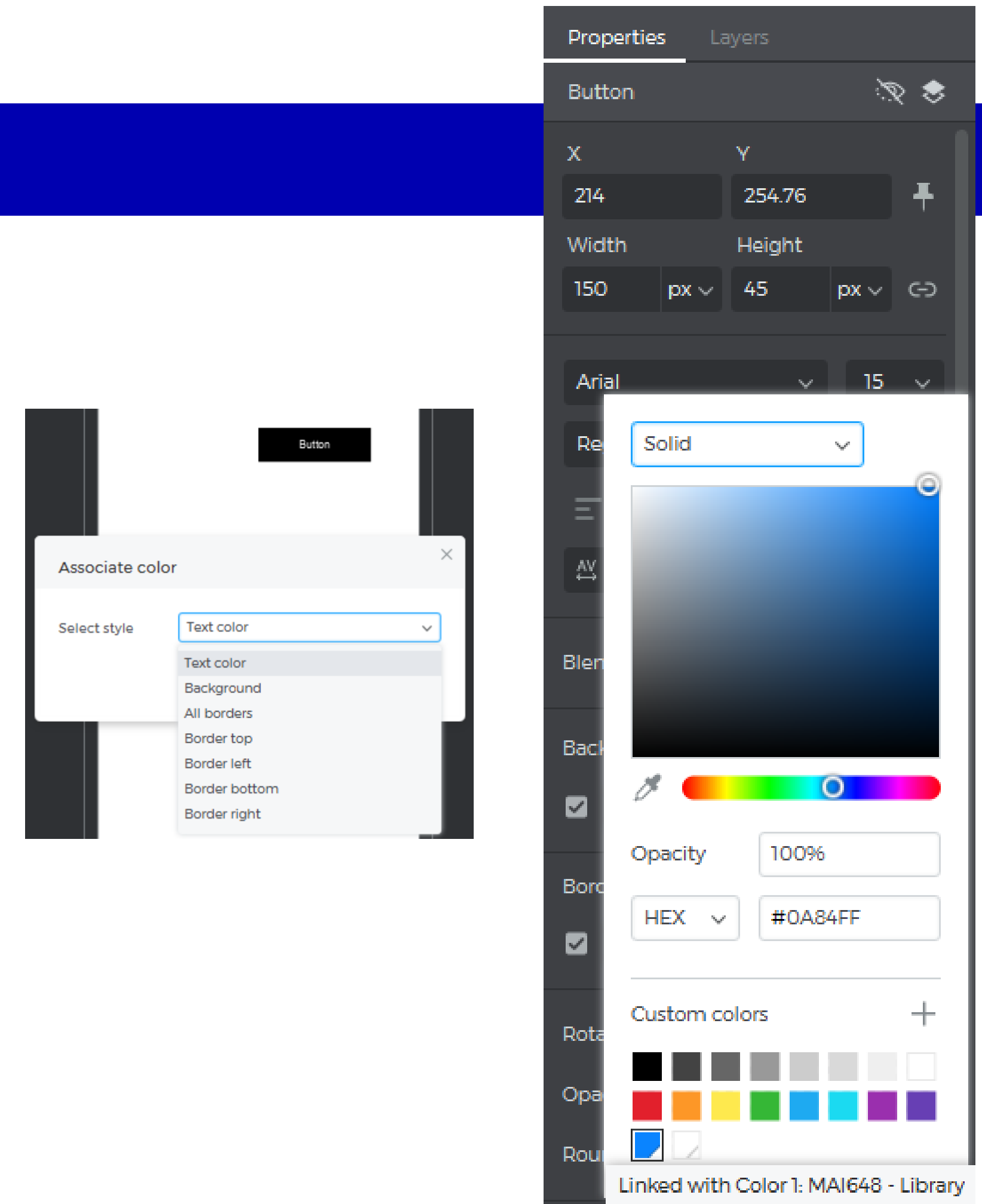
- While in “Edit mode”
- Adding colors
 - **Option 1:** Click on the ‘+’ icon next to the word ‘Colors’. Set your color from the color palette
 - **Option 2:** Drag an element from the canvas onto the ‘Colors’ section. The colors being used by that element will be automatically added to the list.



