

ASSISTED BY AUGMENTED REALITY TECHNOLOGY

CREATE **ANDROID MOBILE APP**

LESS THAN AN HOUR



USING ADOBE ANIMATE CC 2020

**BY NORMALA RAHMAT, PHD
DARNI DARMIN**

POLITEKNIK SULTAN AZLAN SHAH

CONTENTS

INTRODUCTION	2
NEW FEATURES ADOBE ANIMATE 2020	2
ACTIONSSCRIPT 3.0	4
STEPS ON HOW TO DEVELOP MOBILE APPS	5
SECTION A: PREPARING STORYBOARD	5
SECTION B: PREPARING INTERFACE	7
SECTION C: CREATE ANOTHER SCENE	17
SECTION D: HOW TO CREATE MULTIPLE BUTTON	20
SECTION E: MAKE A CONNECTION BETWEEN SCENES	31
SECTION F: CREATE LINK WITH ONLINE FEATURES (WEBSITE)	41
SECTION G: ATTACH .apk FILE TO ADOBE FOLDER	44
SECTION H: CREATE ICON AND SETUP IMAGE SIZE DISPLAYED FOR MOBILE APPS	49
SECTION I: PUBLISH THE FLASH FILE TO ANDROID FILE FORMAT (.apk)	53
SECTION J: HOW TO INSTALL .APK FILE INTO ANDROID PHONE	60
SECTION K: FOLDER AND FILE CREATED WHEN RUN ADOBE ANIMATE CC SOFTWARE	63
SECTION L: HOW TO CONTINUE AFTER CLOSING SOFTWARE @ AFTERPUBLISH	64



Normala Rahmat, PhD has taught Database System in Politeknik Sultan Azlan Shah (PSAS) and has 21 years of teaching experience. She has developed I-Kolej Kediaman System (IKK), which is currently implemented in PSAS.

Normala has been a presenter at several international and national conferences and received the Best Presenter Award in 47th International Education Postgraduate Seminar 2017 organized by Universiti Teknologi Malaysia and Anugerah Pembentang Terbaik in Seminar Pembentangan Penyelidikan 2018 organized by IPG Kampus Temenggung Ibrahim, Johor. She has published papers in engineering and educational journals. She has won several innovation competitions such as National Student Project Innovation Competition And Exhibition 2018 (Silver Medal), International Innovation and Invention Challenge via Exhibition 2019 (Gold Medal), International Learning Innovation Competition 2019 (Bronze Medal), and National Innovation and Invention Competition Through Exhibition 2019 (Silver Medal).



Darni Darmin has taught Interactive Multimedia Application in Politeknik Sultan Azlan Shah (PSAS) and has 16 years of teaching experience. She has awarded Anugerah Khas YB Menteri Pendidikan Malaysia 2018 (2nd place - Pengalaman Pembelajaran Imersif Maya) by the Minister of Higher Education, TeCC Educator for Politeknik Malaysia 2018 (2nd place), and currently leading the research project focussed on Virtual Reality under TVET-Applied Research Grant Scheme (TARGS).

Darni has been a presenter at the national and international conferences. She has won several innovation competitions and the latest she received Gold Medal in National e-Content Development Competition 2018 organized by UITM Shah Alam.

DEVELOP MOBILE APPS USING ADOBE ANIMATE CC 2020

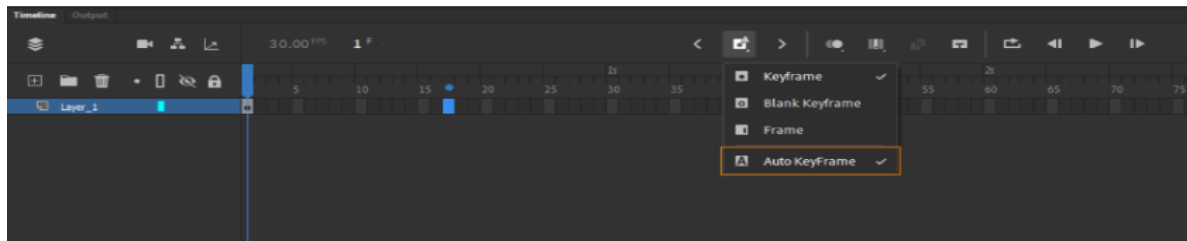
INTRODUCTION

Adobe Flash was replaced with Adobe Animate due to increasing popularity of better technologies like HTML5 and bad press from internet basically everyone on internet and added several new features so that we can export our animations in more format include HTML 5. Now, there is a Cross Platform Technology called **Adobe AIR** that **allows to make apps and games within Animate for several operating systems including Android and IOS**. Creative Cloud is a collection of 20+ desktop and mobile apps and services for photography, design, video, web, UX and more.

NEW FEATURES ADOBE ANIMATE 2020

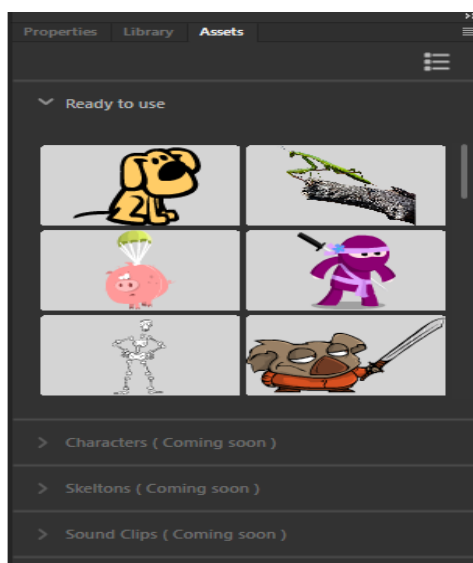
a) Auto Keyframe

In the latest release, you can insert Keyframe or Blank keyframe automatically. The **Auto keyframe** option adds **Keyframe** or **Blank Keyframe** to the selected frame while editing the stage or the Properties panel. A blue dot appears outside the existing frame range to indicate the frame number for auto-keyframing.

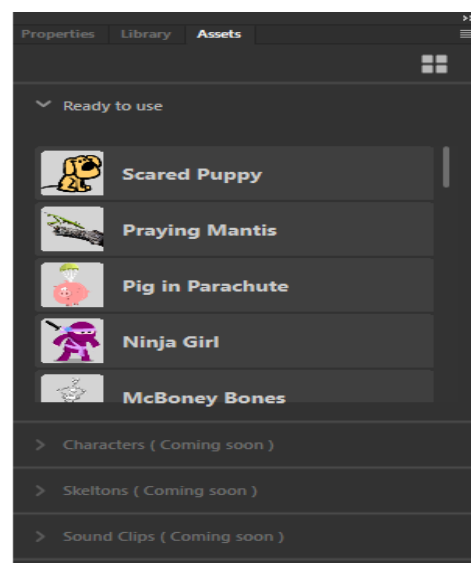


b) Assets Panel

The latest version of Animate introduces **Assets** panel to store, manage, and reuse ready-to-use assets across documents. From the **Context Menu** in Library panel, you can export any image or symbol as an asset. Once exported, you can import assets into the Assets panel from the **Hamburger Menu** > **Import**.



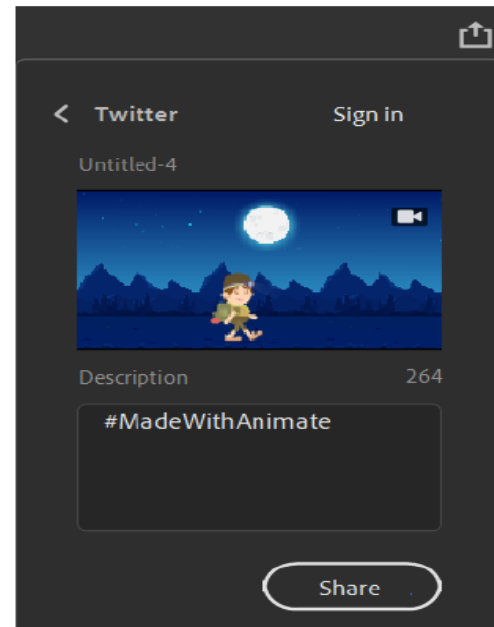
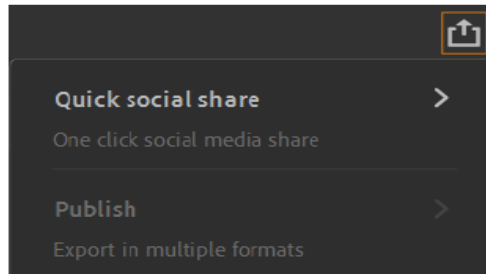
Assets Panel: Thumbnail view



Assets Panel: List view

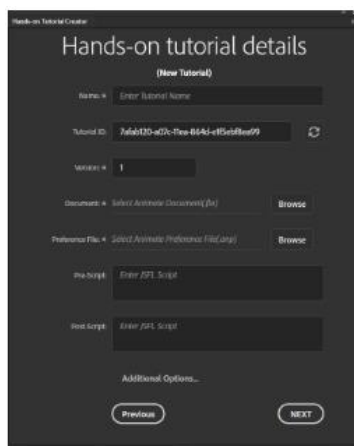
c) Quick Social Share

The latest update allows you to quickly share your animations on Twitter. To share your content on Twitter, click the **Share** button > **Quick social share** > **Twitter**. Check the preview, type your tweet, and click **Share** to generate a video via Adobe Media Encoder and post it.

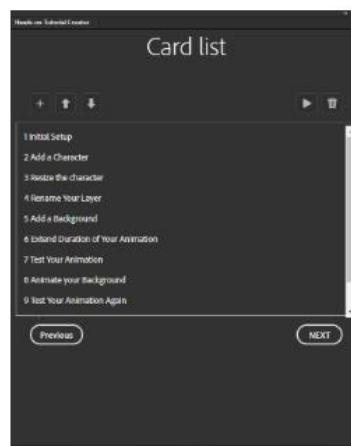


d) Hands-on Tutorial Creator

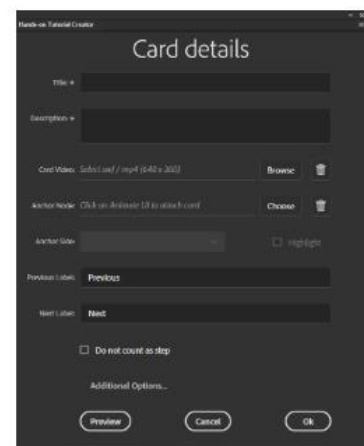
Eager to create your own hands-on tutorial. You can quickly create hands-on tutorial using the new panel from **Window > Extensions > Hands-on Tutorial Creator** menu. The panel allows you to create a new or edit an existing tutorial.



Hands-on tutorial details



Card list



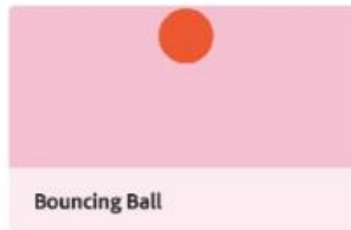
Card details

Once saved, you can test it out by importing it using **Help > Hands-on Tutorial > Import Tutorial**.

For new users to get started, animate allows you to explore hands-on tutorials of your choice. You can hover over the tutorial to watch the preview or skip the panel to explore later.

e) New User On-Boarding Panel

Learn to animate in just about 10 mins. Try a hands-on tutorial.



☐ Do not show again

Skip

f) Selective Texture Publishing

To speed up Canvas publishing and reduce output file size, a new optimization is in place when **Export as: Texture** is selected in Publish settings. The optimization selectively converts complex vector shapes to bitmaps and retains simple shapes as vector. Also, the optimization ensures that runtime performance remains uninterrupted.

<https://helpx.adobe.com/animate/using/whats-new.html>

<https://www.youtube.com/watch?v=7W0ISI3yqwo>

ACTIONSCRIPT 3.0

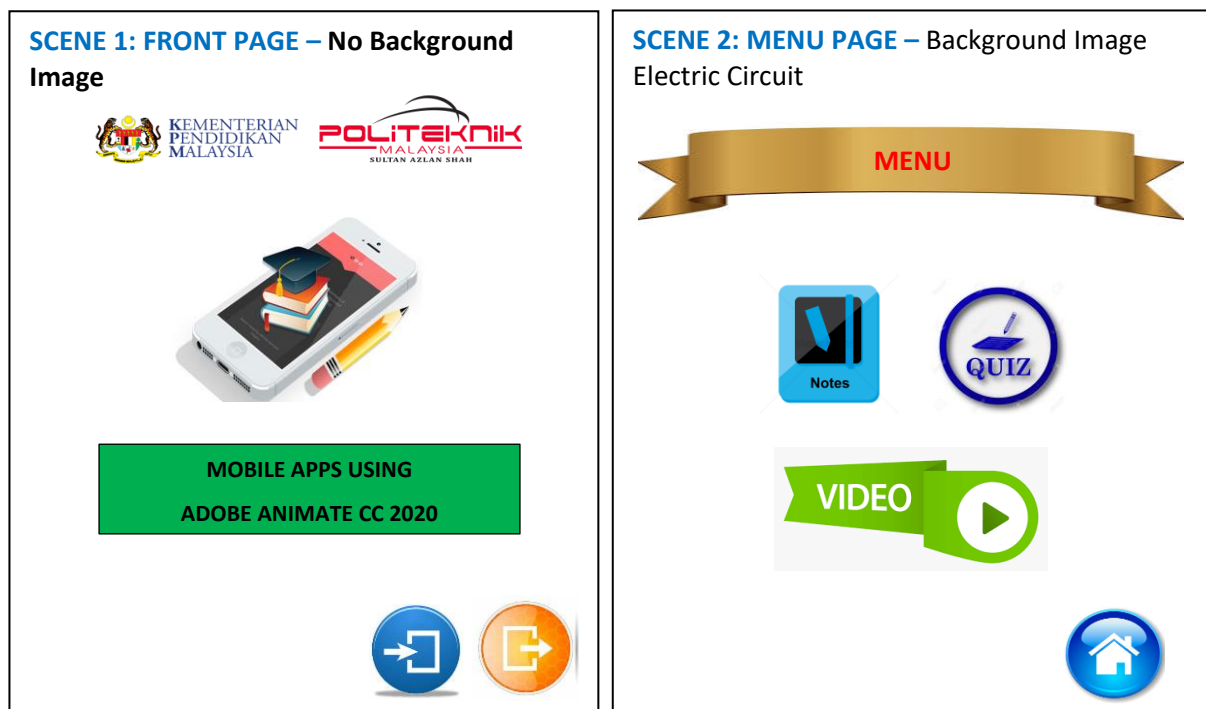
ActionScript 3.0 is a powerful, object-oriented programming language that signifies an important step in the evolution of the capabilities of the Flash Player runtime.

STEPS ON HOW TO DEVELOP MOBILE APPS

SECTION A: PREPARING STORYBOARD

A **storyboard** is a graphic layout that sequences illustrations and images with the purpose of visually telling a story. A story board is used to communicate how a scene or frame will play out scene by scene or frame by frame. Storyboard panels can be comprised of custom drawings including type of buttons either image button or creating button from box and text convert to image, screenshots from comparable notes, photos or videos.

Example Storyboard Template:



SCENE 3: CHAPTER CONTENTS PAGE – Background Image Electric Circuit

NOTES CONTENTS

CHAPTER 1

CHAPTER 2

CHAPTER 3



SCENE 4: CHAPTER 1 – Background Image Electric Circuit

CHAPTER 1

INTRODUCTION

FEATURES



SCENE 5: SUB-CHAPTER 1 (INTRODUCTION) – No Background Image

INTRODUCTION

1.0 INTRODUCTION TO ADOBE ANIMATE CC 2020

Adobe Flash was replaced with Adobe Animate due to increasing popularity of better technologies like HTML5 and bad press from internet basically everyone on internet and added several new features so that we can export our animations in more format include HTML 5.



SCENE 6: SUB-CHAPTER 1 (FEATURES) – No Background Image

FEATURES

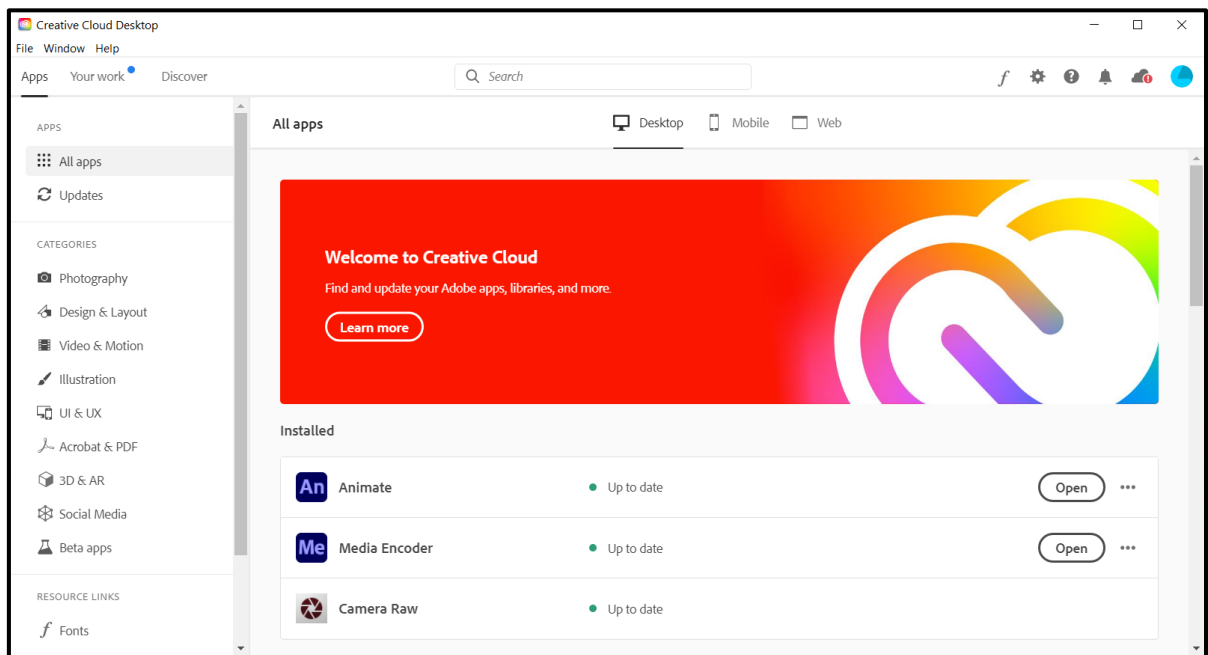
a) Auto Keyframe

In the latest release, you can insert Keyframe or Blank keyframe automatically. The **Auto keyframe** option adds **Keyframe** or **Blank Keyframe** to the selected frame while editing the stage or the Properties panel. A blue dot appears outside the existing frame range to indicate the frame number for auto-keyframing.

