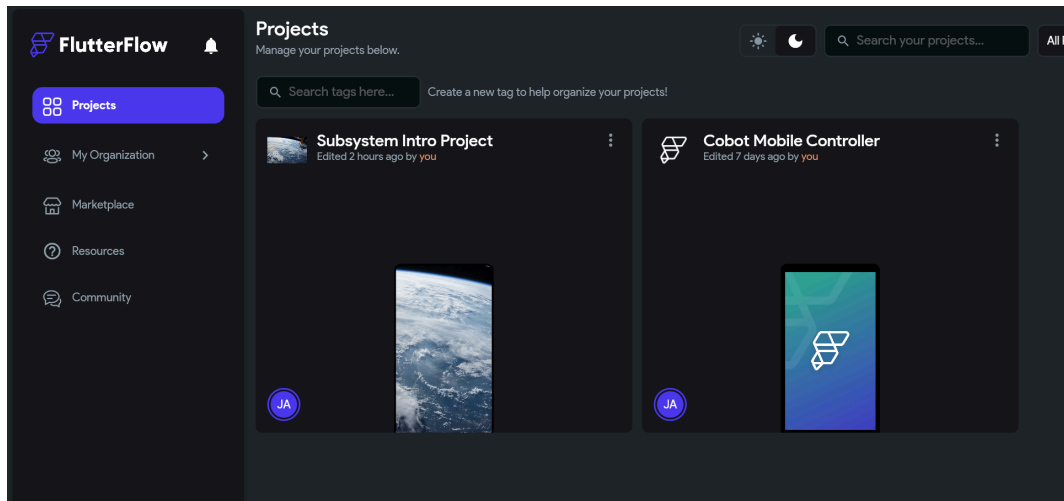
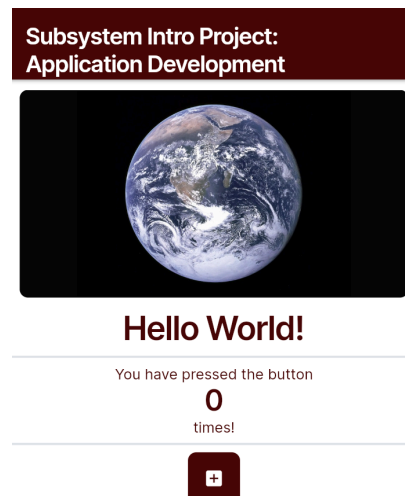


- 1) The relevant application I used on this project is FlutterFlow to create/deploy my mobile application. It is the software of choice for both my Introduction Project and my Subsystem Integration:



## 2) Documentation (steps to create the mobile app.):

1. Create the project (blank template) and create the page that appears when the application is opened. Since this app consists of just one page, there will be no need to make other pages.
2. Create the *hello world* project visual interface by creating various text boxes and images. The image was found using Unsplash directly from FlutterFlow and all components were dragged over using the *Widget Palette* from the left-side column.



- From the column located on the left side of the screen, navigate to the *Data Types* option. Add a field and call it *counter*. Under field type, type in *value*. The data type will be an *integer*. Do not toggle, *Is List*, to yes. Set the default value to 0.

Field Name	Data Type	Default Value
value	Integer	0

+ Add Field

- Navigate one tab down to *App Values*. Select *Add App State* and call it *num*. The field type will be *Data Type*, and select the *counter* created in the previous step. Do not select *Is List*, or *Persisted*. If you select the latter, it will not reset on app close.

Field Name	Data Type	Persisted	Default Value	Actions
num	Data (counter)	false	num	Tap to Edit Fields

+ Add App State Variable

- Navigate back to the *Page Selector* from the left-side column. Since this is a push-button, create a box that resembles a push-button.
- Click on the *box* that you added to the screen. On the right-hand side, navigate to the route settings, and choose *Actions*.
- Create an action by clicking *Add Action*. Then, scroll down the options until you find the *Update App State*. Choose the following options so that your menu looks like this:

On Tap

Action 1

Update App State

Set Fields

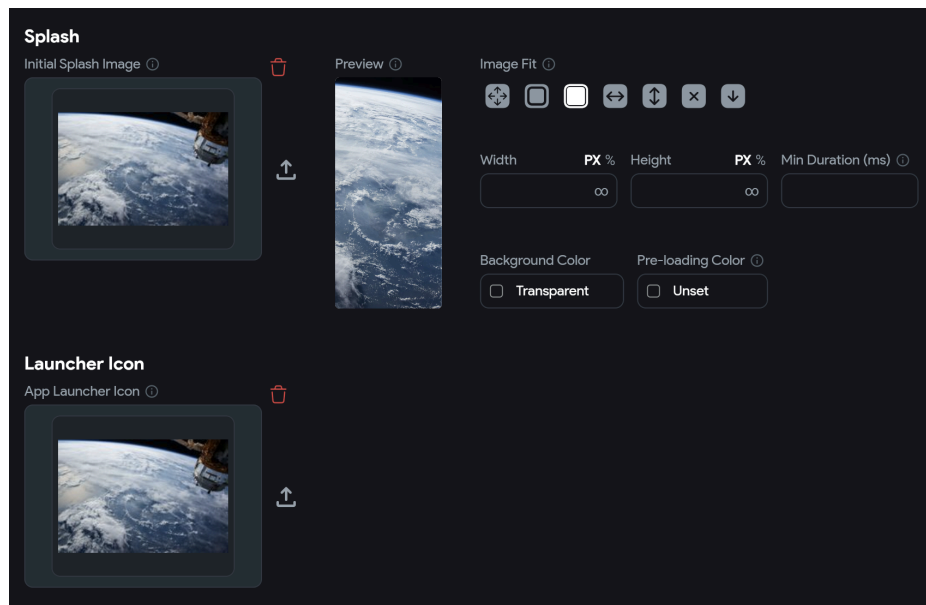
num - (Data (counter))

Select Update Type

Update Field(s)

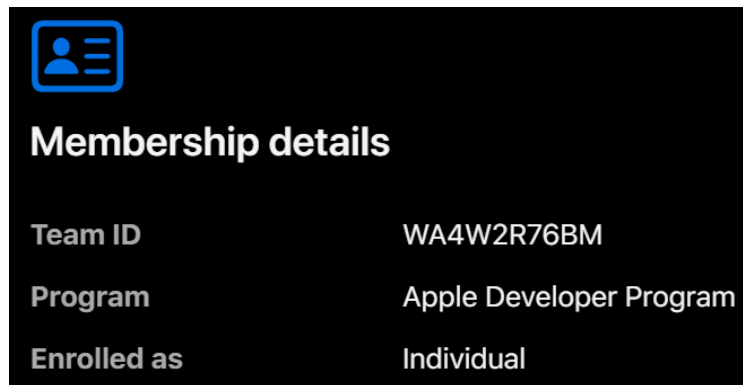
Update counter

8. Once all steps above are completed, navigate to the purple button in the top right with the lightning bolt and click run. If the application opens and clicking the button increases the counter, then the app was created successfully.
9. Scroll down to *settings* at the bottom of the left-side column. Select the *App Assets*, and create an *Initial Spash Image*, *Preview*, and *Launcher Icon*. These will be the icons and loading screens for the app on your mobile device.

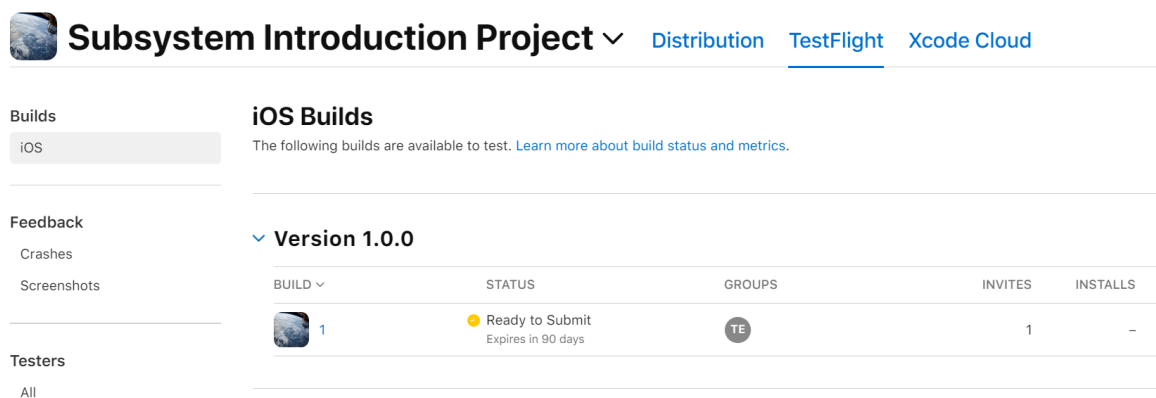


10. The next step requires creating an Apple Developer Account. Once that is created and you have paid for the membership, you must set up your account with the basic information and complete the initial deployment steps.
  11. Navigate to *App Store Connect* and create an *App*. Put the *SKU* and *Bundle ID* from the FlutterFlow App and initialize the application. Go back into FlutterFlow and put the *Private Key* from *App Store Connect* and make sure all details are filled out.
  12. Create a *tester* group (yourself) and make sure that this group has access to the *TestFlight App* by adding (your) email. Create the *TestFlight App* and make sure the beta has been sent over to your mobile device.
  13. Test functionality and make sure the app works as intended. Close the app and reopen to make sure the counter has reset each time the app is opened.
-

### 3) Application Deployment:



*Apple Development Account Enrollment*



*TestFlight Beta Testing Development*

### 2/4) “Push Button” Application demo:

[Mobile Application Demonstration](#)