LAB 4

Using colors in a library

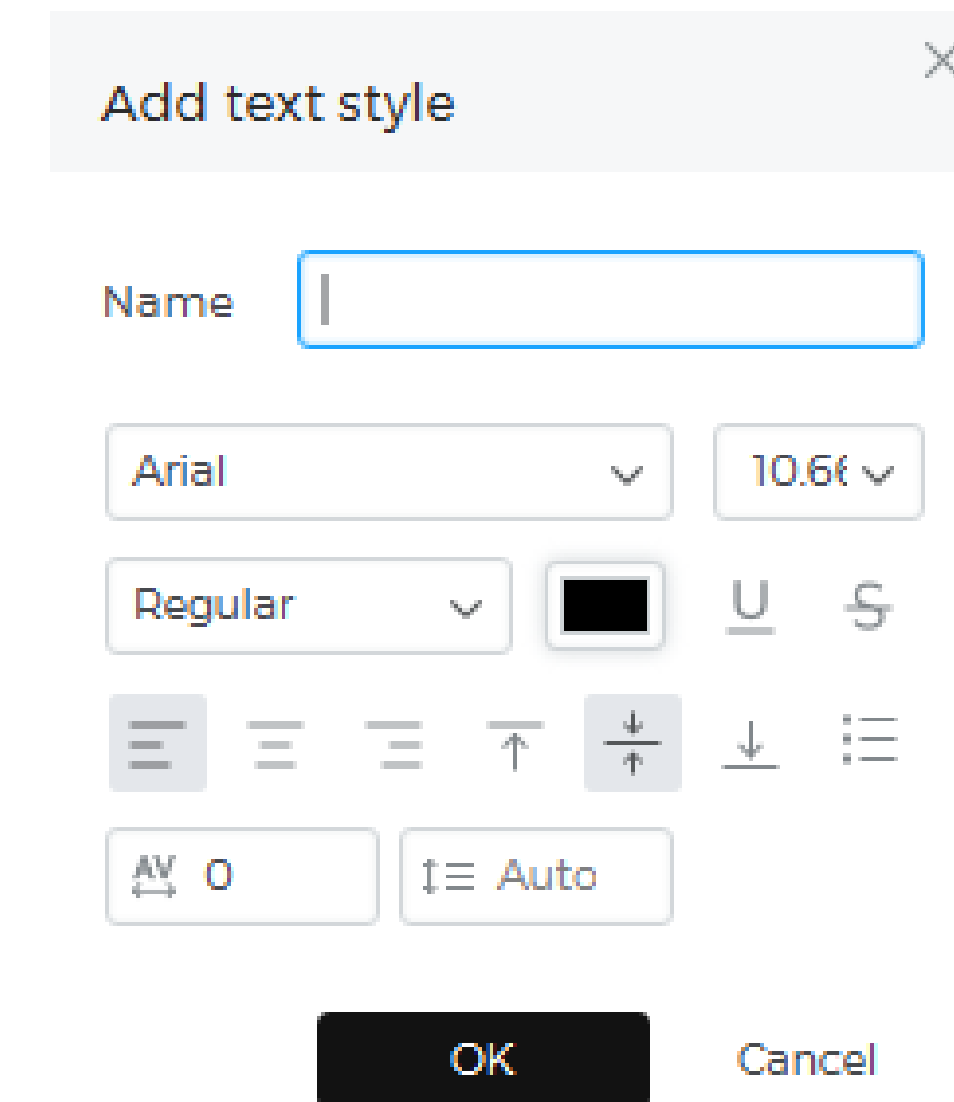
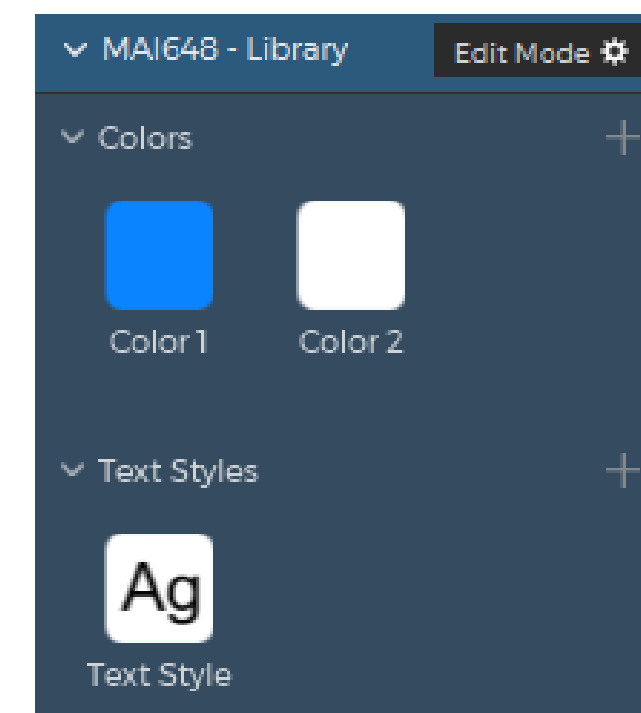
- **Option 1:** Drag the color on top of the element. A pop up will show up to select what part of the element you want to color
- **Option 2:** Click on the color picker in the 'Properties' palette. In the color picker that shows up, you'll see the list of all the colors in the libraries that you're using listed at the end of the dialog
- You may update the template color in which then all the objects that use that color will be updated