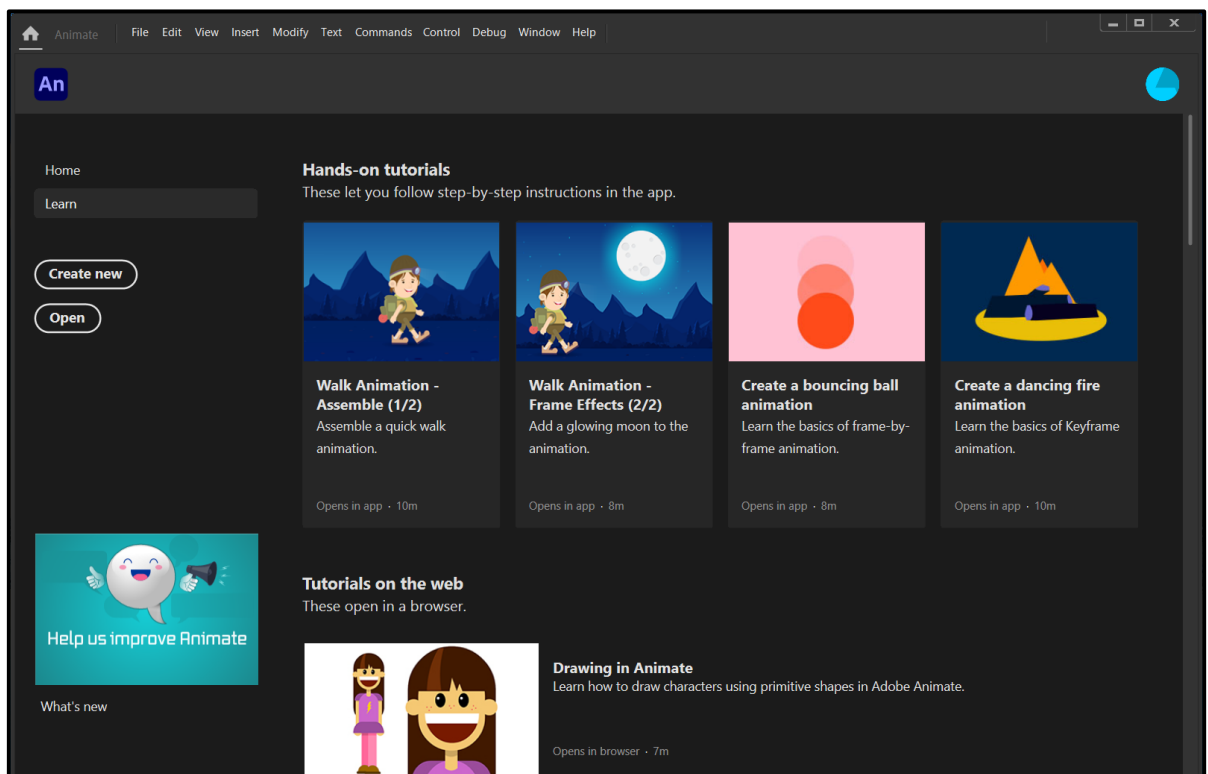


SECTION B: PREPARING INTERFACE

1. On **Creative Cloud Desktop** -> Open **Animate (An)** software.

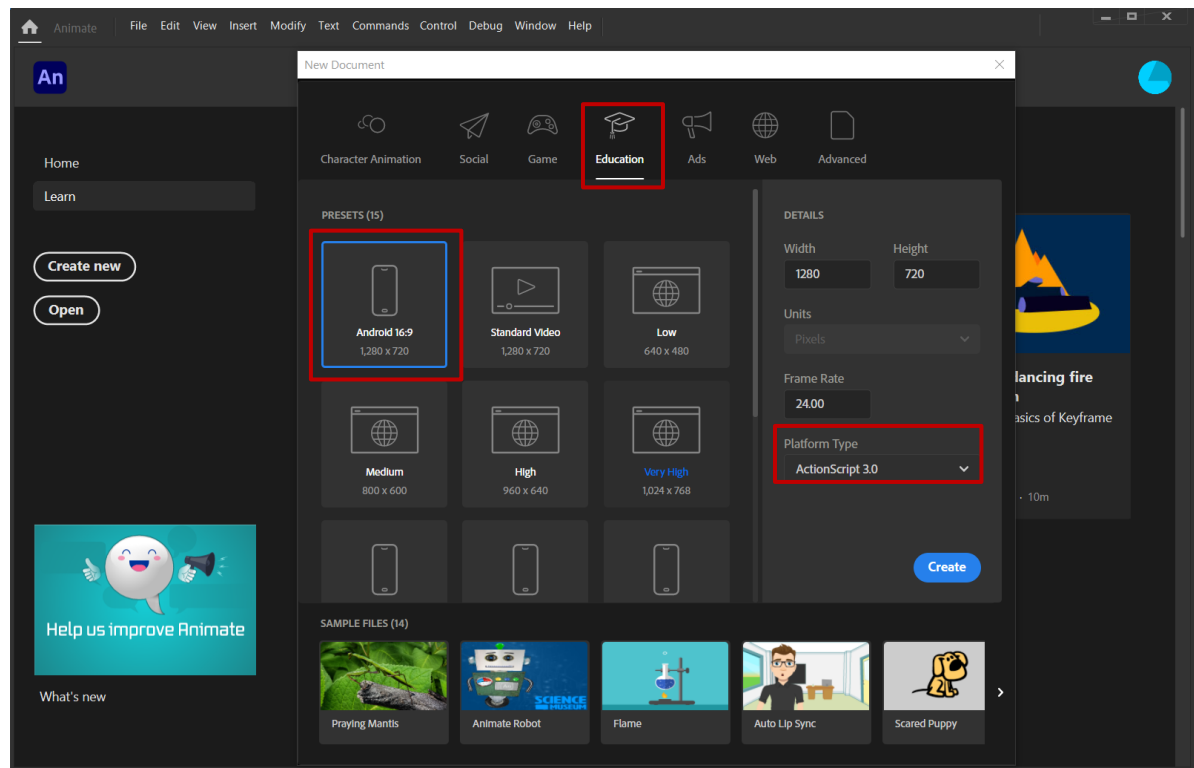


2. Popup menu **Adobe Animate CC 2020** appear as below. **Click Create New.**

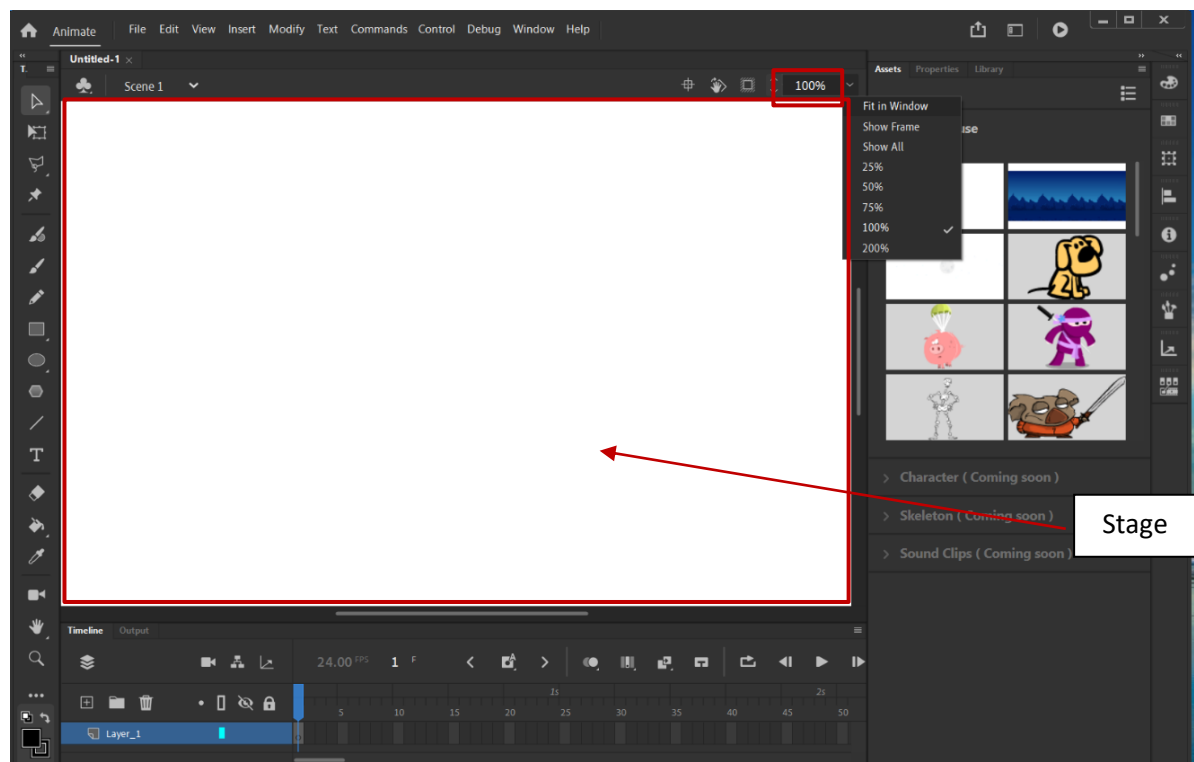


3. **Menu New Document** appear -> **Select Education.** Then at **Tab PRESETS (15)** -> Select **Android 16:9 (1280 x 720)** and change **Platform Type** to **ActionScript 3.0** -> Then **click Create.**

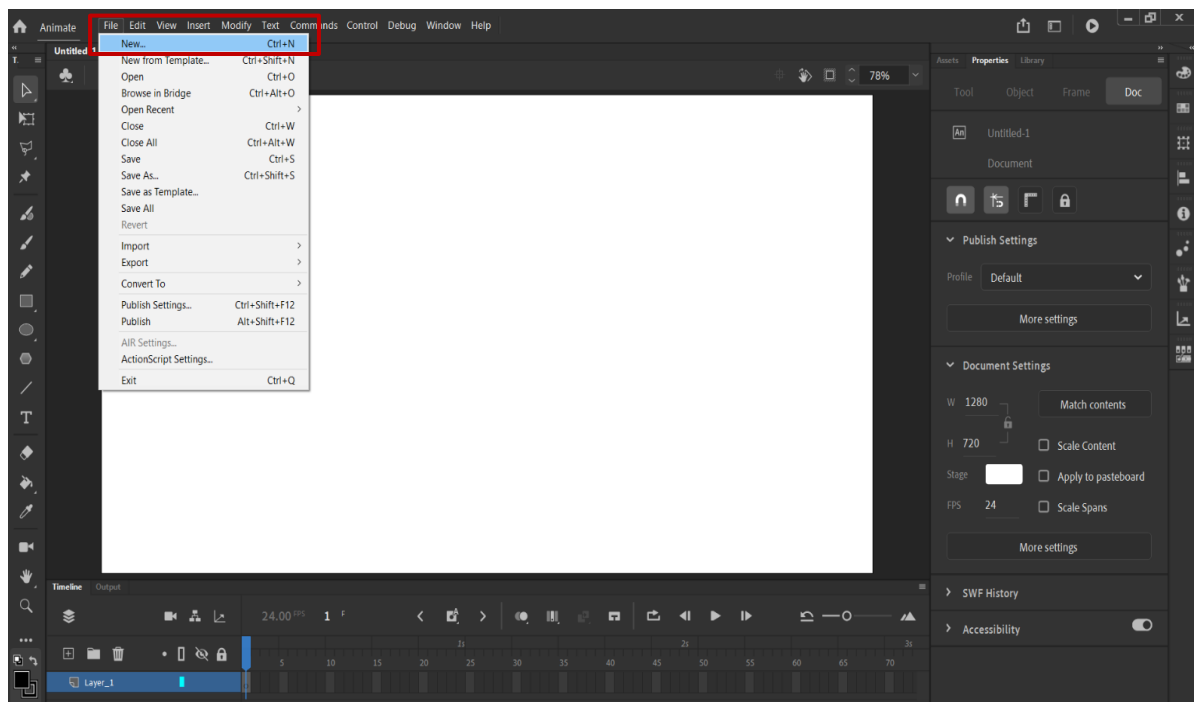
*** We can select any size of PRESETS depends on our target apps we want to produce. There are 15 template that we can choose.*



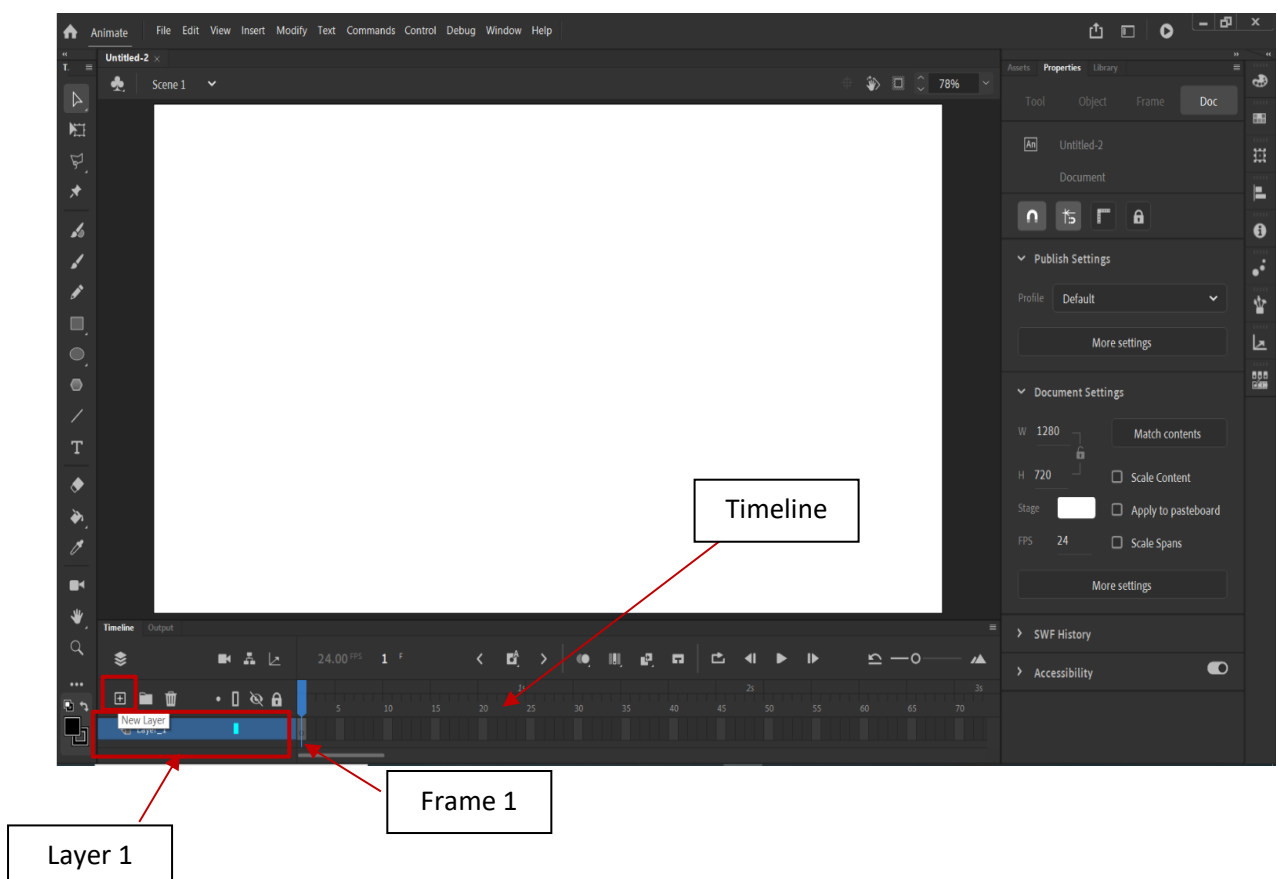
4. The popup Scene will appear as below. Set the **stage** as **Fit in Window**, so that the stage doesn't moving up and down when we scroll up and down mouse @ cursor. The purpose is to lock the moving of the stage so that design process easier.



5. Otherwise we can create a New Scene from **Tab File -> New -> Select Education**. Then at **Tab PRESETS (15) -> Select Android 16:9 (1280 x 720)** and change **Platform Type** to **ActionScript 3.0 -> Then click Create**.

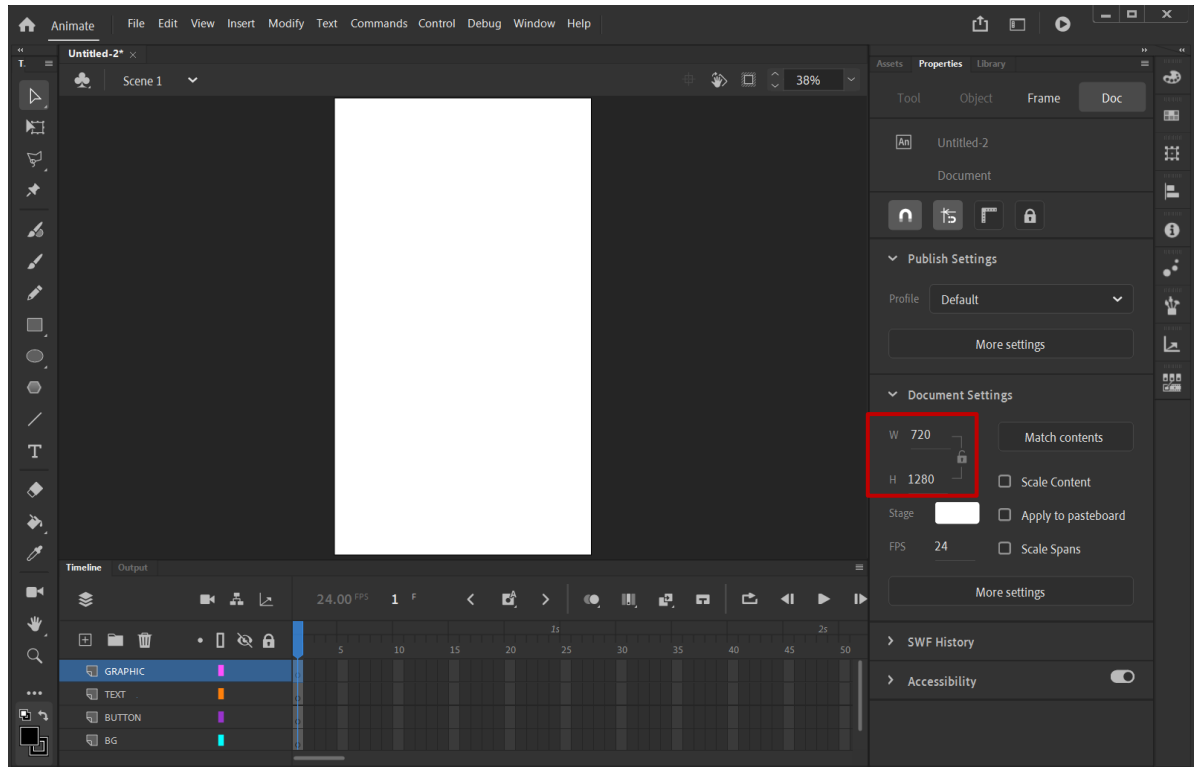


6. Then **Create LAYER** (at least 4) by click button +. Then **RENAME** the layer by **double click** the default name of layer (eg. Layer 4: Graphic; Layer 3: Text; Layer 2: Button; Layer 1: BG)



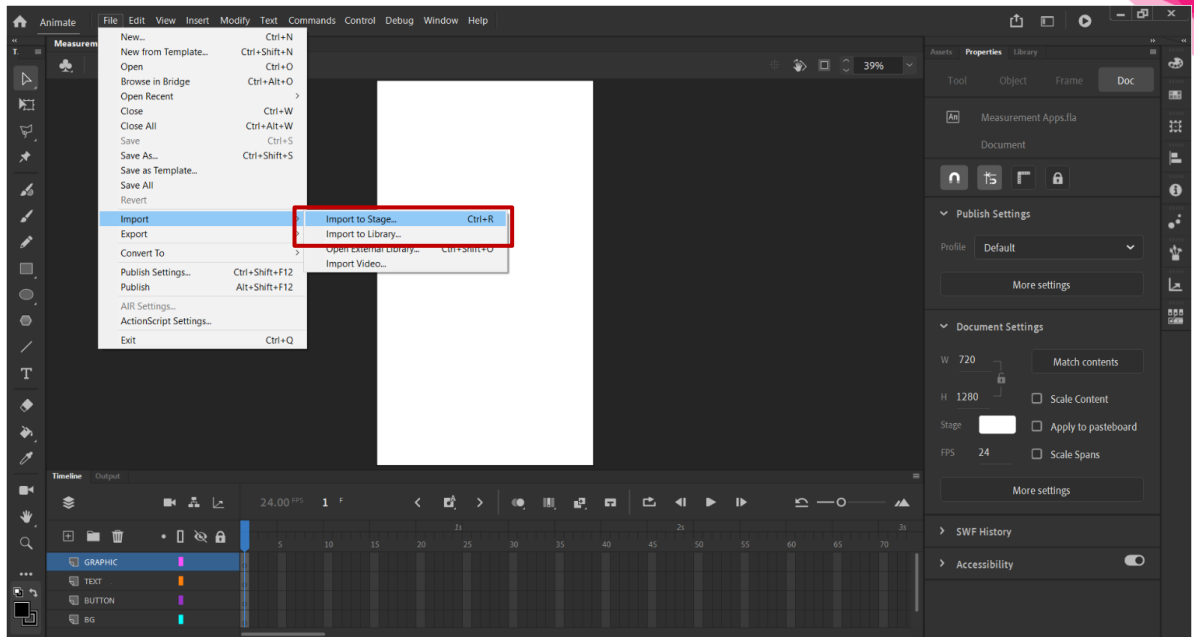
7. At **Tap Properties** -> **Documents Settings** -> **Change Stage Size** to **W = 720** and **H = 1280** to get apps display in **Portrait Size**. Then click **Tab File** -> **Save As** -> **File Name:** _____. This file was saved as type **Animate Document (*.fla)**.




*** Make sure all the files @ works keep in one folder – (e.g: Mobile Apps)*



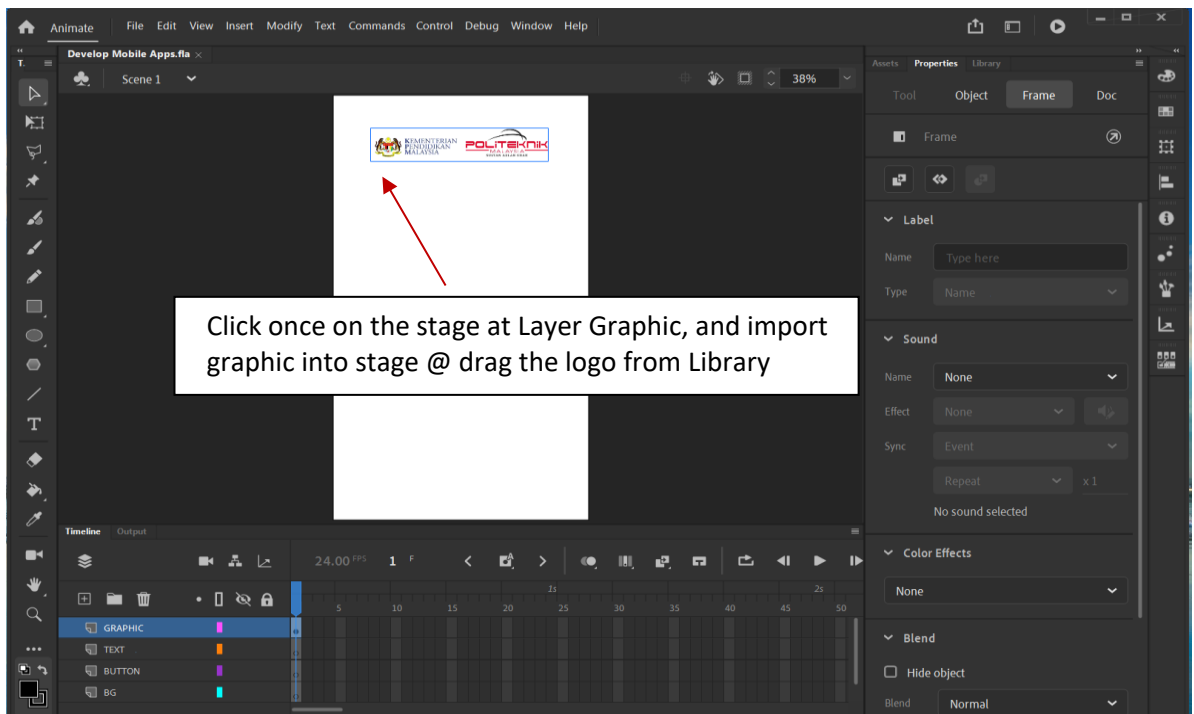
8. At **Layer Graphic**, import a picture to Frame 1. Select **File** -> **Import** -> **Import to Stage** (select any picture from your desktop, for example - a polytechnic logo). Resize your picture using **Free Transform Tool**.

@ **File** -> **Import** -> **Import to Library** (to keep image in the library).