LAB 4

Adding and using text styles in a library

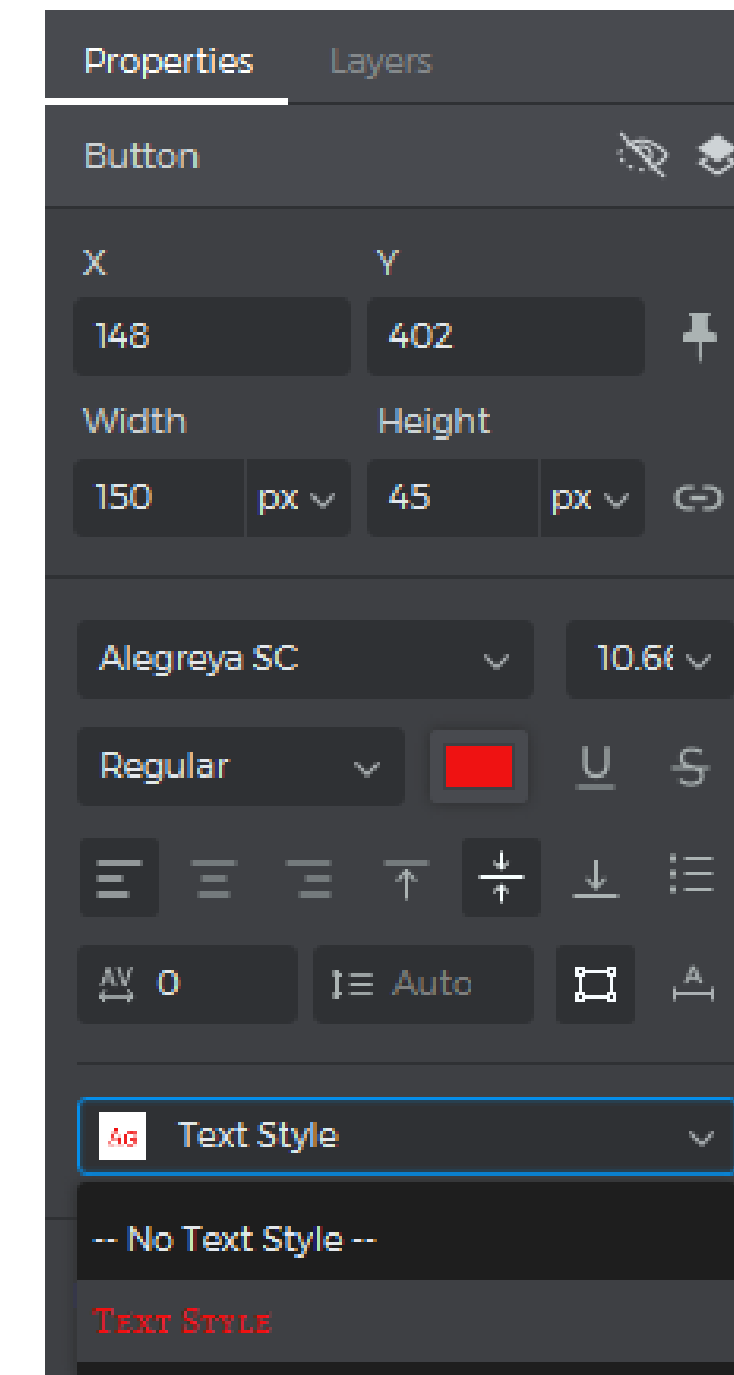
- While in “Edit mode”
- Adding colors
 - **Option 1:** Click on the ‘+’ icon next to the word ‘Text Styles’. Set your text style from the palette
 - **Option 2:** Drag an element from the canvas onto the ‘Text Styles’ section. The text style being used by that element will be automatically added to the list.