		
Selection Tool	Sub Selection Tool	Free Transform Tool
To select object	To move the direction points to reshape the curves.	To scale, rotate, or skew a selection

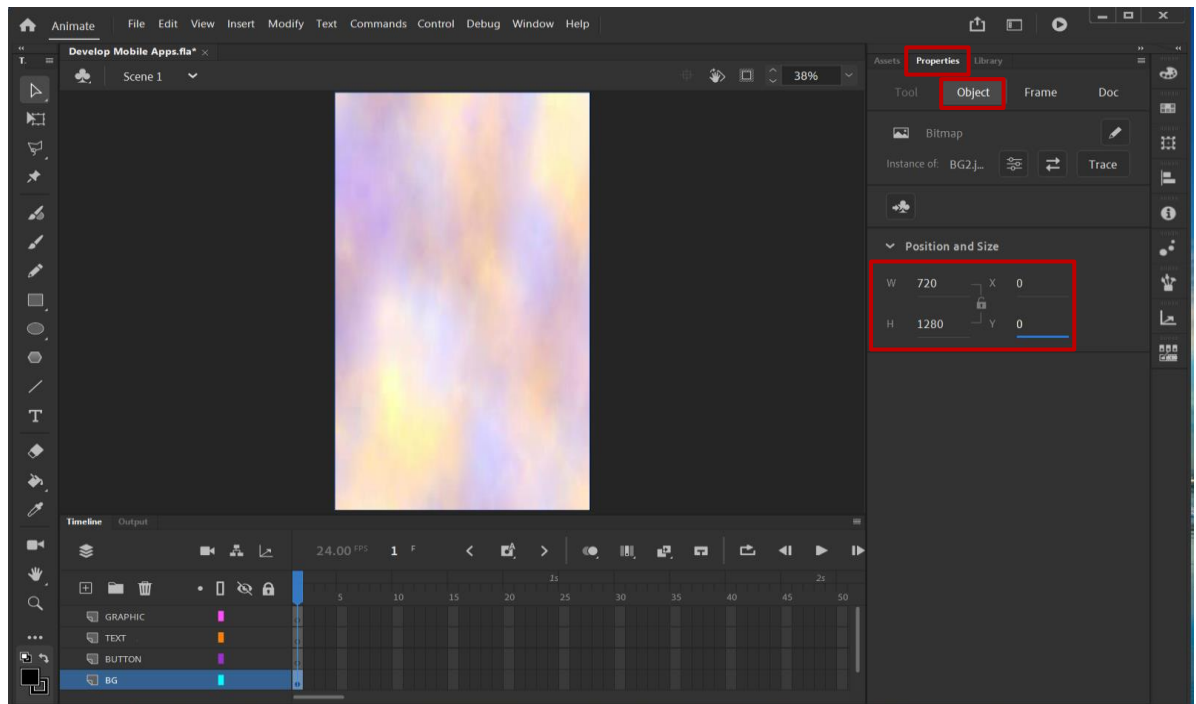
<https://helpx.adobe.com/animate/using/basic-tools.html>



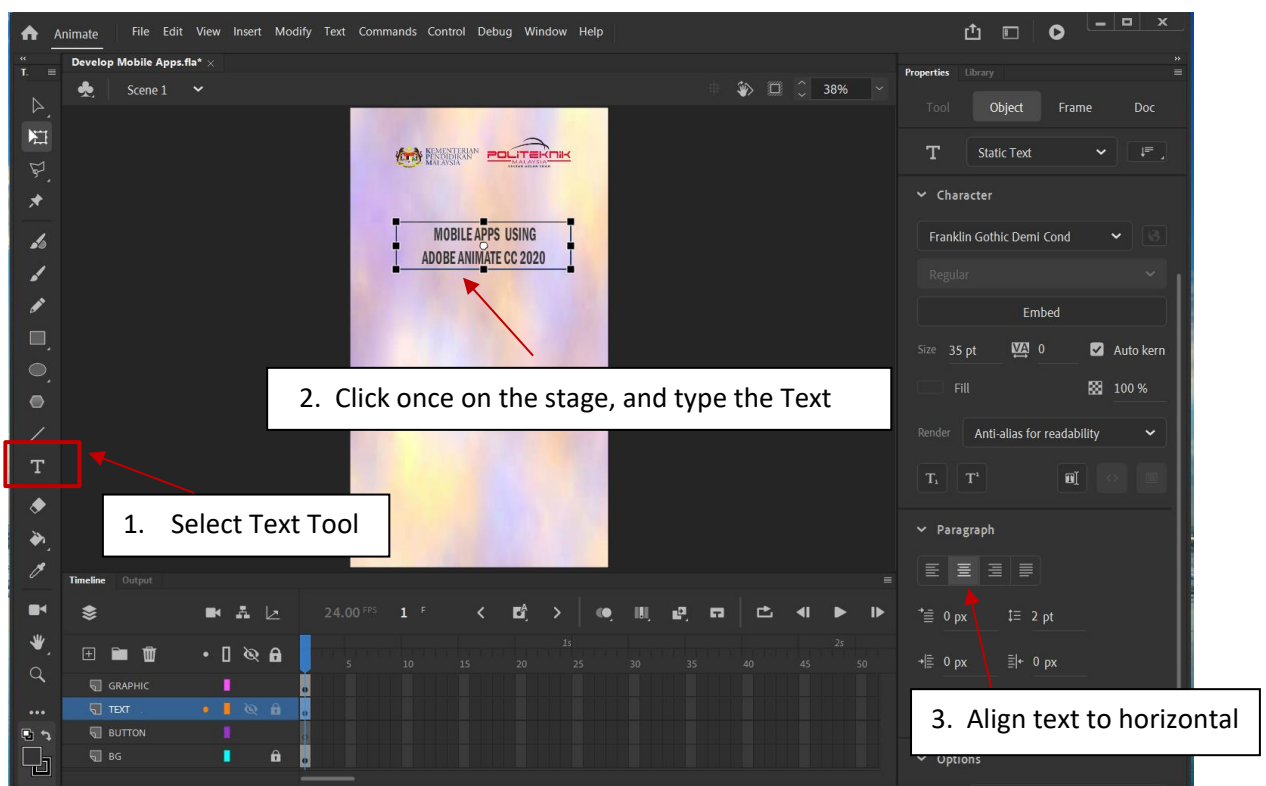
9. In the same frame at **Layer BG**, insert Background.

Google -> Pastel Background -> Images -> Select image (no watermark) -> Save at Location where we save an Adobe Animate CC 2020 -> File -> Import -> Import to Library -> Then from Library Drag to Stage -> Then at Tab Properties -> at Tab Object setup the Position and Size as below:

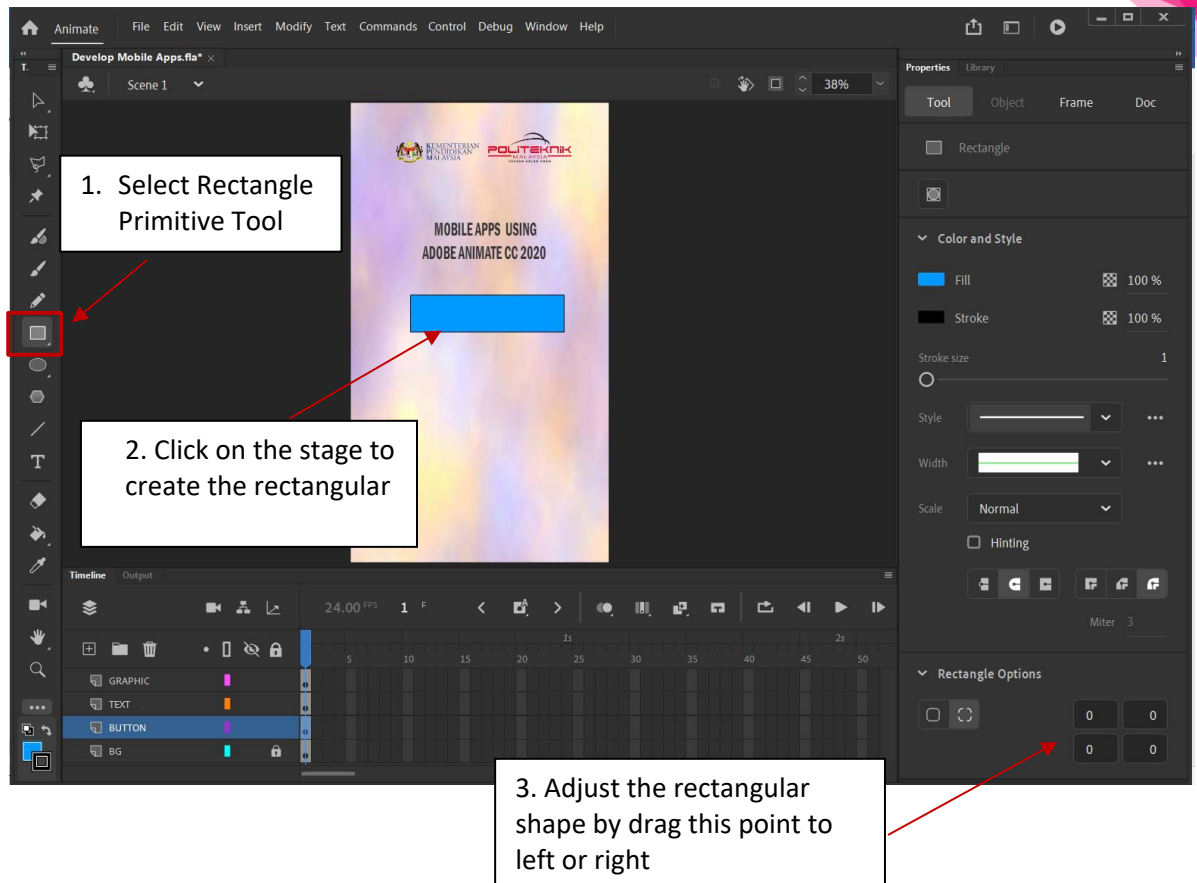
X: 0.00 Y: 0.00
W: 720.00 H: 1280.00



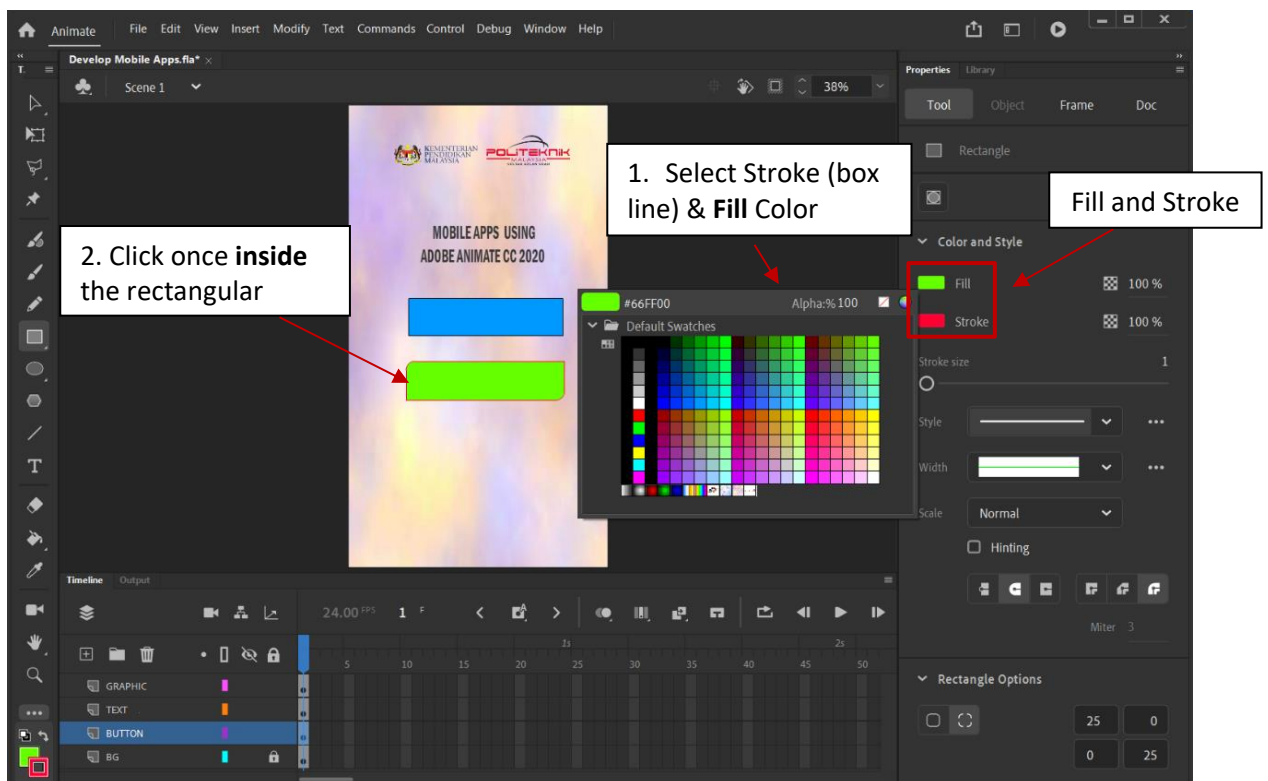
10. In the same frame at **Layer Text**, insert Text using Text Tool. Select **Text tool**, then **click once on the area we need to put a text** and type the text! Align your text and picture using **Align Tool**.



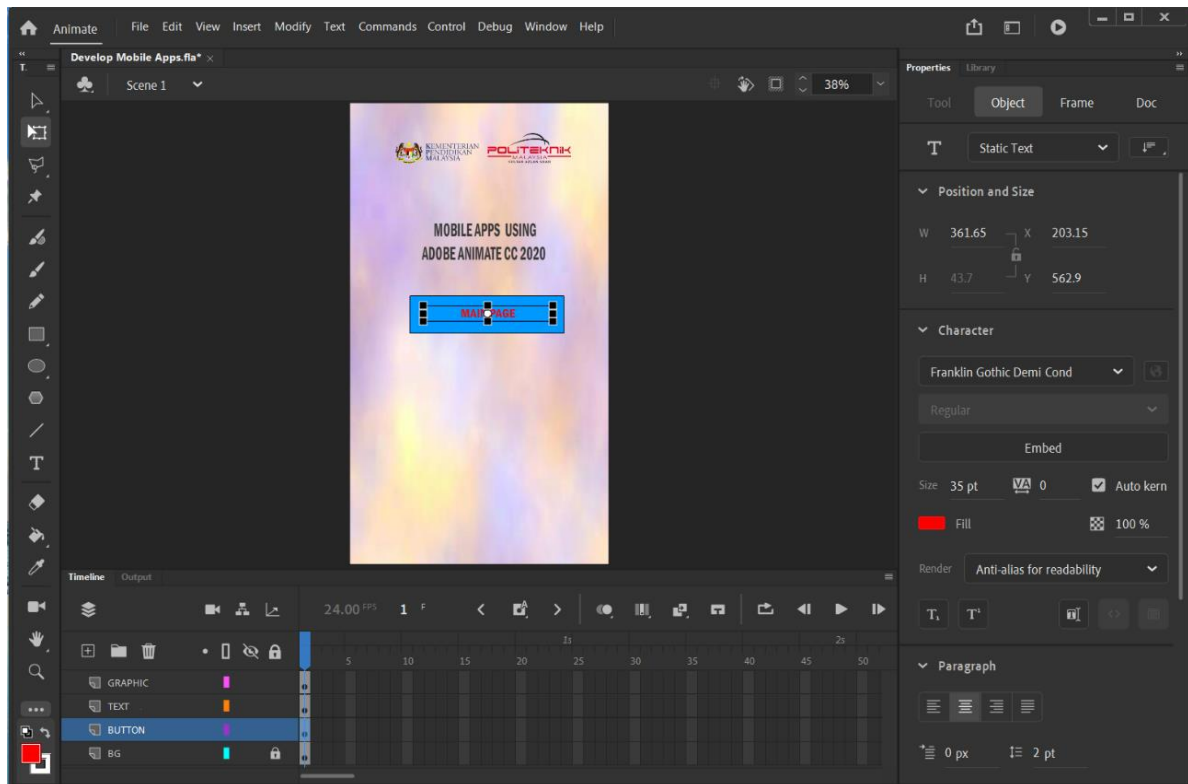
11. In **Layer Button**, create a rectangular shape. This rectangular shape is used as a **Button**.



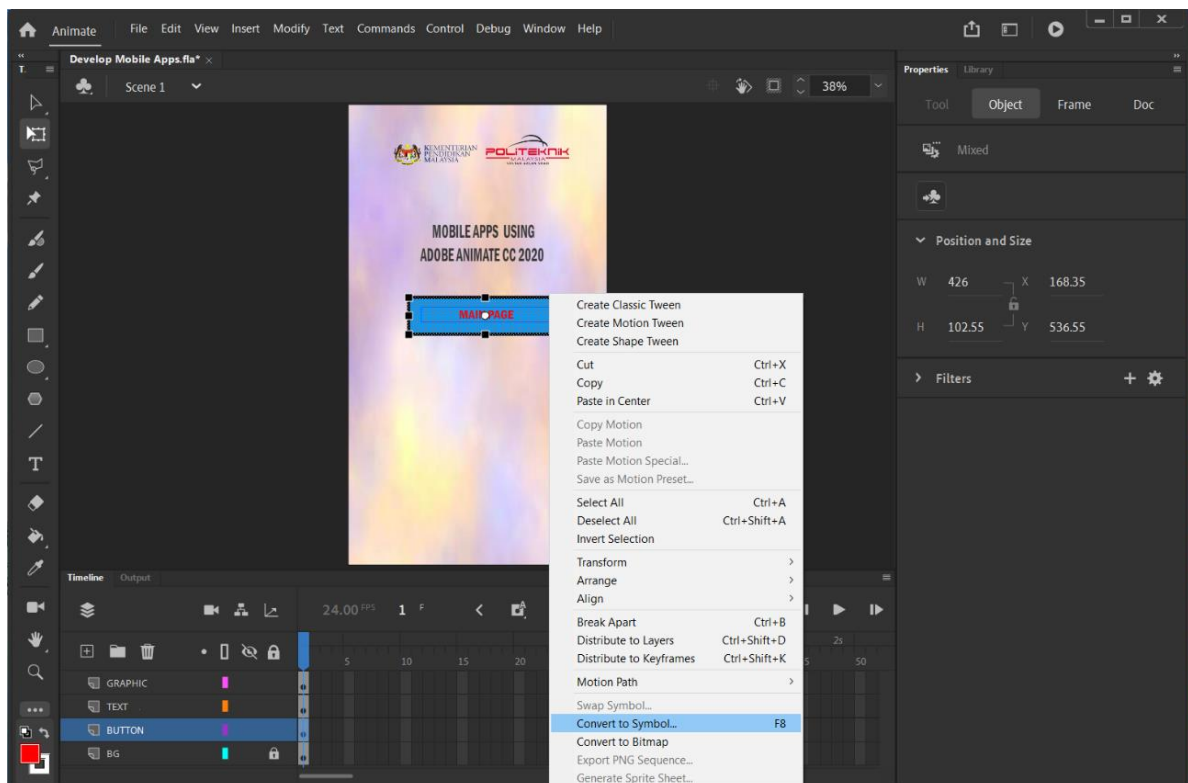
12. Colour the **Button**. Here, you can set **Fill** and/or the **Stroke** (which is line) colour.



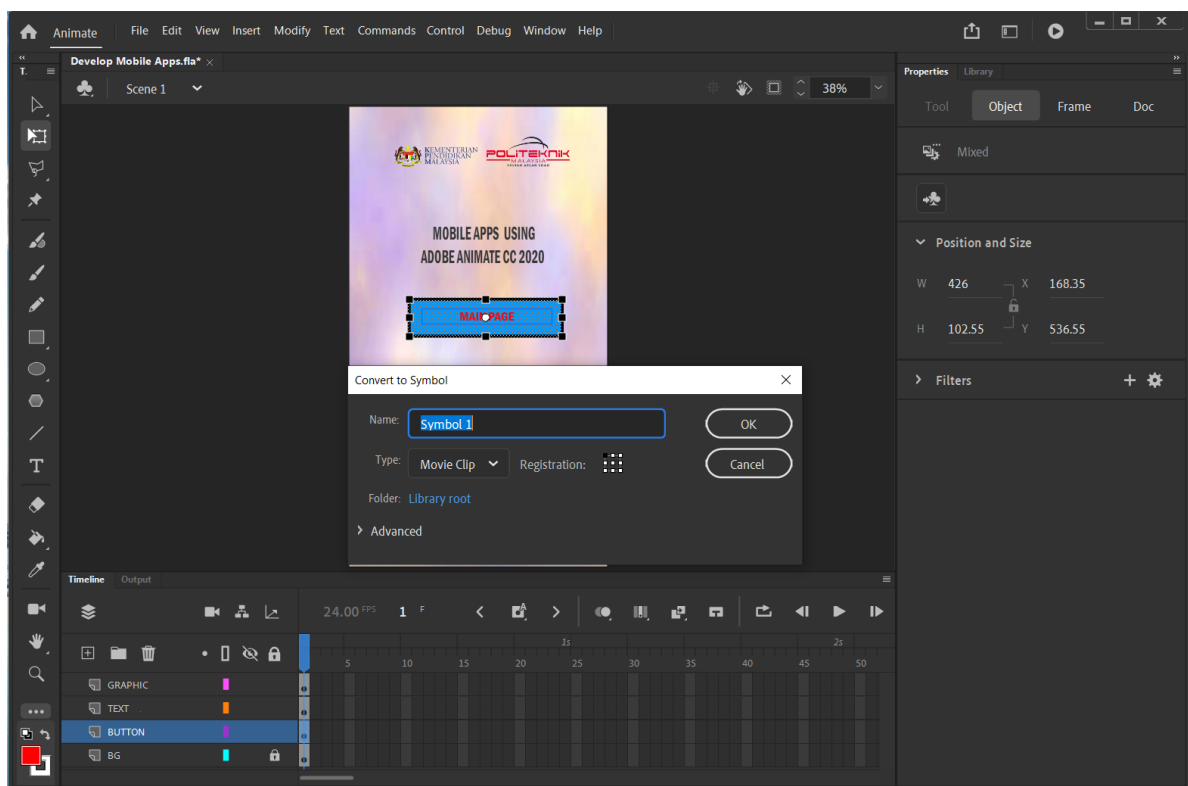
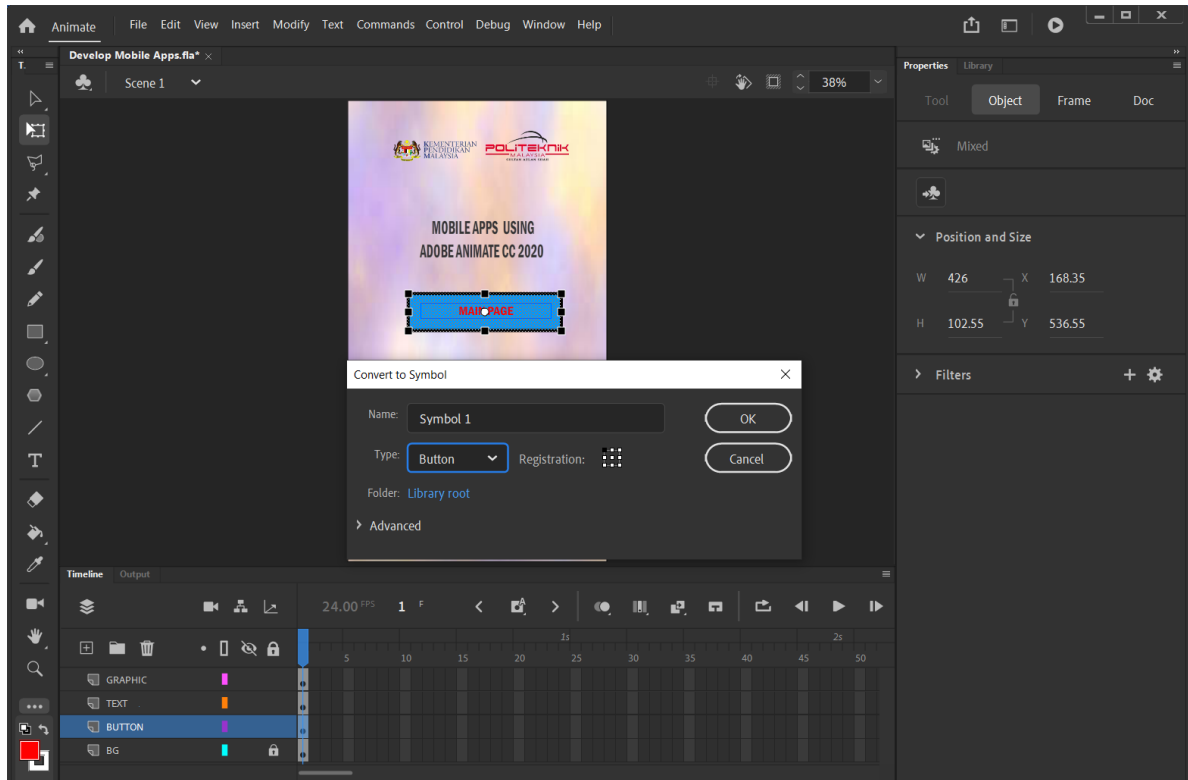
13. Insert text into the button and design your first interface apps.