LAB 4

Using text styles in a library

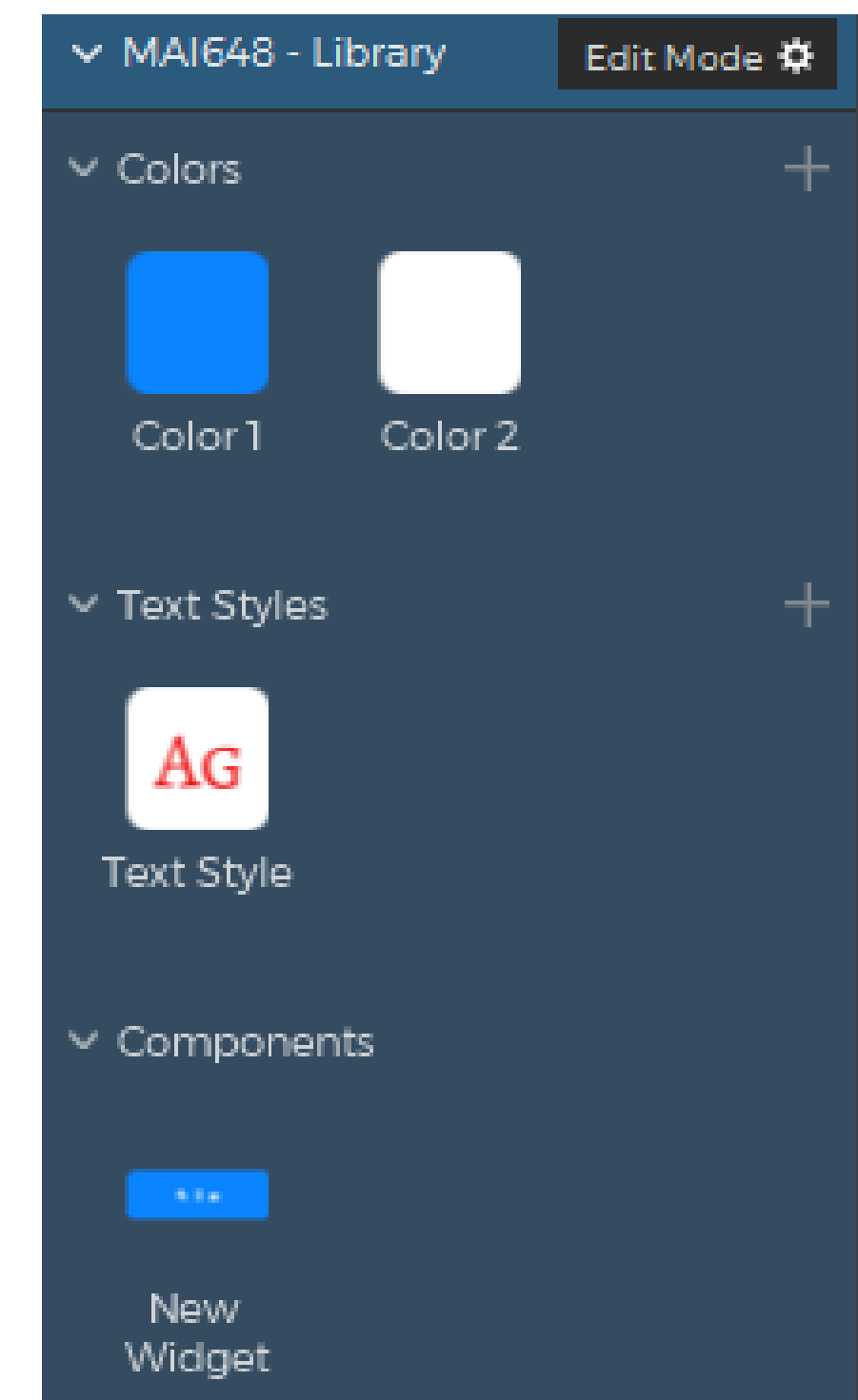
- **Option 1:** Drag the text style on top of the element
- **Option 2:** Click on the text style section in the 'Properties' palette. In the text styles section, you'll see the list of all the text styles in the libraries
- You may update the template text style in which then all the objects that use that text style will be updated



LAB 4

Adding and using components in a library

- Design an element or group of elements on the Canvas. You can also add interactions like Mouse Over and Swipe effects.
- To add an element to a library, drag it from the Canvas to the 'Components' section in the library in the Libraries palette. You can also right-click on an element, go to 'Add to Widget Library', and select the library.
- Next, write in a name and description for the element and click 'OK'.
- You can now drag and drop it from the library onto the Canvas to use in your prototypes.



LAB 4

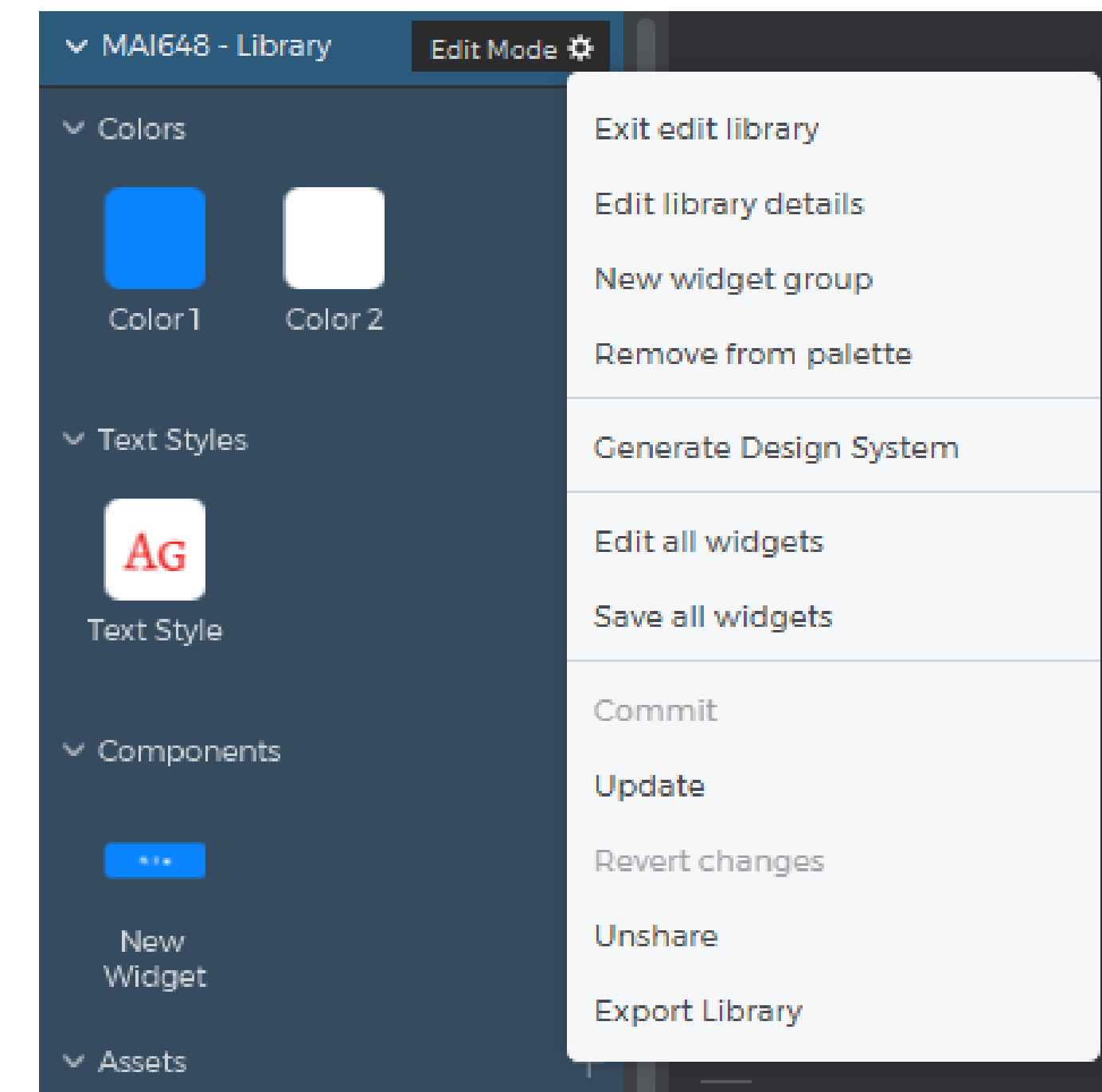
Adding and using graphical assets in a library