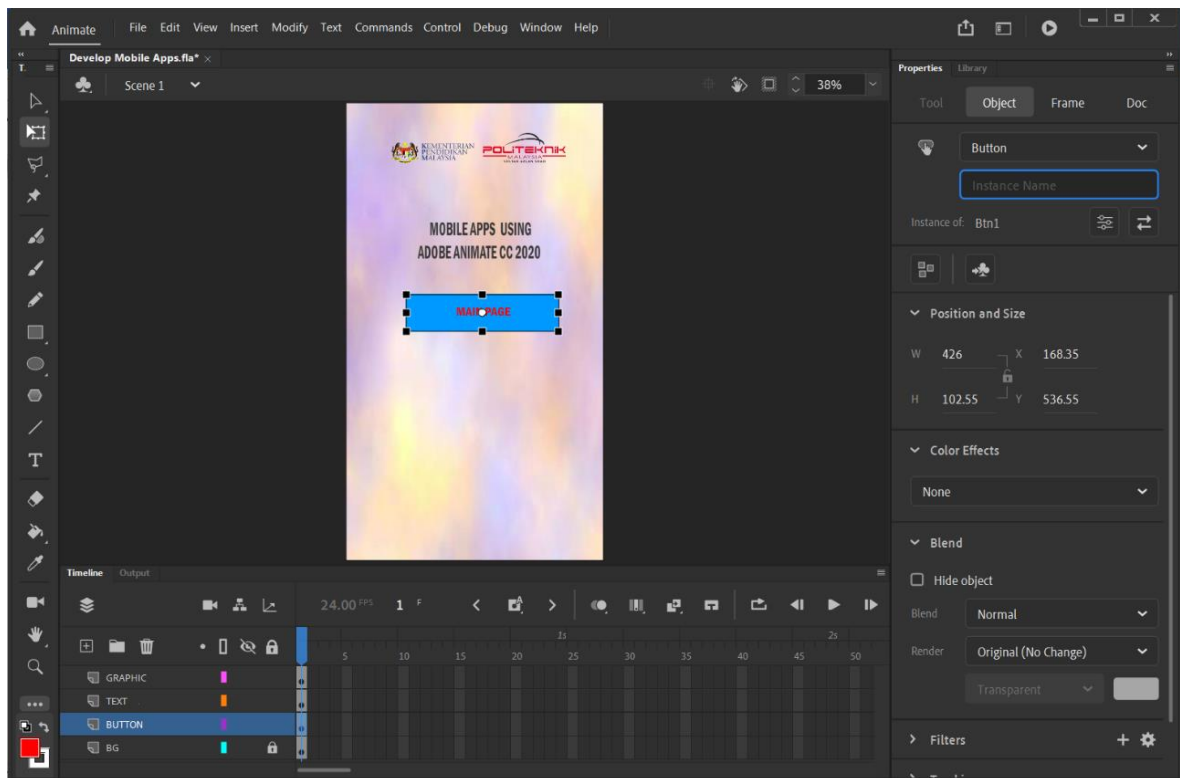
14. Click Free Transform Tool to select Button and Text to convert as a button. Right click mouse -> Select Convert to Symbol or F8. Popup menu Convert to Symbol appear as below:



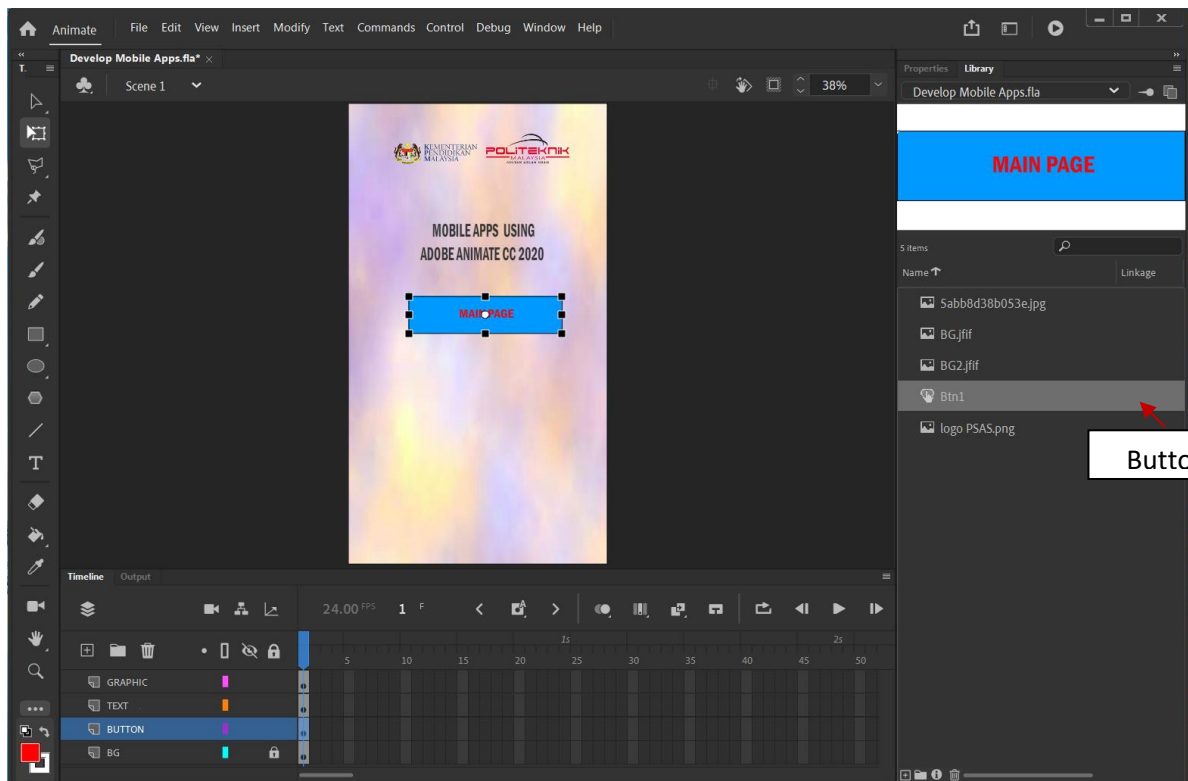
15. Popup menu **Convert to Symbol** appear as below. Then **rename** the **Symbol 1** (default) for example **Btn1** and **change button Type** as **Button**. Then **click OK**.



16. Then **rename the Button Properties** same as **Symbol Name** for example **Btn1**.

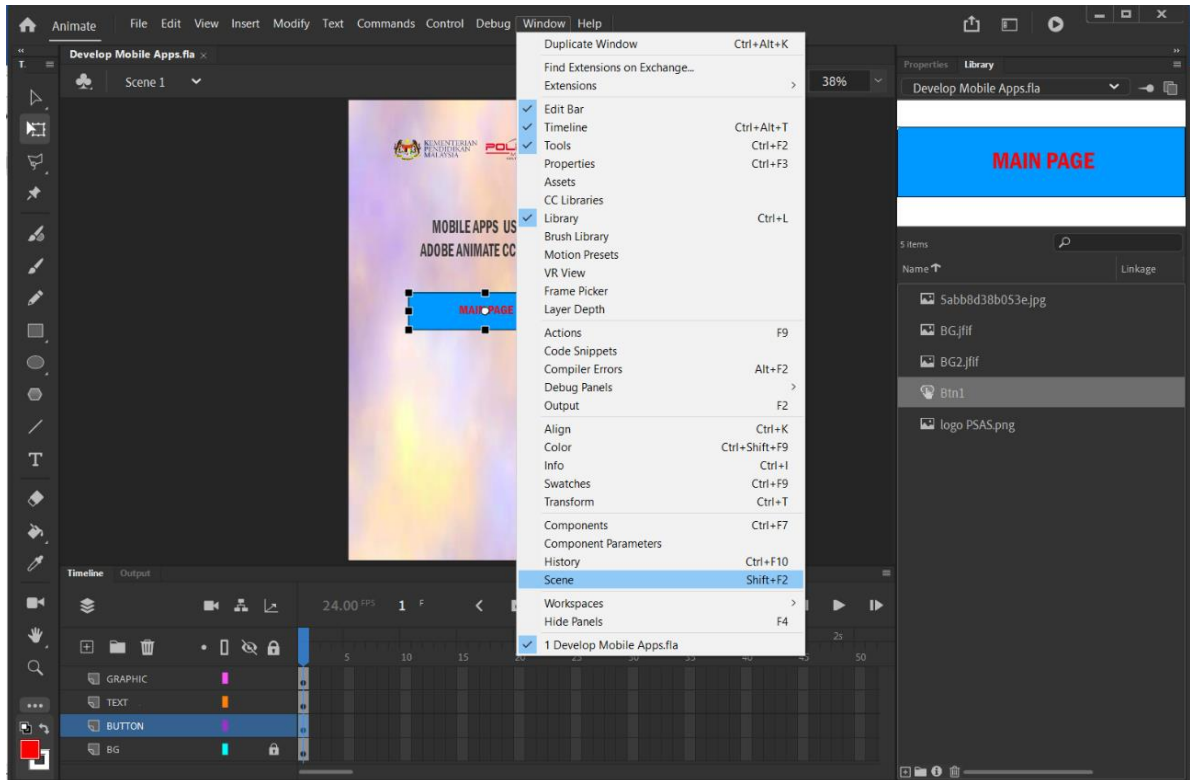


17. The created button **Btn1** appear at **Library**.

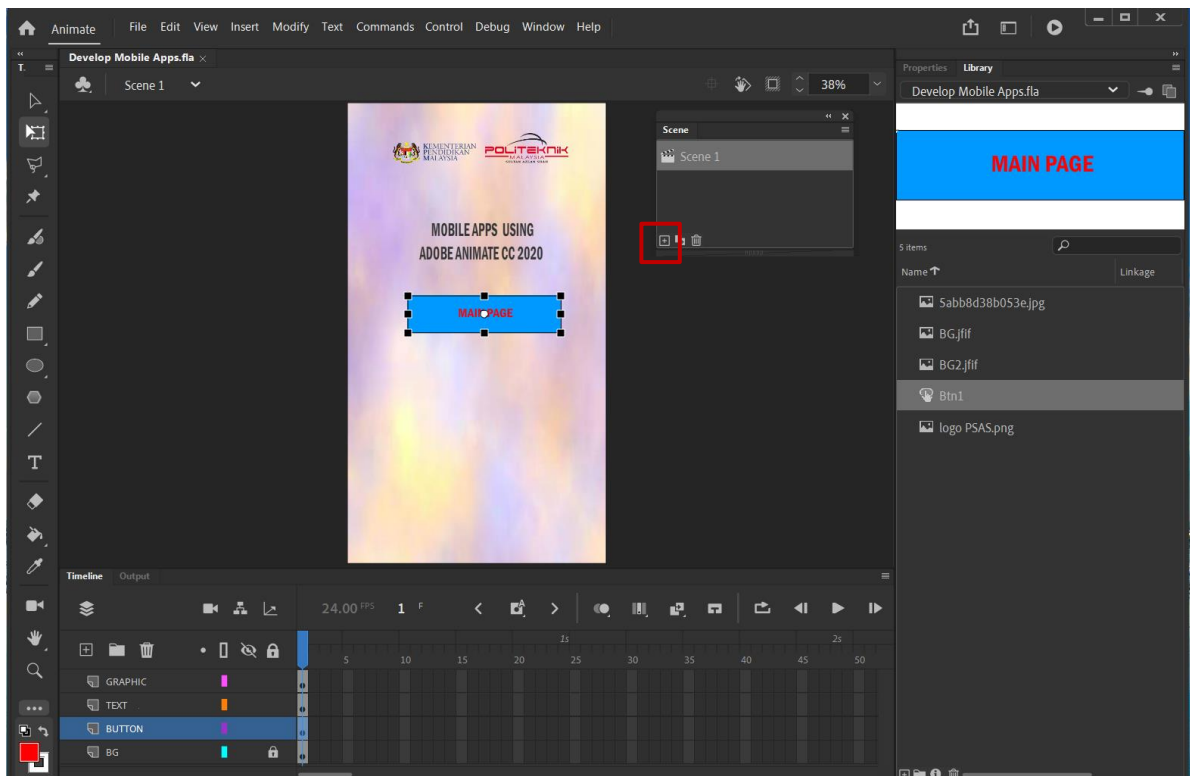


SECTION C: CREATE AN ANOTHER SCENE

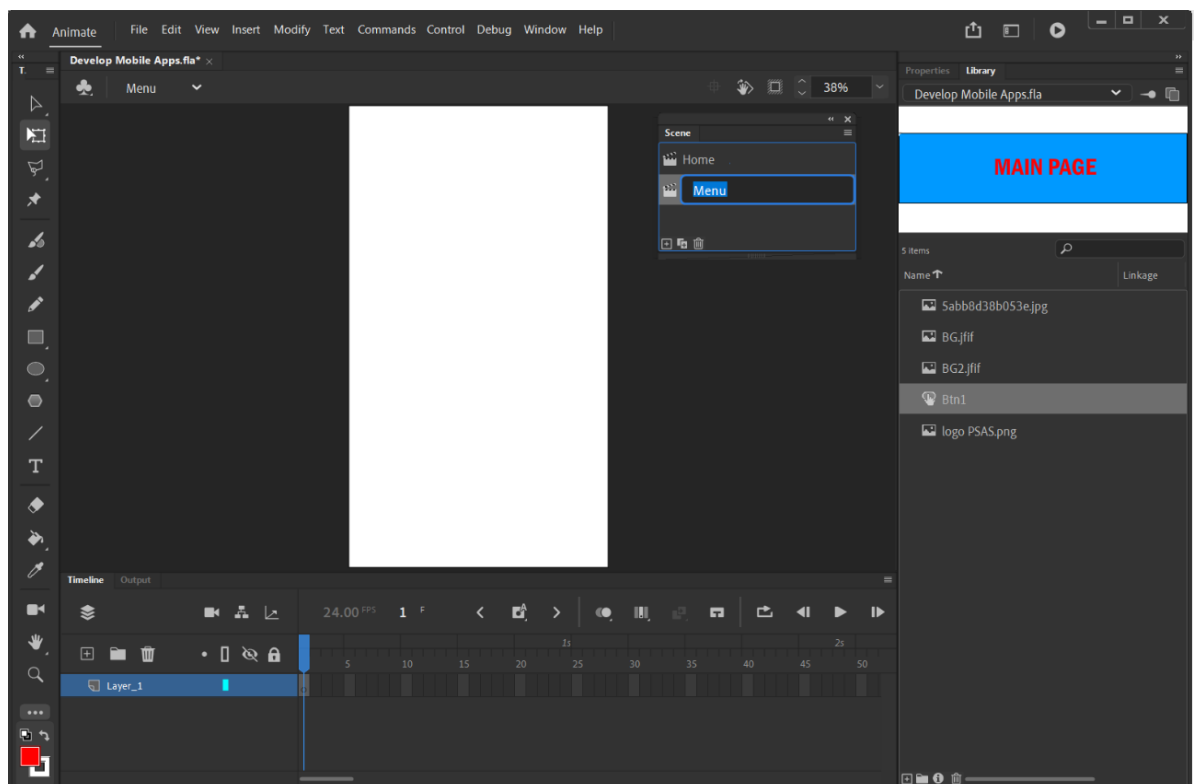
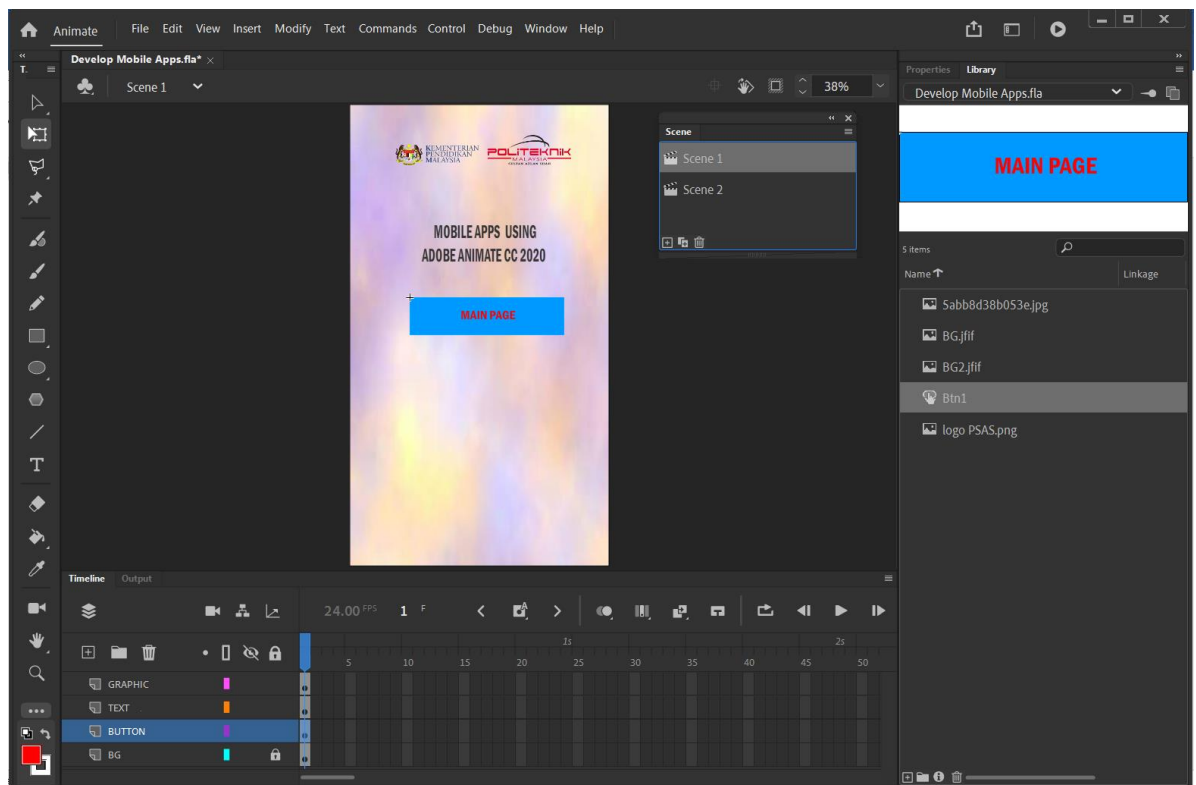
1. To add another **Scene**, click **Window Tab -> Scene** or **Shift+F2**. This action will create a second scene for another page interface in mobile apps.



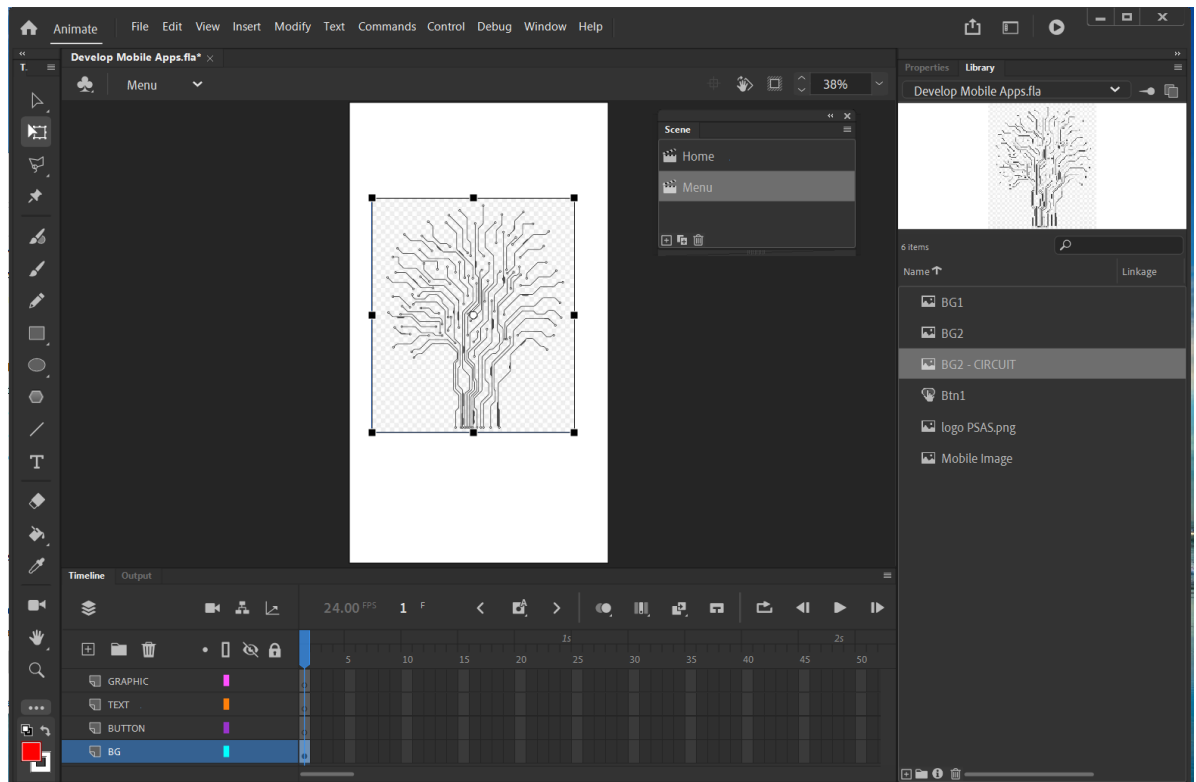
2. **Popup menu Scene appear then click button + to add another scene.**



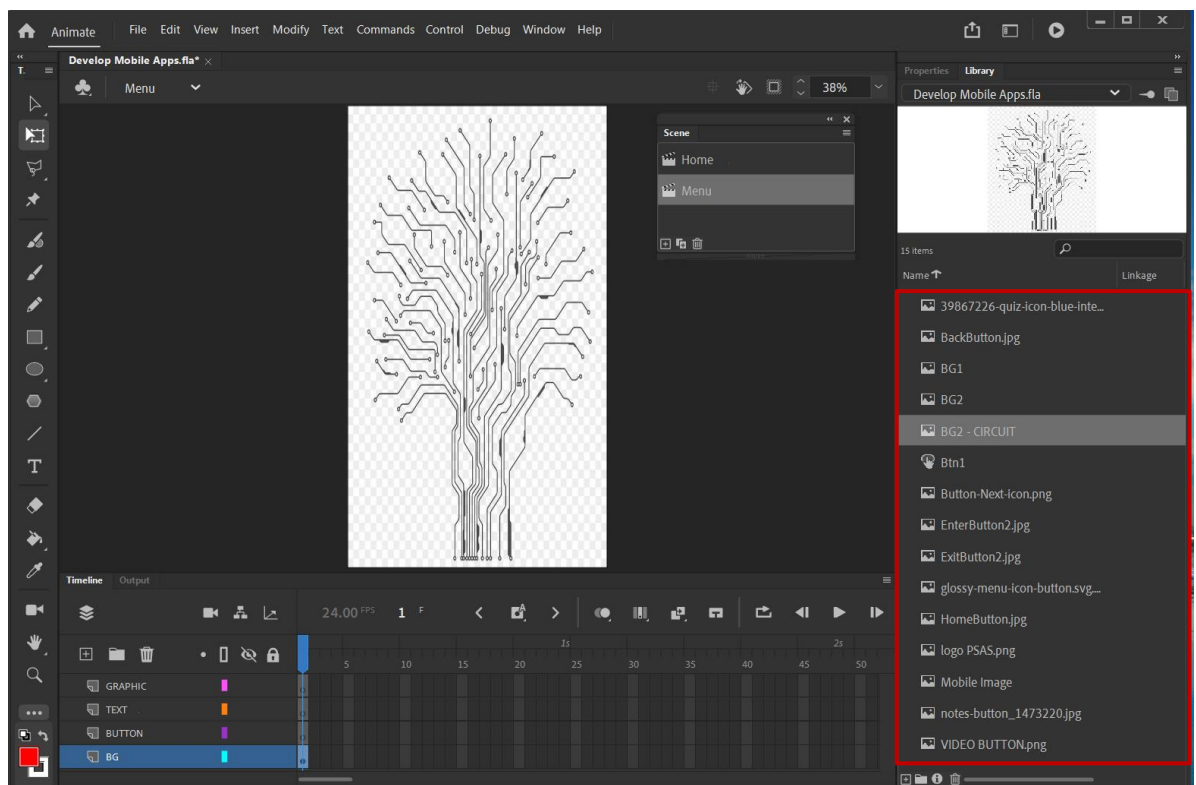
- Then rename the Scene 1 as **Home** and Scene 2 as **Menu** by double click the scene picture.



4. In Scene 2 stage, insert an information about **Menu** page. Design the stage by follow the raw idea in storyboard including all the button. The button will be used as link to connect between scene.

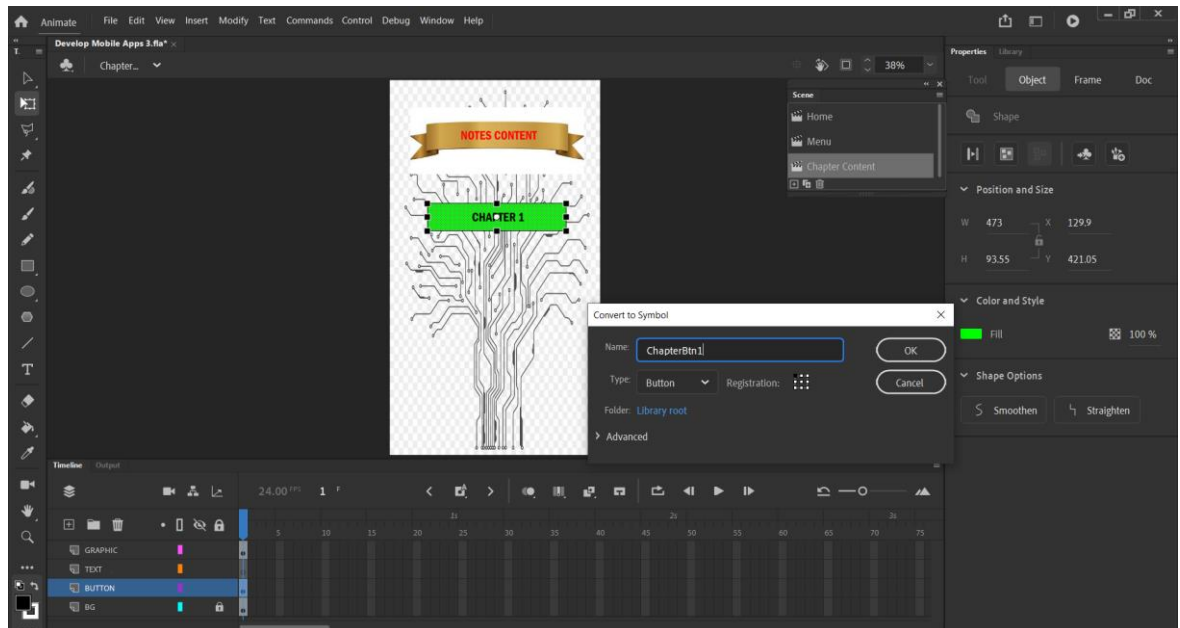


5. Import all the images that will be used in this mobile apps design to the library. The button image very important because it's will be used as link to connect between scene.

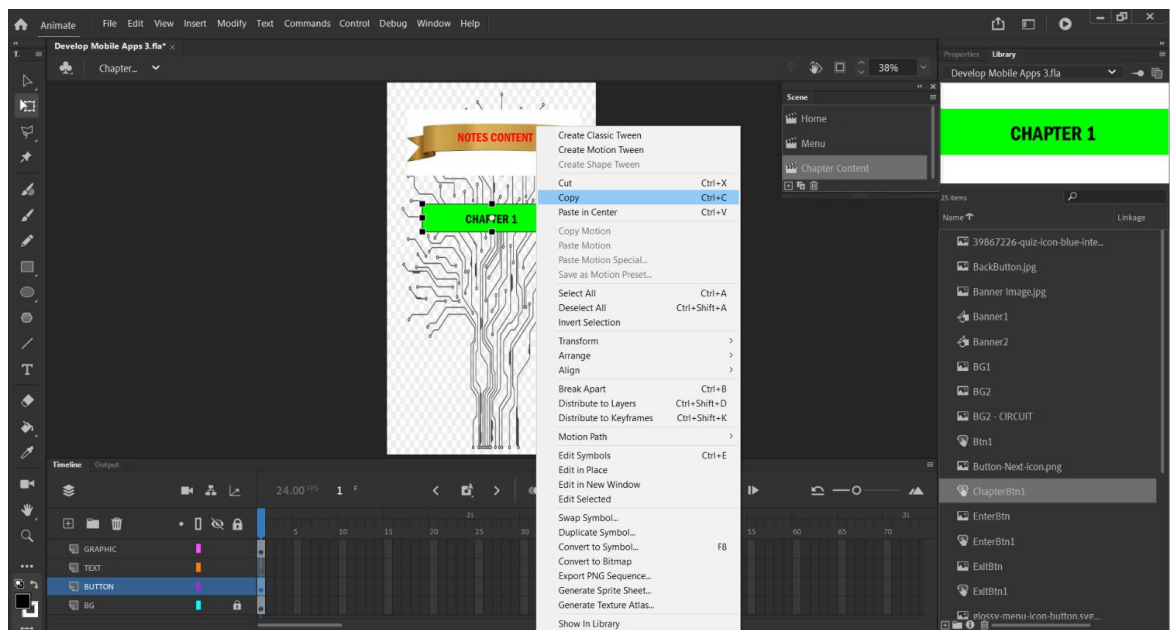


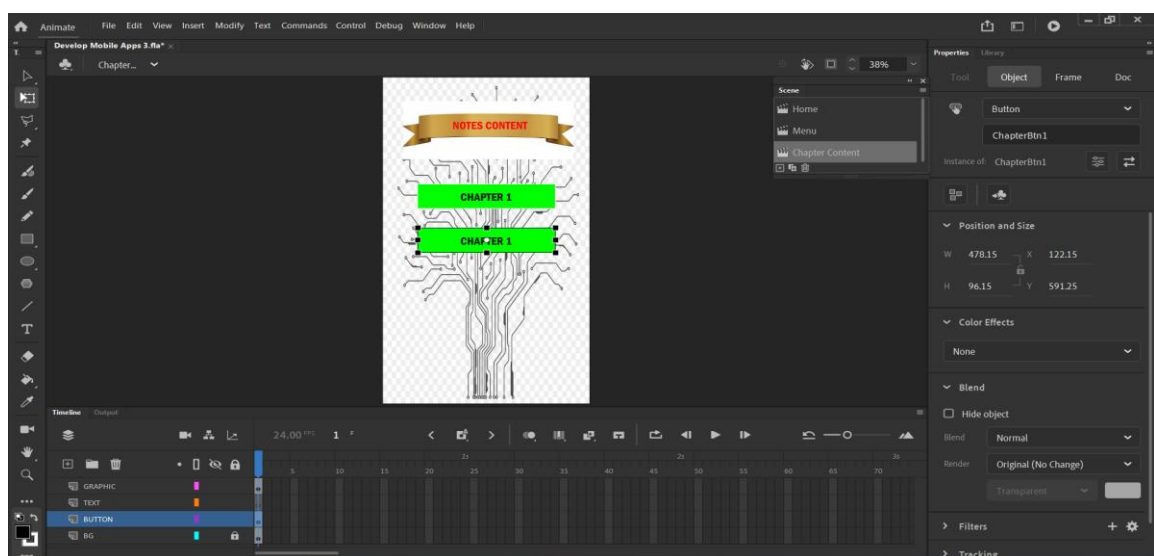
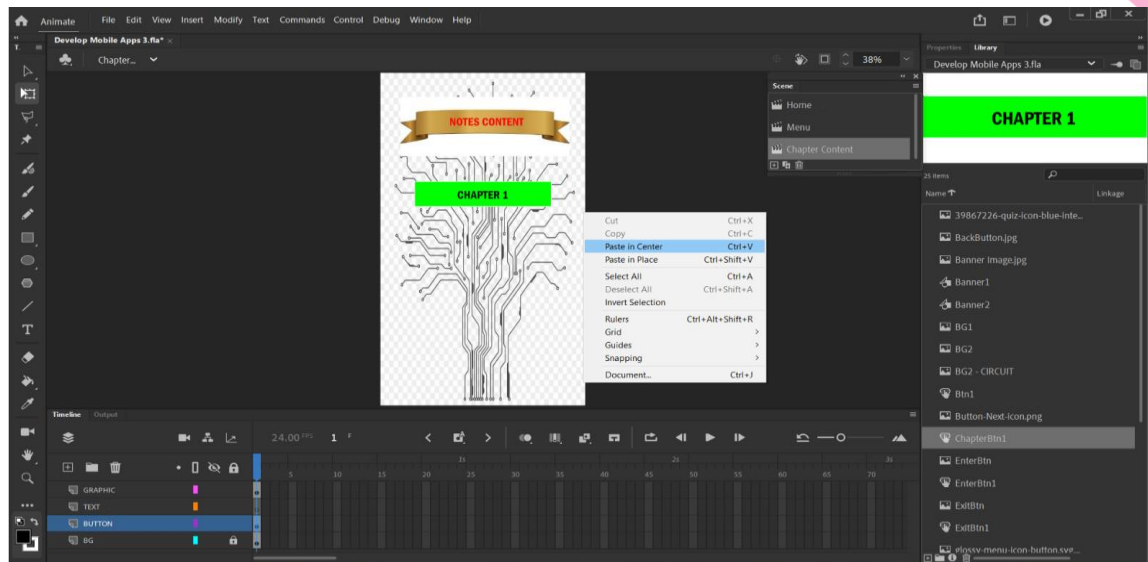
SECTION D: HOW TO CREATE MULTIPLE BUTTON

1. **Multiple button** can be created in one interface paged or Scene. Create one button and rename for example **ChapterBtn1** button.

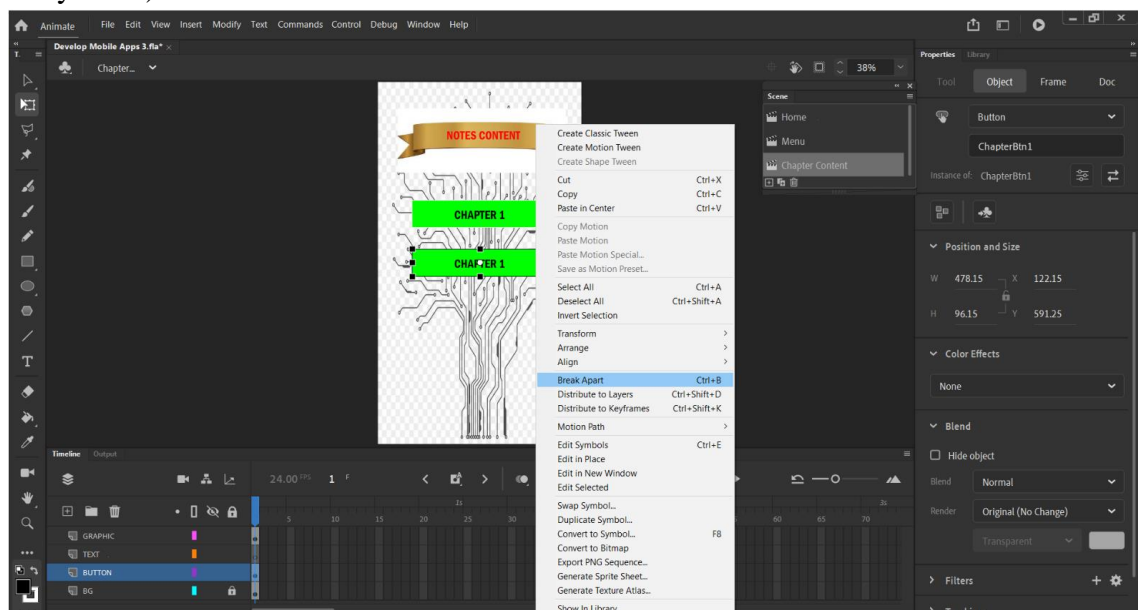


2. Click the button on the stage and then **right click mouse** -> select **Copy** -> then **Paste in Center**.

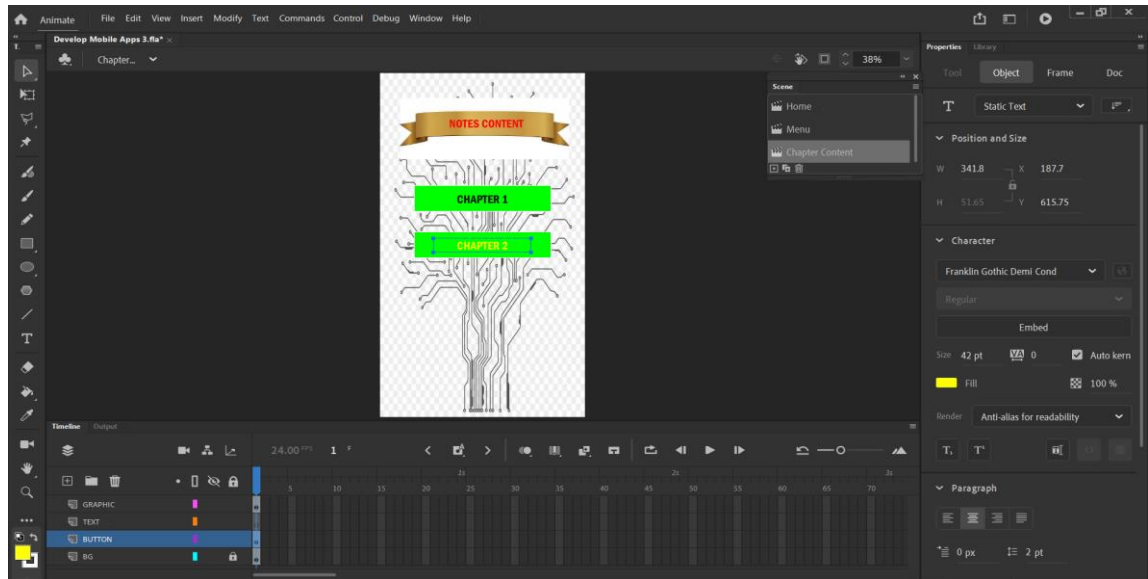




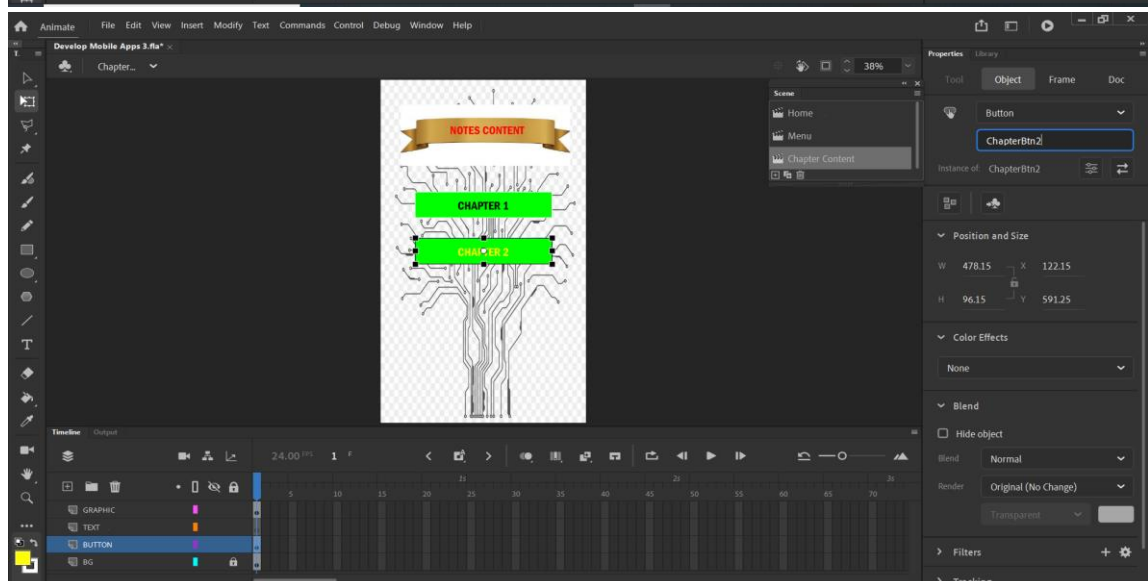
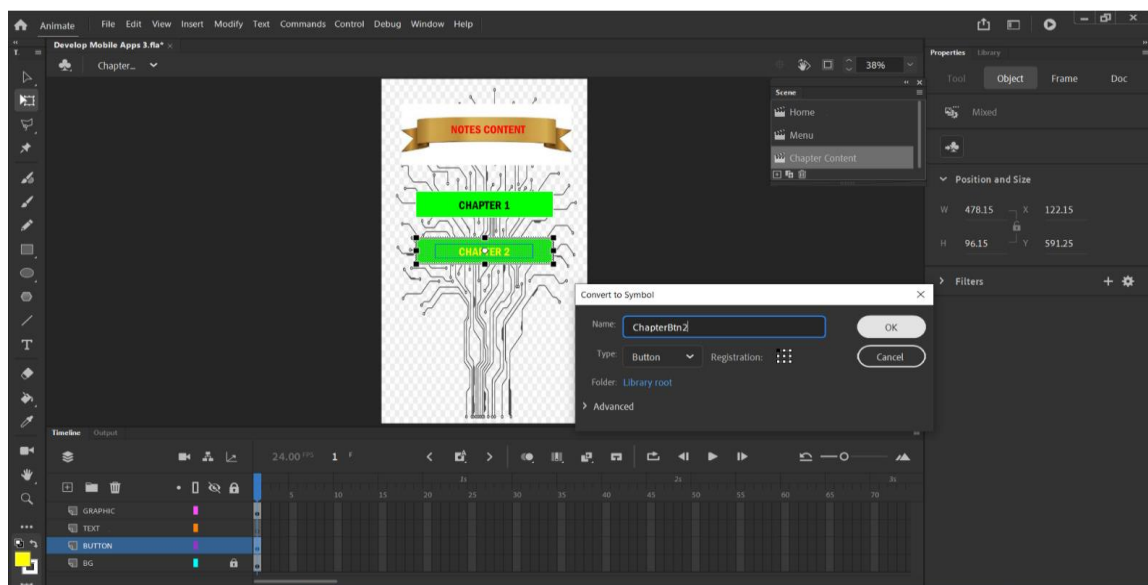
- Click the second button name **Chapter 1** again then **right click mouse** -> select **Break Apart** to change wording in second button another word for example **Chapter 2** (refer storyboard).



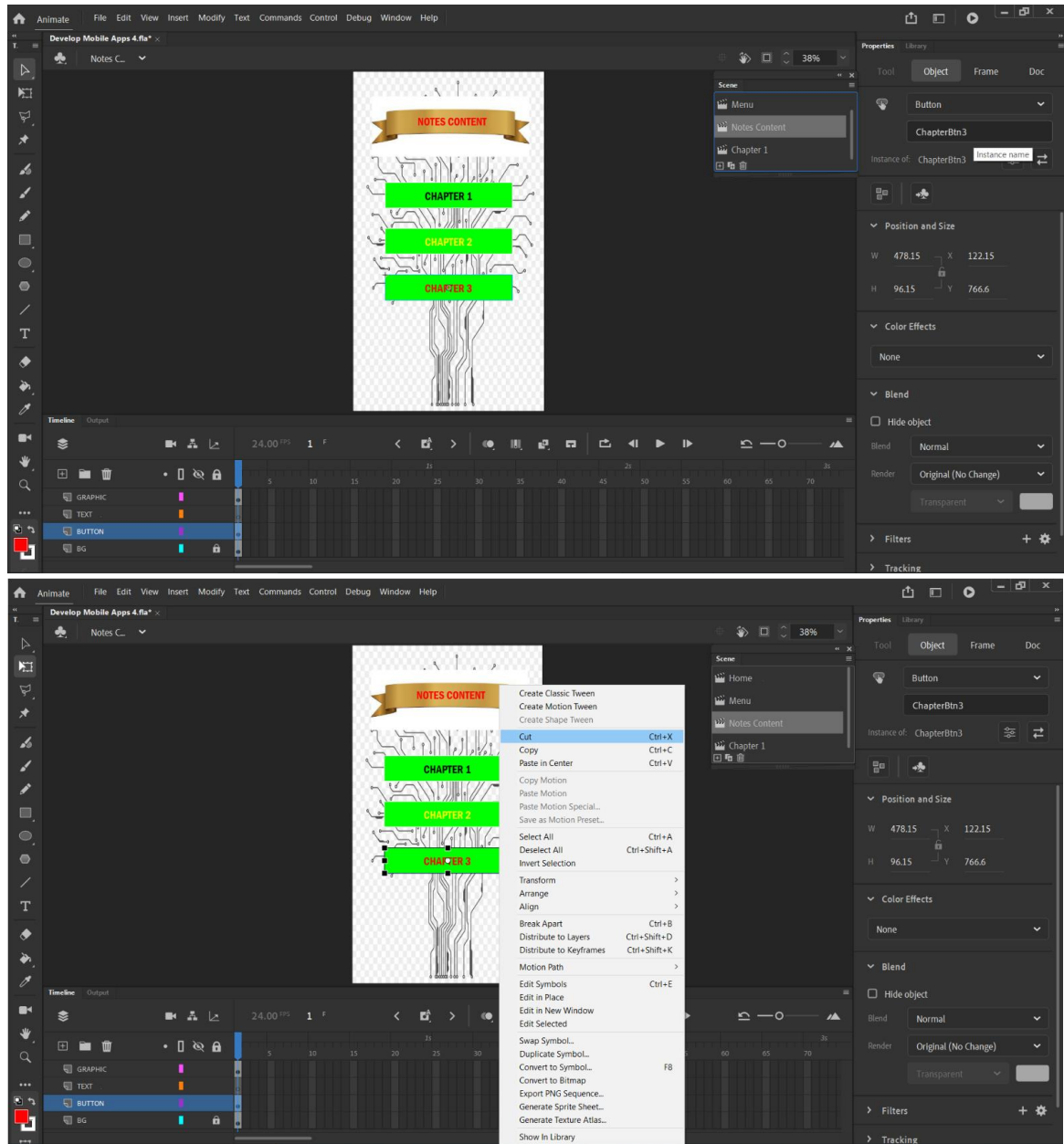
4. We can change the colour of wording into different colour at **Character Tab -> Color**.