- **Option 1:** Click on the '+' icon next to the word 'Assets'. A file dialog will show up and you can use it to select an image file from your computer
- **Option 2:** Add assets to a library by dragging an image, a path or several paths to the 'Assets' section

LAB 4

Share a custom library

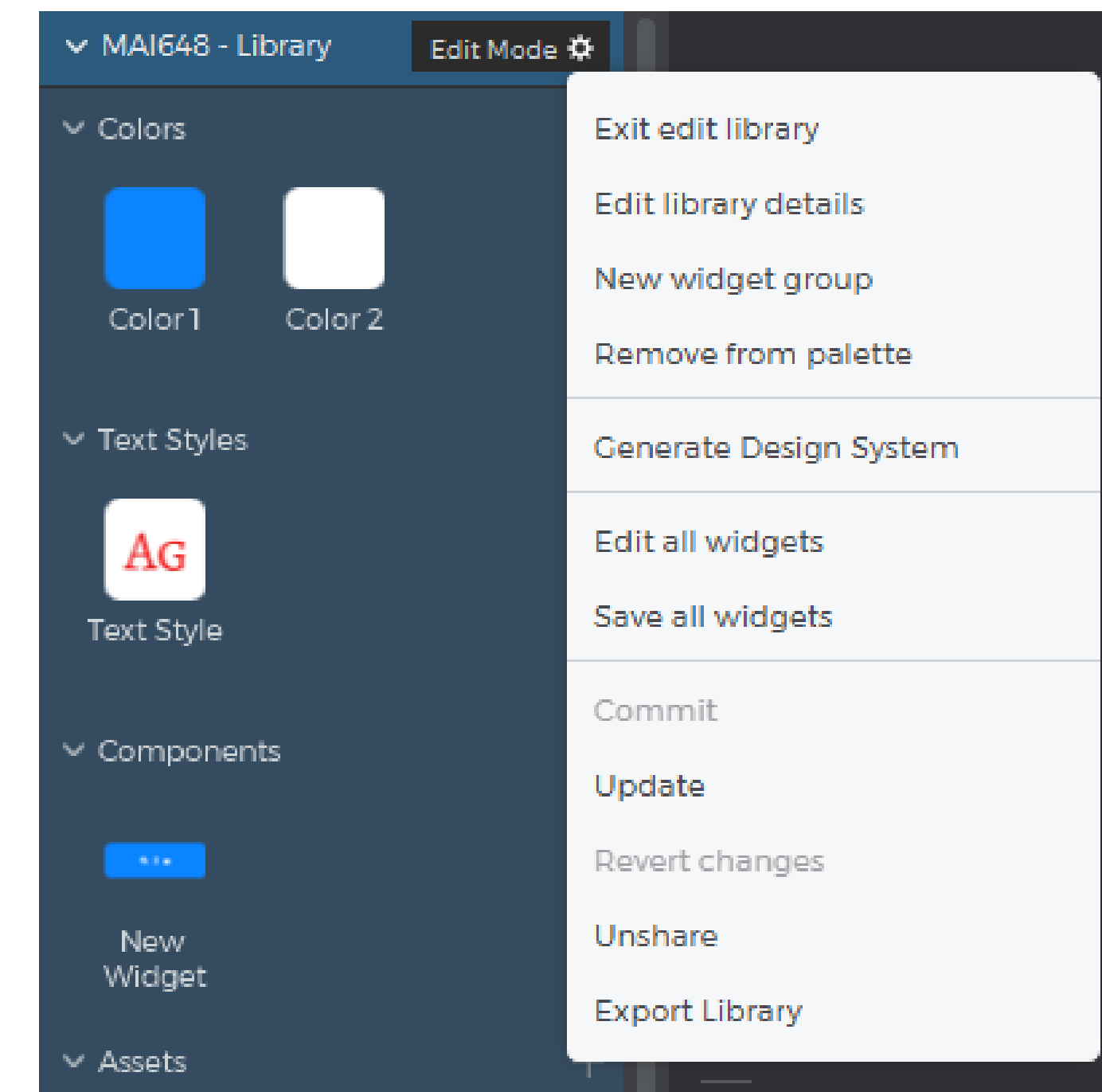
- You can share a custom library with your teammates.
- Click the 'gear' button next to your library's name in the Libraries palette and tap 'Share'.



LAB 4

Commit library changes

- Tap on the 'gear' button and select 'Commit' in the pop-up to upload your library's changes.
- Teammates can click 'Update' in the 'gear' button pop-up for the library to download those updates.



Designing user interactions on the web and mobile

LAB 4

Swipe through screens

- Create a mobile or tablet prototype with two screens.
- Go to Screen 1 and double-click on the Canvas, or select the screen in the Layers palette. This will select the base screen Canvas.
- Look to the Events palette and click 'Add event', which will open the Events dialog. This is where you'll build the link between screens.
- From the 'Choose Trigger' dropdown, hover over the **Gestures** section and pick the **On Swipe Left** trigger.

LAB 4

Swipe through screens

- You'll see the 'Choose Action' dropdown appear next. Click on it and choose the **Navigate To** action.
- Choose Screen 2 from the list of screens below. Then, select the 'Slide left' transition effect. Click 'OK' to finish building the event.
- Go to Screen 2 and select the base screen. Go to the Events palette and click 'Add event'.
- Pick an On Swipe Right trigger and a Navigate To action, and choose Screen 1 to link to. Add a 'Slide right' transition effect, and click 'OK' to finish building the event.

LAB 4

Hide content

- Place a Button B and an Image I on the Canvas and style them as preferred. You can find them in the Toolbar. Label the button “Hide image”.
- Select the “Hide image” button, go to the Events palette and click “Add event”.

LAB 4

Hide content

- a. From the Trigger dropdown, hover over the Tap section and pick an On Tap trigger.
- b. From the Action dropdown, pick the Hide Element action. You'll then see a preview of the Canvas appear.
- c. This is where you can select the target of the action – the element that you want to hide when you tap on the “Hide image” button. Select the image you created earlier. Click ‘OK’ to finish building the event.

LAB 4

Conditional navigation

- Create a Search screen with texts and rectangles. Add a button and label it “Search”.
- Add a Dropdown/Select List widget to the Canvas and style it as preferred. You can find it in the Toolbar dropdown under ‘Interactive input fields’.
- With the dropdown selected, go to the Properties palette and click on ‘Edit values’. Delete all the values in the dialog and add two new ones – “Houses” and “Apartments”.
- Click the ‘+’ button in the Screens palette and create two new screens. Name one “Houses” and the other “Apartments”. Customize these screens as preferred.

LAB 4

Create the events

- Go back to the Search screen and select the “Search” button. Look to the Events palette and click ‘Add event’. Create an On Tap + Navigate To event and choose the Houses screen as the target.
- Look to the Events palette, where you’ll see the event you just created. Click the ‘add condition’ text link above the action, which will open the Conditional Expression builder.

LAB 4

Create the events

- a. Look to the Canvas preview and drag the dropdown to the open space in the expression that's labeled "Click to edit or drag & drop a component".
- b. Drag the Equals (=) logic function next to the dropdown in the expression.
- c. You'll see a new open space appear in the expression. Double-click in this space and write "Houses".
- d. Click 'OK' to finish building the expression.
- The event and condition you just created will link you to the Houses screen only if you select "Houses" from the dropdown.

LAB 4

Create the events

- Still in the Events palette, click on the 'Else' text link below. Create another On Tap + Navigate To event and link to the Apartments screen. Since there are only two options you can select from the dropdown, you don't need to create a condition for this action.

LAB 4

Share information between screens

- Create a prototype with two screens. Go to Screen 1 and design a sign-up form using an Input Text Field and a Button.
- Add a text element to Screen 2 and style it as preferred. You'll use this text element to show the email address you entered on the previous screen.
- Go to the Variables palette and create a new variable by clicking on the '+' button. Name the variable "Email" and leave its default value blank.