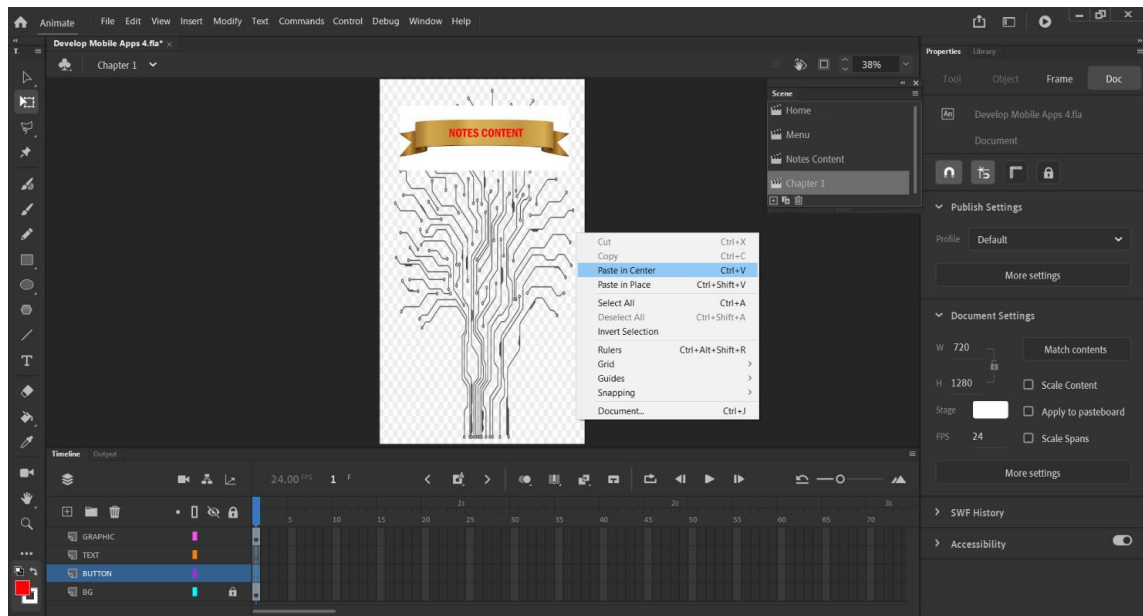
5. Then convert and rename second button **Chapter 2** into button.



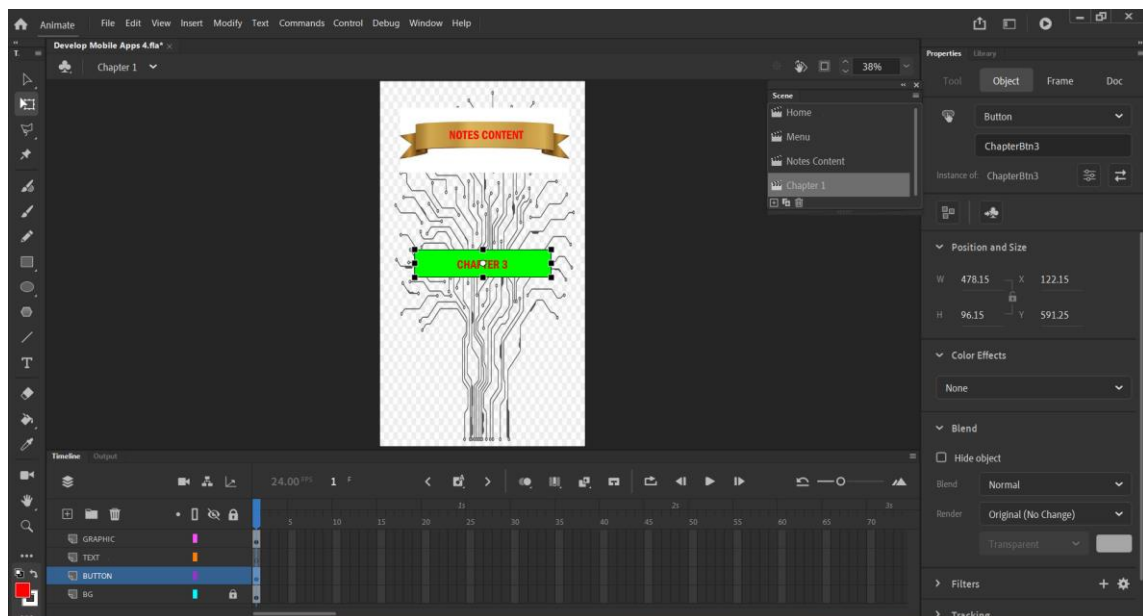
6. We also can transfer our multiple button to another scene. Add another scene rename the scene for example **Chapter 1** and then select which button we want to transfer for example button **Chapter 3** then cut and paste into another scene.



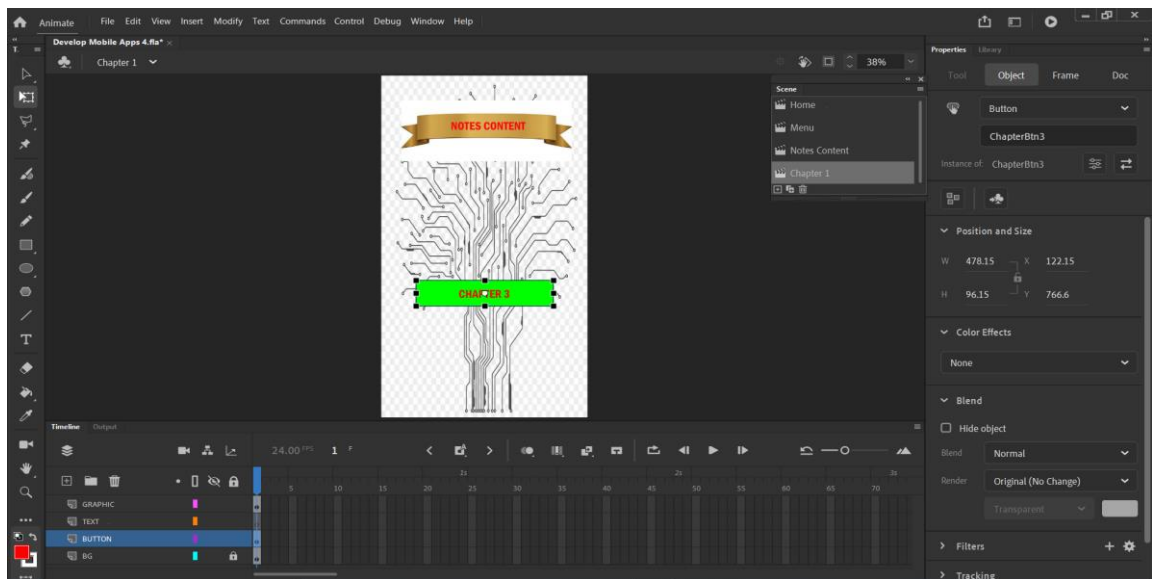
7. There two options paste which Paste, which is Paste in Center and Paste in Place.



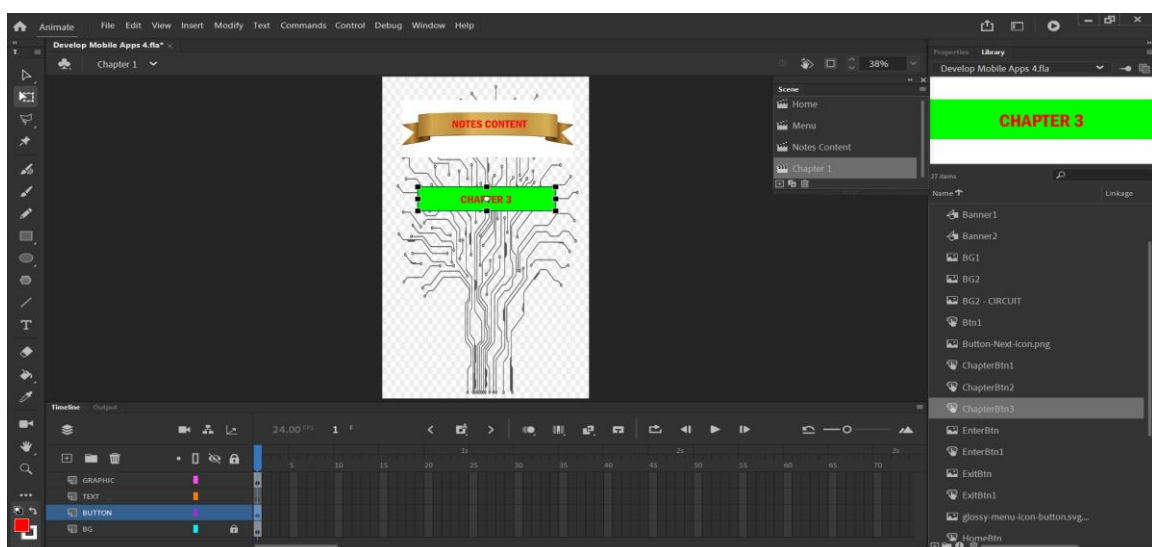
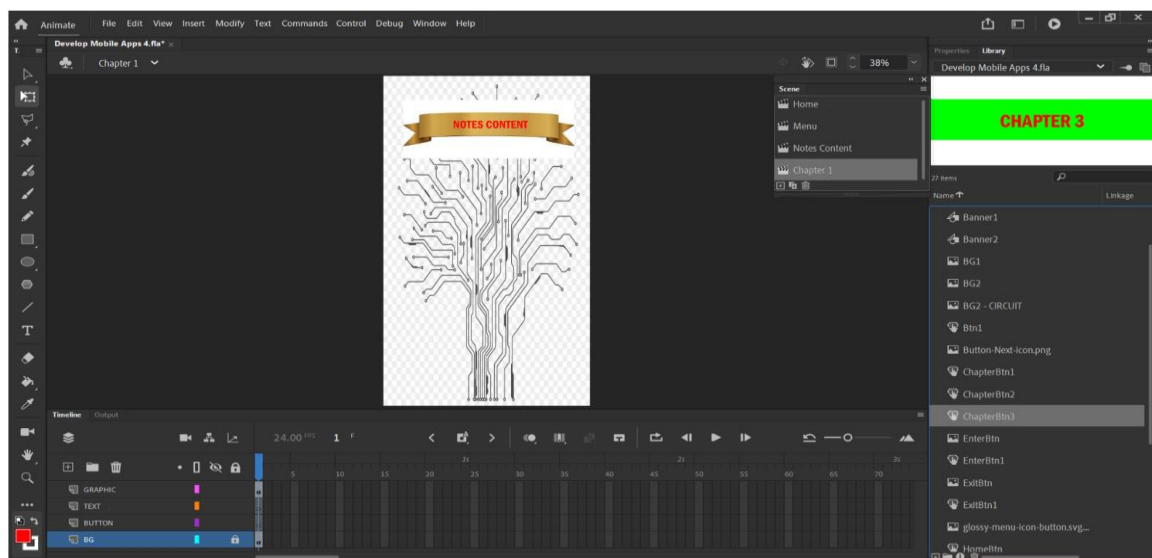
8. Paste in Center mean the button will put at the center of the stage.



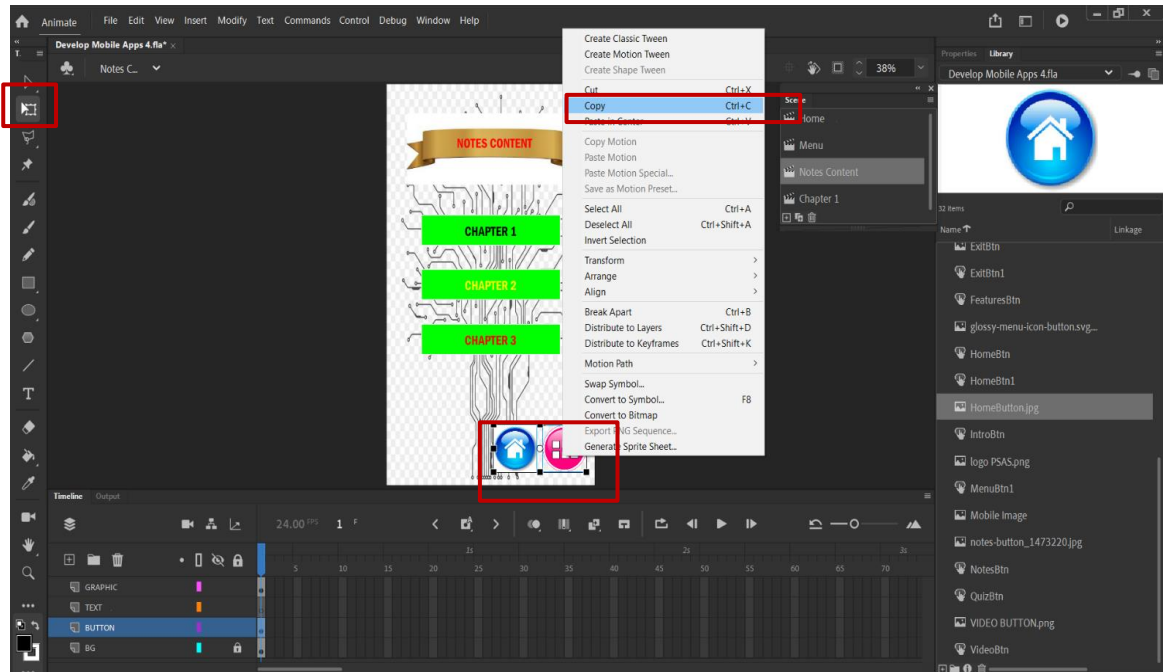
9. Mean while Paste in Place mean the button will put at the same position same as previous scene where it is.



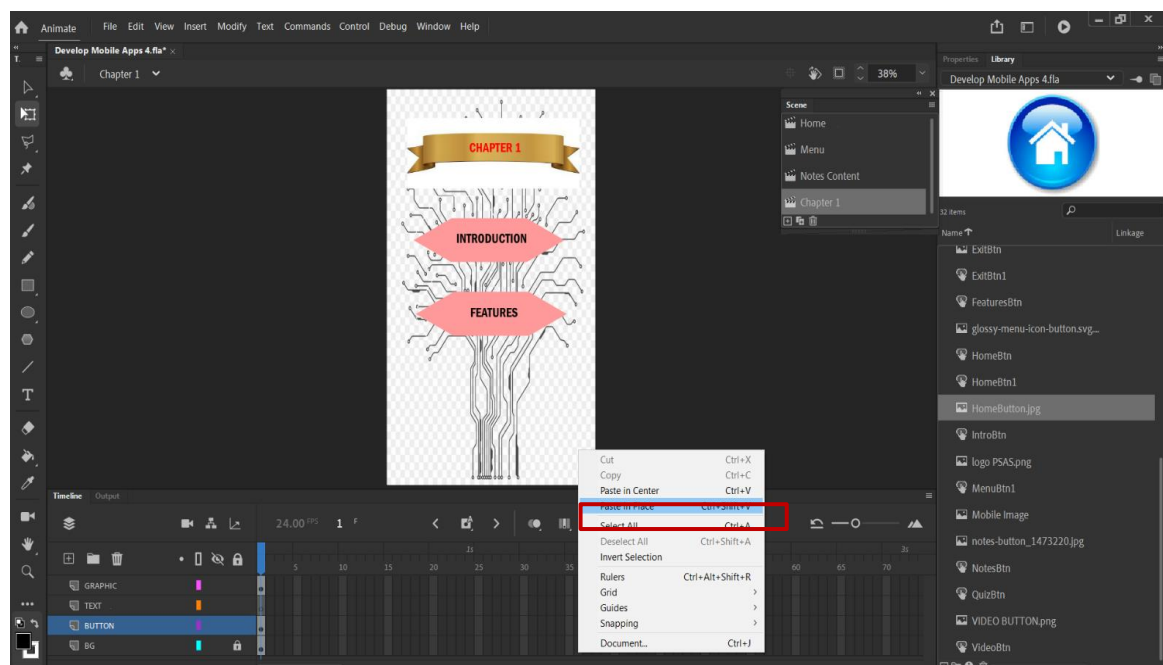
10. The deleted button still save and appear in Library, so we can drag the button for example button **Chapter 3** and place it in the new scene for the example scene **Chapter 1**.



11. Button also **can copy as a group** by select the button that request to copy for example **button home** and **button menu** in scene **Notes Content** to scene **Chapter 1** using **Free Transform Tools (Q)**. **Right click mouse -> select Copy**.

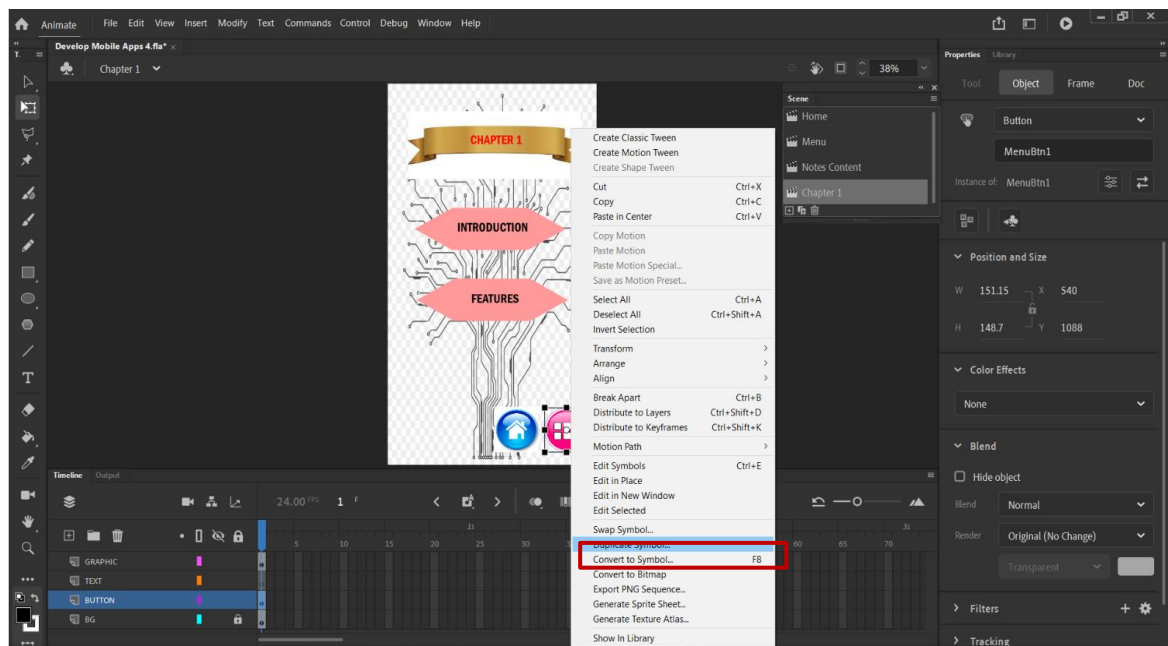


12. Click the requested scene which is scene **Chapter 1**. Then **Right click mouse -> then Paste in Place**.

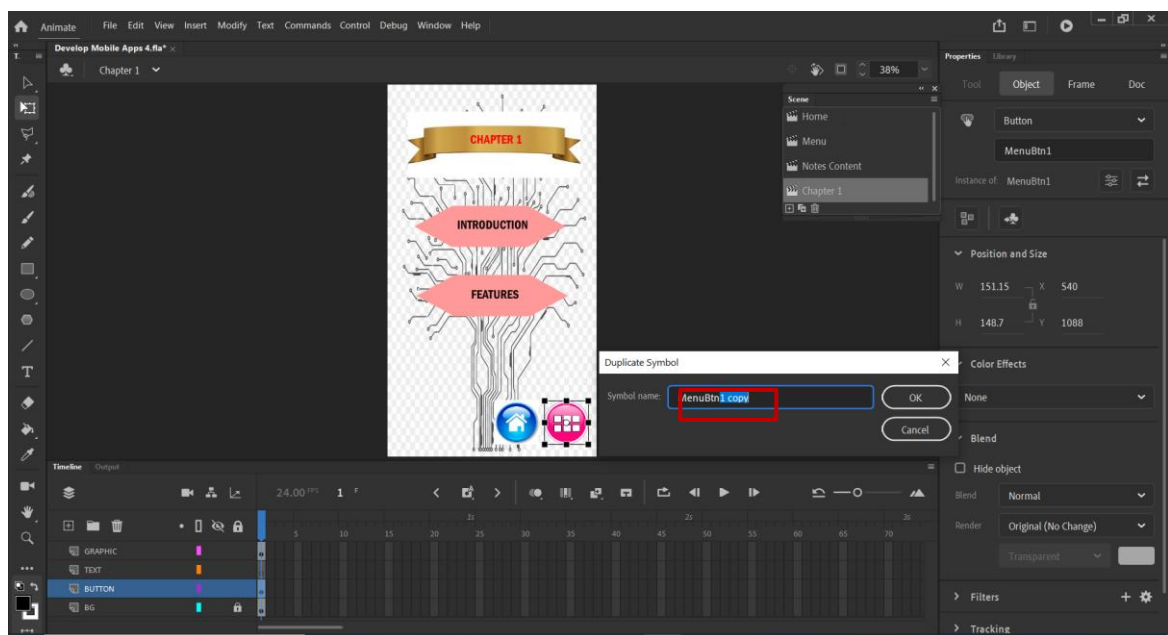


13. Then changes the name of button by **right click mouse -> Duplicate the Symbol**. Then change **MenuBtn1** copy to **MenuBtn2** -> click OK. The new name of the button will appear at **Object Tab** as **Instance of: MenuBtn2**. Then we change **Instance Name** same

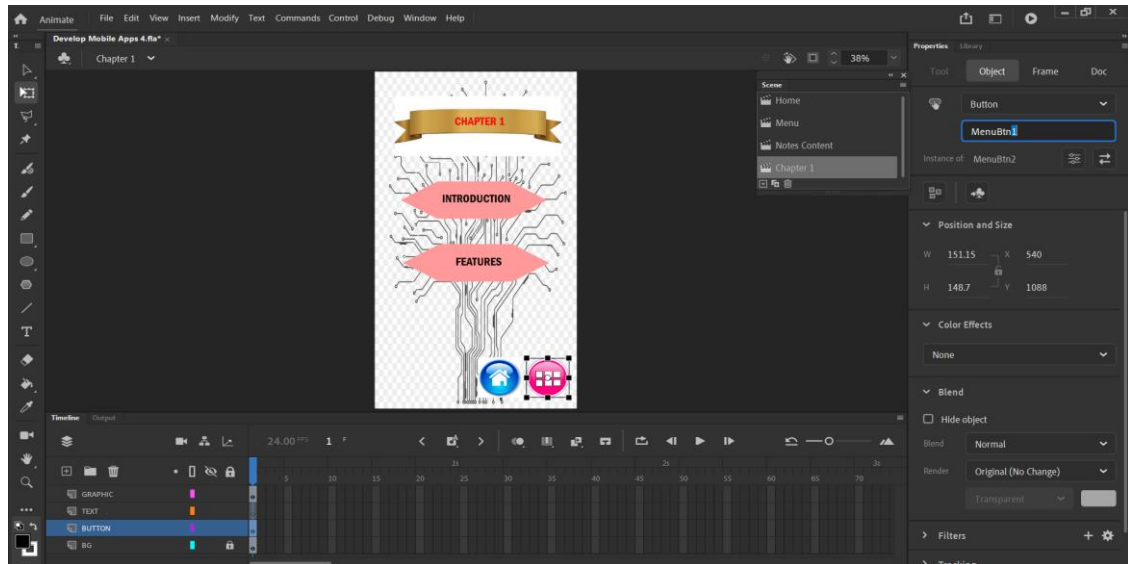
as button name **MenuBtn2**. Repeat the process for all button that we copy @ duplicate (refer storyboard).



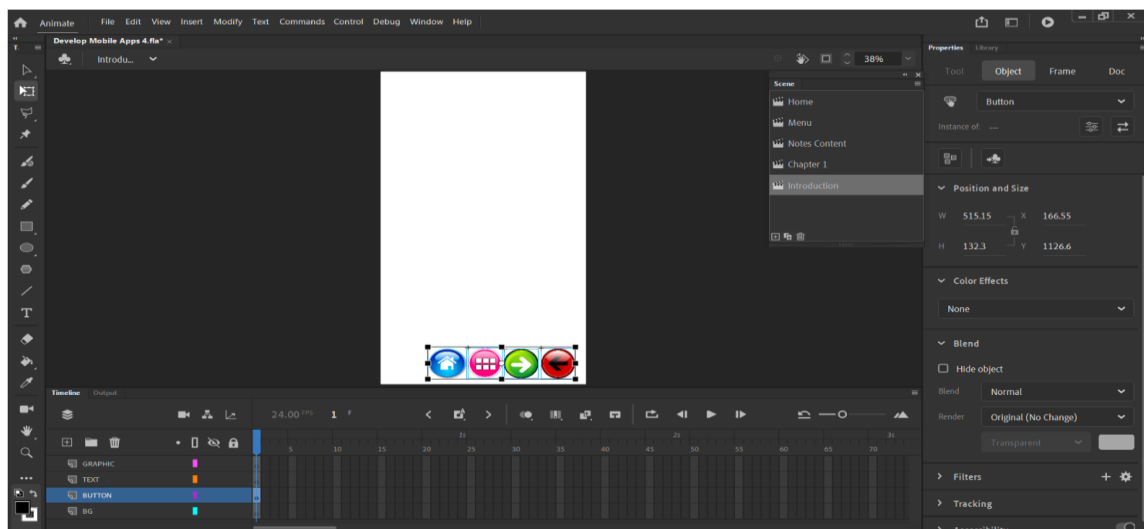
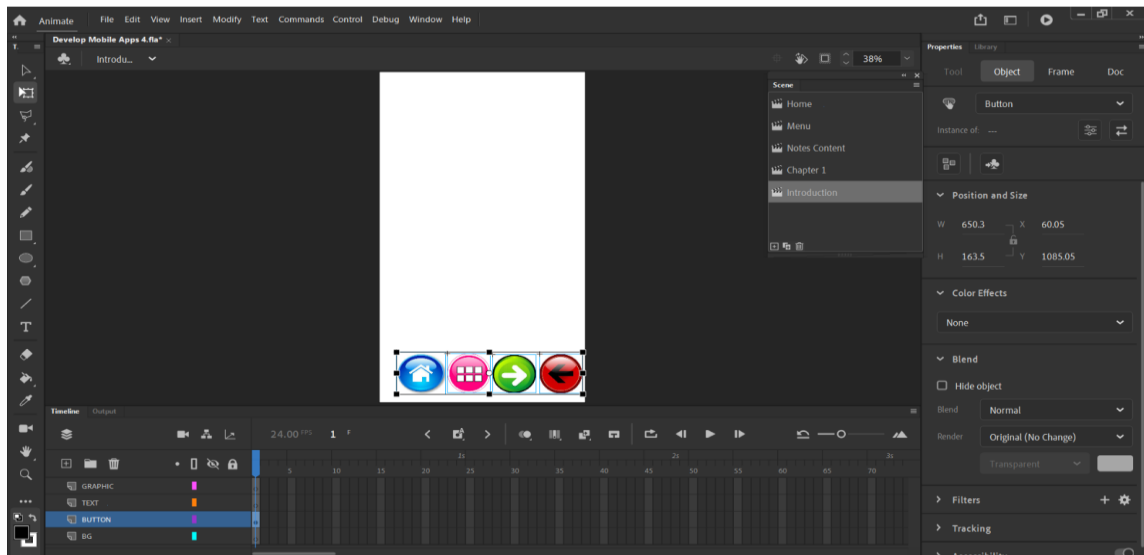
14. Then change **MenuBtn1 copy** to **MenuBtn2** -> click **OK**. The changes Instance of: MenuBtn1 to MenuBtn2 and also changes



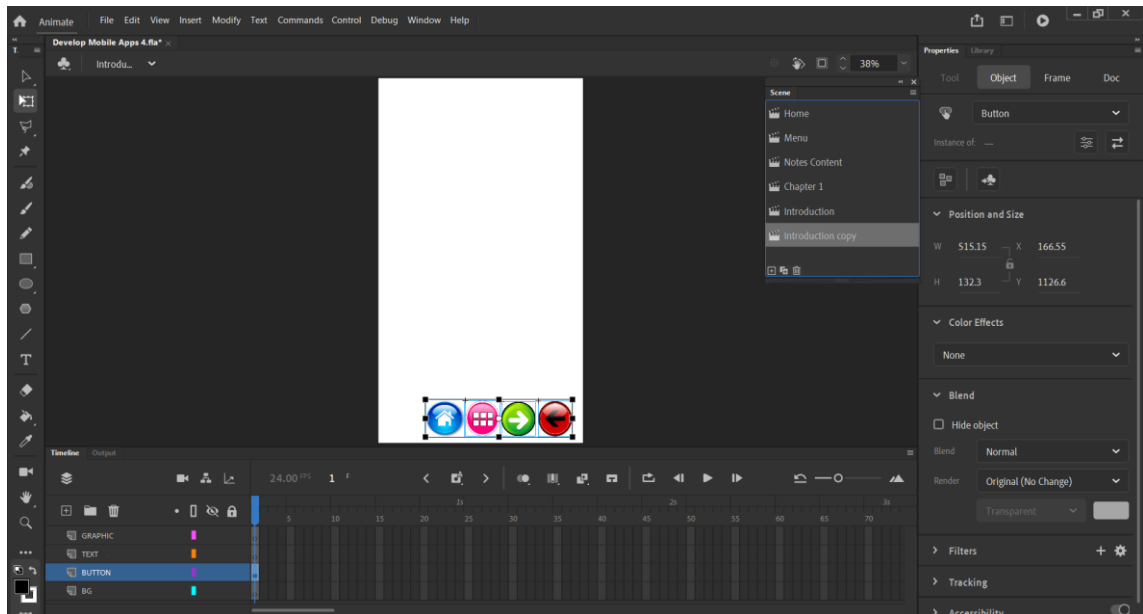
15. The new name of the button will appear at **Object Tab** as **Instance of: MenuBtn2**. Then we change **Instance Name** same as button name **MenuBtn2**. Repeat the process for all button that we copy @ duplicate (refer storyboard).



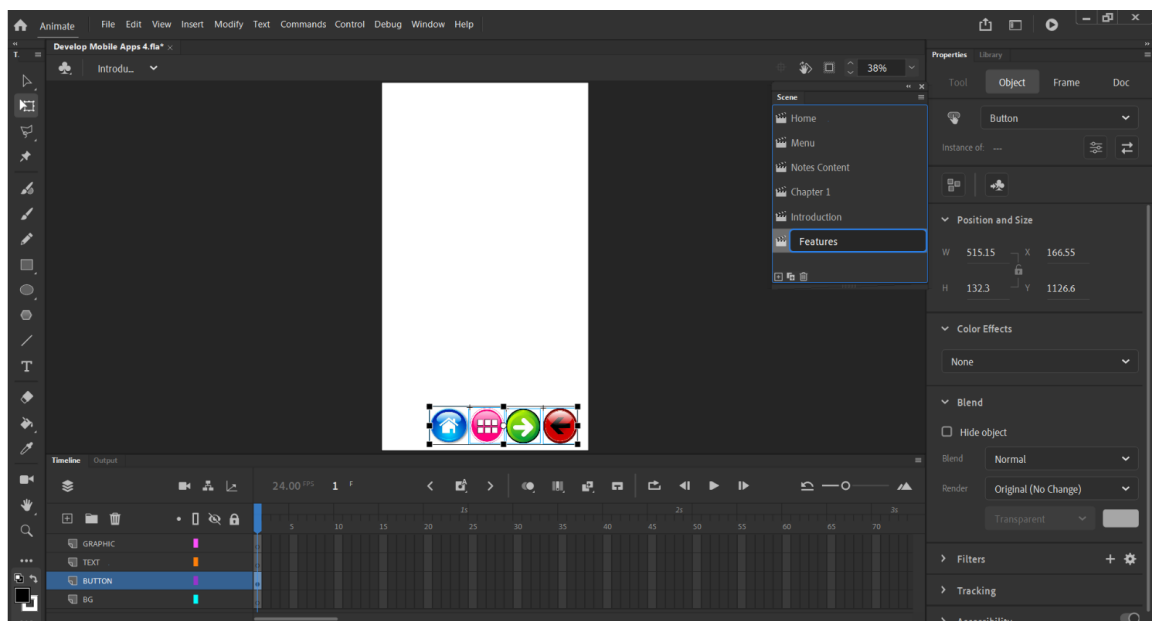
16. Size of the button can also resize in a group. Click **Free Transform Tools (Q)** -> select **all the button** -> Then **resize size of the button**.



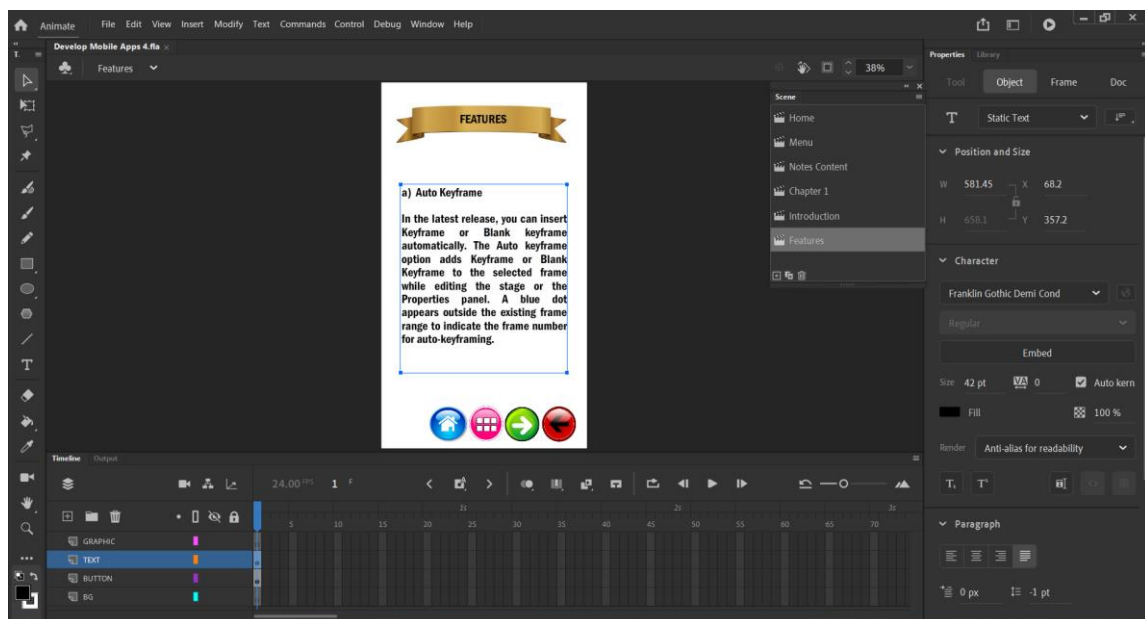
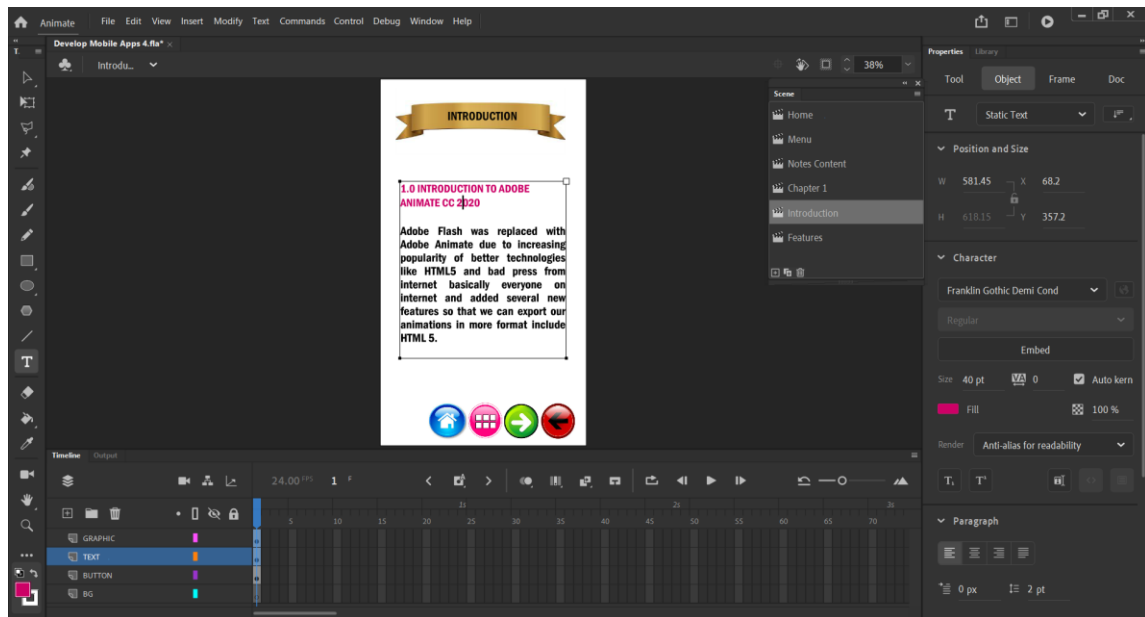
17. All the contents of the scene (graphic, text, button also background) can be copy using **Duplicate Scene in the Scene Tab**. For example, we duplicate scene Introduction. Then we get copy of the Introduction scene -> **Introduction copy**.



18. Then rename the copy of the scene for example Features (refer to storyboard).

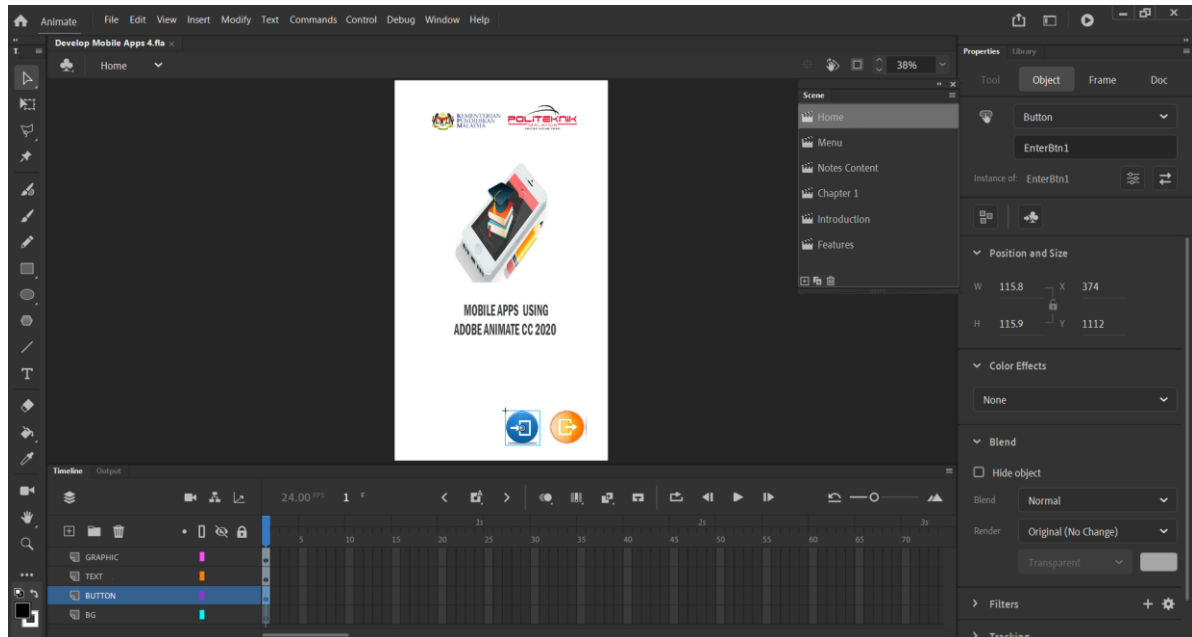


19. Notes write on the scene can be select from word file or power point also from web. **Just select and paste it after we active the Text Tools (T).** Make sure the text that we wrote is in **Text layer**.