LAB 4

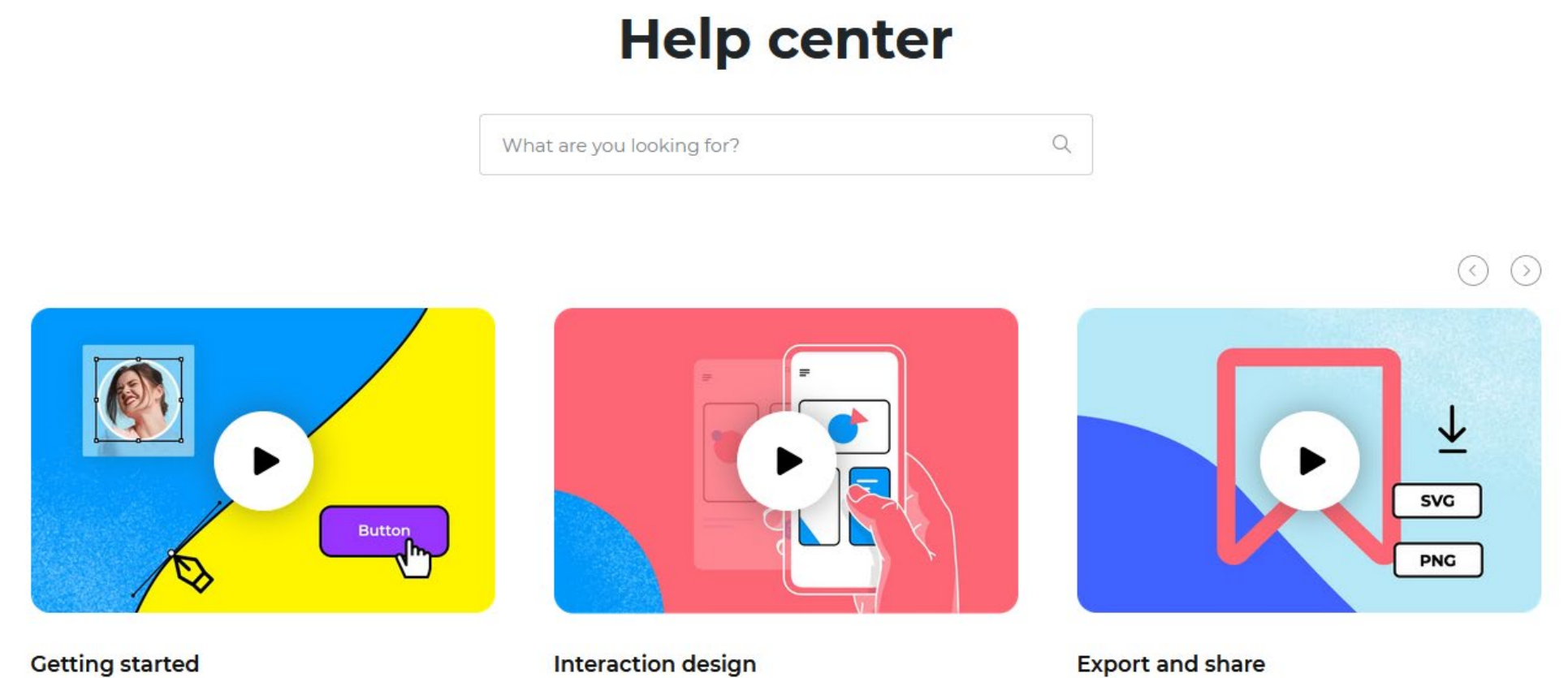
Create the events

- Go back to Screen 1 and select the input text field. Drag it to the “Email” variable in the Variables palette.
- This creates an On Page Unload + Set Value event, which gives the variable the value you enter in the input text field when you navigate away from the screen.
- Select the button below the input text field and drag it to Screen 2 in the Screens palette, creating a link from the button to Screen 2.
- Go to Screen 2 and drag the “Email” variable to the text element on the screen.
- This creates an On Page Load + Set Value event and gives the text element the variable’s value when the screen first loads.

LAB 4

Resources and Help

- <https://www.justinmind.com/prototyping-tool>
- <https://www.justinmind.com/support>
- [https://en.wikipedia.org/wiki/Justinmind_\(software\)](https://en.wikipedia.org/wiki/Justinmind_(software))



MAI4CAREU

Master programmes in Artificial
Intelligence 4 Careers in Europe

Thank you.