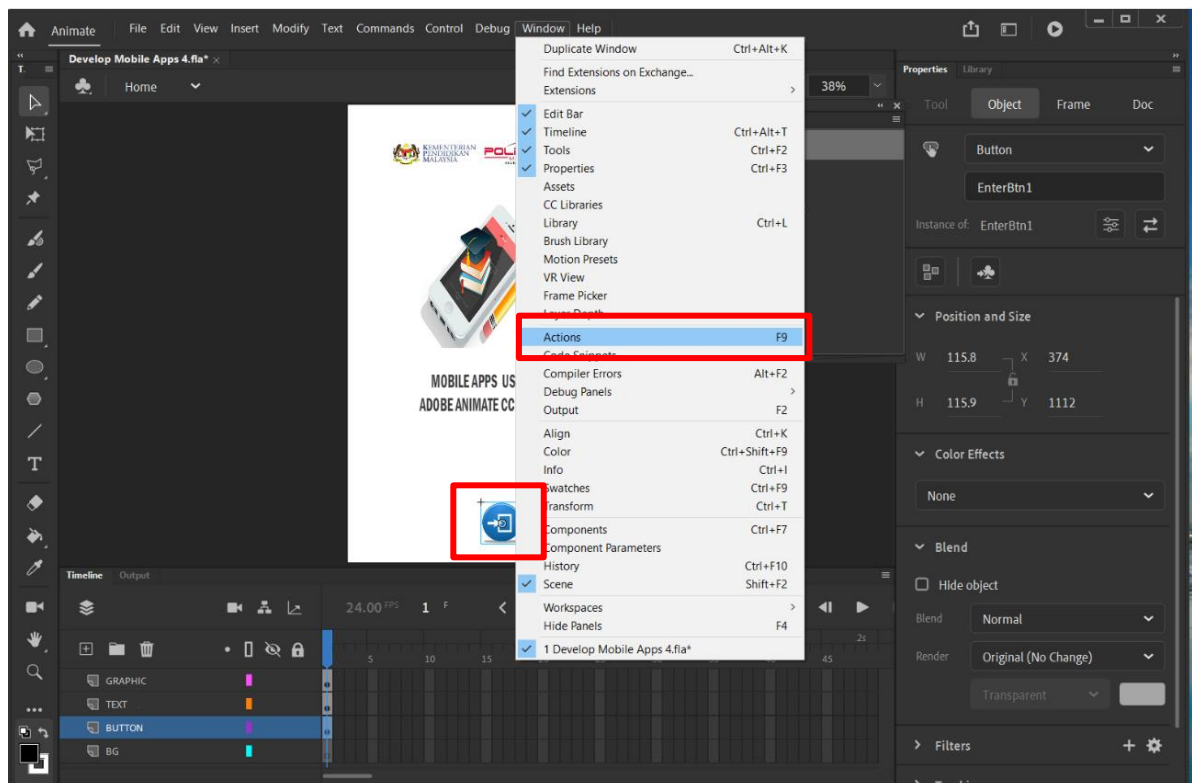


SECTION E: MAKE A CONNECTION BETWEEN SCENES

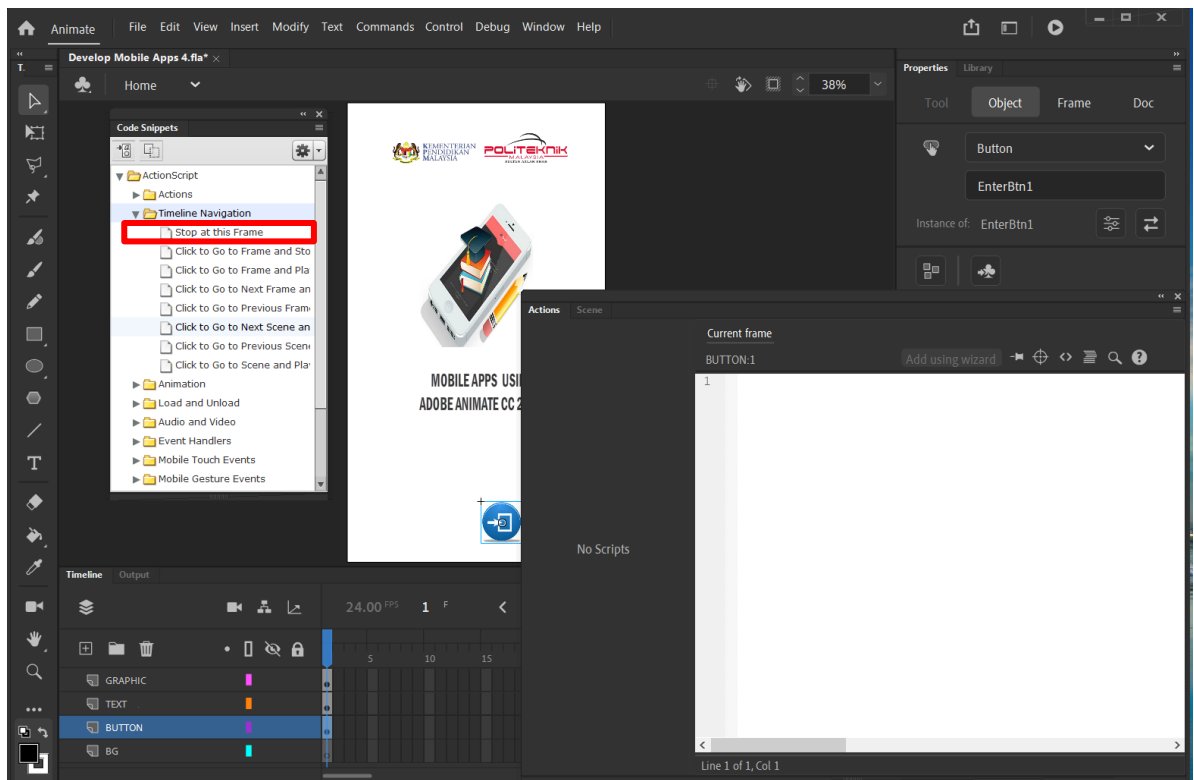
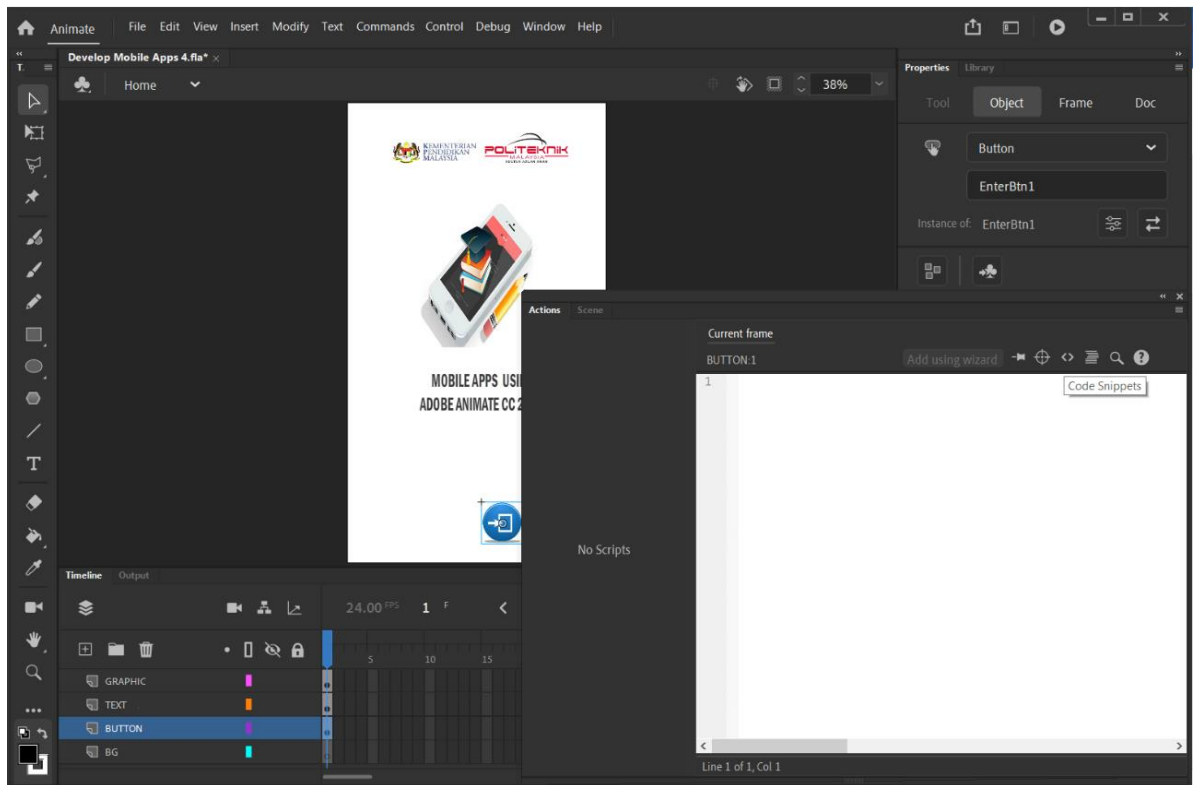
1. Click one of the buttons for example enter button (**EnterBtn1**).



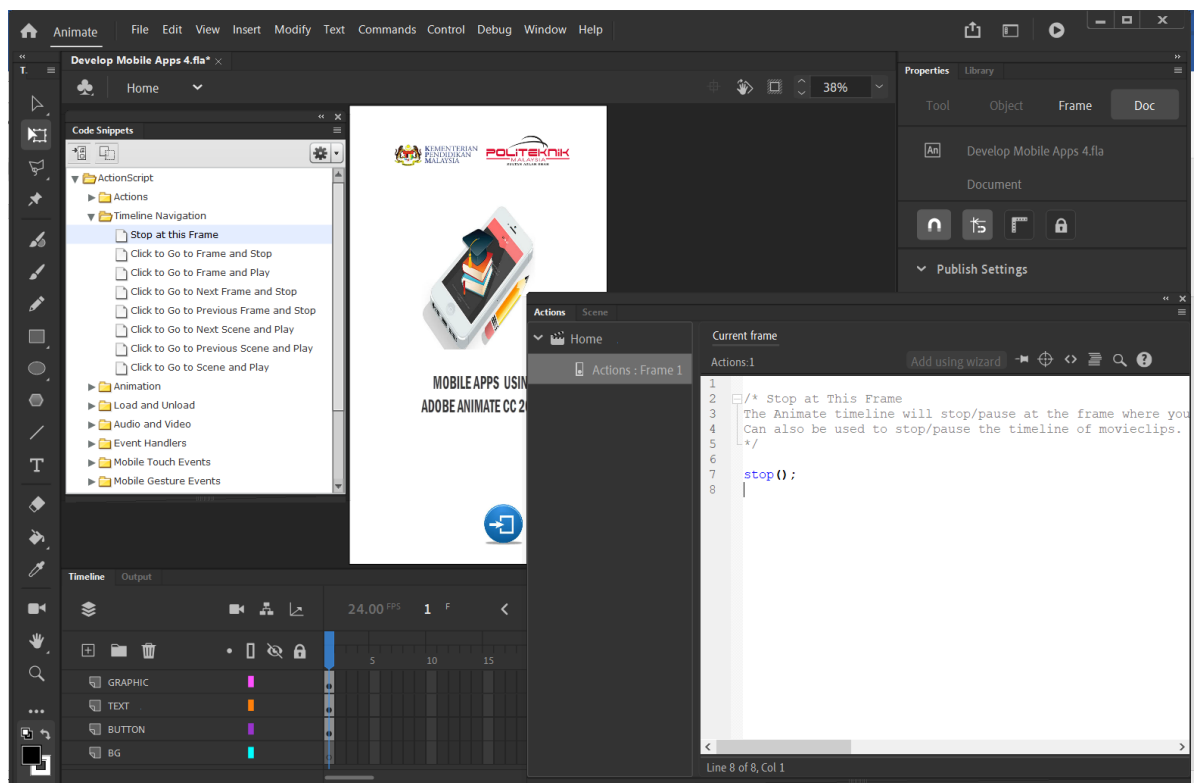
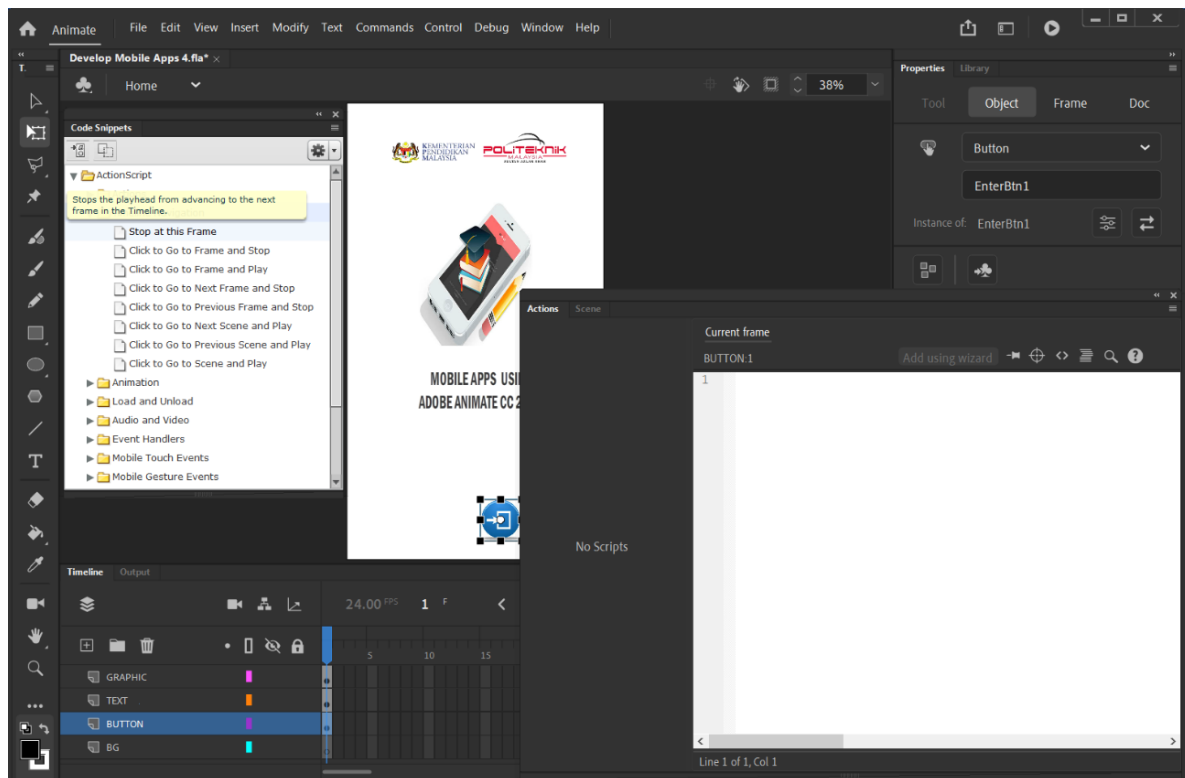
2. Click icon **Windows** and select **Actions @ F9**.



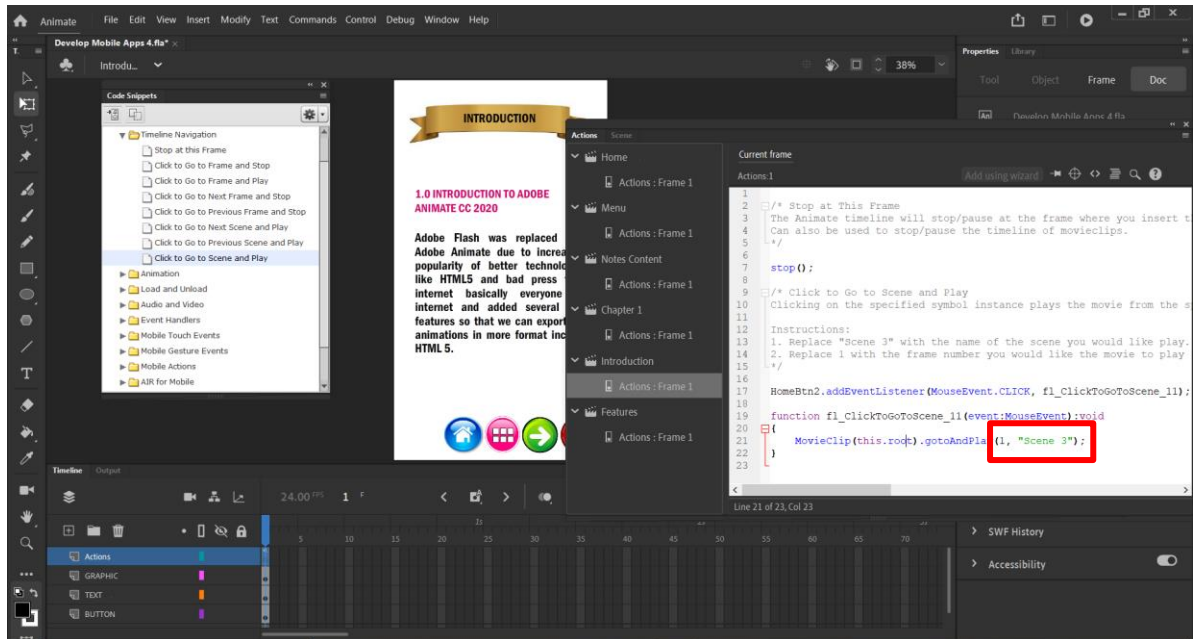
3. Click the button -> Click **Code Snippet**, and then select **Timeline Navigation** -> **Stop at this Frame**.



4. The purpose to select **Stop at this Frame** to stops the playhead from advancing to the next frame in the Timeline @ the scene is flashing and doesn't work.



3. Then, to make a connection to the other scene or interface, click again the button. Select **Timeline Navigation -> Click to Go to Scene and Play**. You **ONLY** need to change **the name of scene**.



Scene: Home

```
/* Stop at This Frame
```

The Animate timeline will stop/pause at the frame where you insert this code.

Can also be used to stop/pause the timeline of movieclips.

```
*/
```

```
stop();
```

```
/* Click to Go to Next Scene and Play
```

Clicking on the specified symbol instance moves the playhead to the next scene in the timeline and continues playback in that scene.

```
*/
```

```
/* Click to Go to Scene and Play
```

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.

2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

```
*/
```

```
EnterBtn1.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene);
```

```
function fl_ClickToGoToScene(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Menu");
}
```



```
ExitBtn1.addEventListener(MouseEvent.CLICK, fl_ClickToGoToWebPage);
```

```
function fl_ClickToGoToWebPage(event:MouseEvent):void
{
    NativeApplication.nativeApplication.exit(0);
}
```

Scene: Menu

/* Stop at This Frame

The Animate timeline will stop/pause at the frame where you insert this code.

Can also be used to stop/pause the timeline of movieclips.

*/

```
stop();
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
HomeBtn.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_1);
```

```
function fl_ClickToGoToScene_1(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Home");
}
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
NotesBtn.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_3);
```

```
function fl_ClickToGoToScene_3(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Notes Content");
}
```

Scene: Notes Content

/* Stop at This Frame

The Animate timeline will stop/pause at the frame where you insert this code.

Can also be used to stop/pause the timeline of movieclips.

*/

stop();

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

HomeBtn1.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_4);

```
function fl_ClickToGoToScene_4(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Home");
}
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

MenuBtn1.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_5);

```
function fl_ClickToGoToScene_5(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Menu");
}
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

ChapterBtn1.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_6);

```
function fl_ClickToGoToScene_6(event:MouseEvent):void
{
```

```

        MovieClip(this.root).gotoAndPlay(1, "Chapter 1");
    }

```

Scene: Chapter 1

/* Stop at This Frame

The Animate timeline will stop/pause at the frame where you insert this code.

Can also be used to stop/pause the timeline of movieclips.

*/

```
stop();
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
HomeBtn2.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_7);
```

```
function fl_ClickToGoToScene_7(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Home");
}

```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
MenuBtn2.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_8);
```

```
function fl_ClickToGoToScene_8(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Menu");
}

```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
IntroBtn.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_9);
```

```
function fl_ClickToGoToScene_9(event:MouseEvent):void

```

```
{
    MovieClip(this.root).gotoAndPlay(1, "Introduction");
}
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
FeaturesBtn.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_10);
```

```
function fl_ClickToGoToScene_10(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Features");
}
```

Scene: Introduction

/* Stop at This Frame

The Animate timeline will stop/pause at the frame where you insert this code.

Can also be used to stop/pause the timeline of movieclips.

*/

```
stop();
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
HomeBtn2.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_11);
```

```
function fl_ClickToGoToScene_11(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Home");
}
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
MenuBtn2.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_12);
```

```
function fl_ClickToGoToScene_12(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Menu");
}
```

/* Click to Go to Next Scene and Play

Clicking on the specified symbol instance moves the playhead to the next scene in the timeline and continues playback in that scene.

*/

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
NextBtn1.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_13);
```

```
function fl_ClickToGoToScene_13(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Features");
}
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
BackBtn1.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_14);
```

```
function fl_ClickToGoToScene_14(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Chapter 1");
}
```

Scene: Features

/* Stop at This Frame

The Animate timeline will stop/pause at the frame where you insert this code.

Can also be used to stop/pause the timeline of movieclips.

*/

```
stop();
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
HomeBtn3.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_15);
```

```
function fl_ClickToGoToScene_15(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Home");
}
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

*/

```
MenuBtn3.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_16);
```

```
function fl_ClickToGoToScene_16(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Menu");
}
```

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.
2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

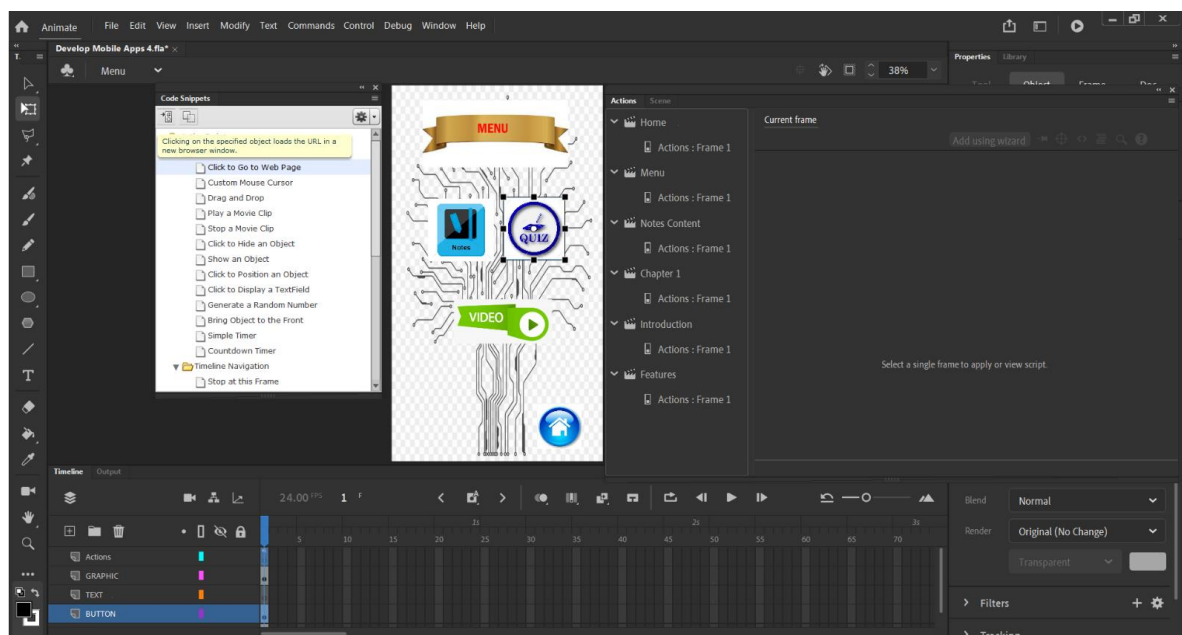
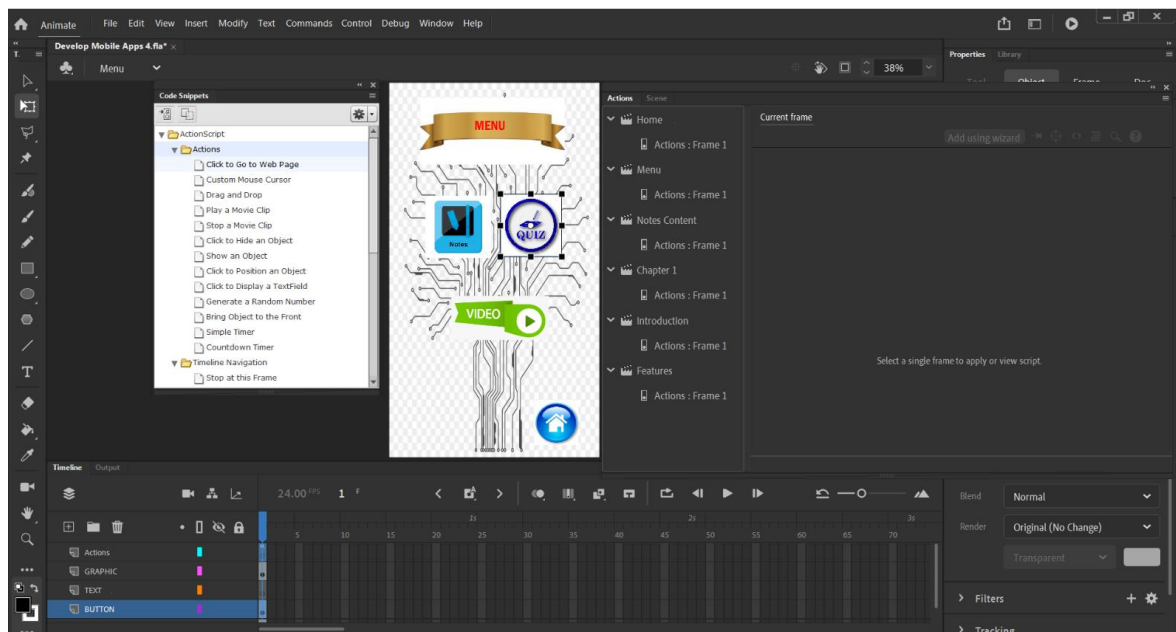
*/

```
BackBtn2.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene_17);
```

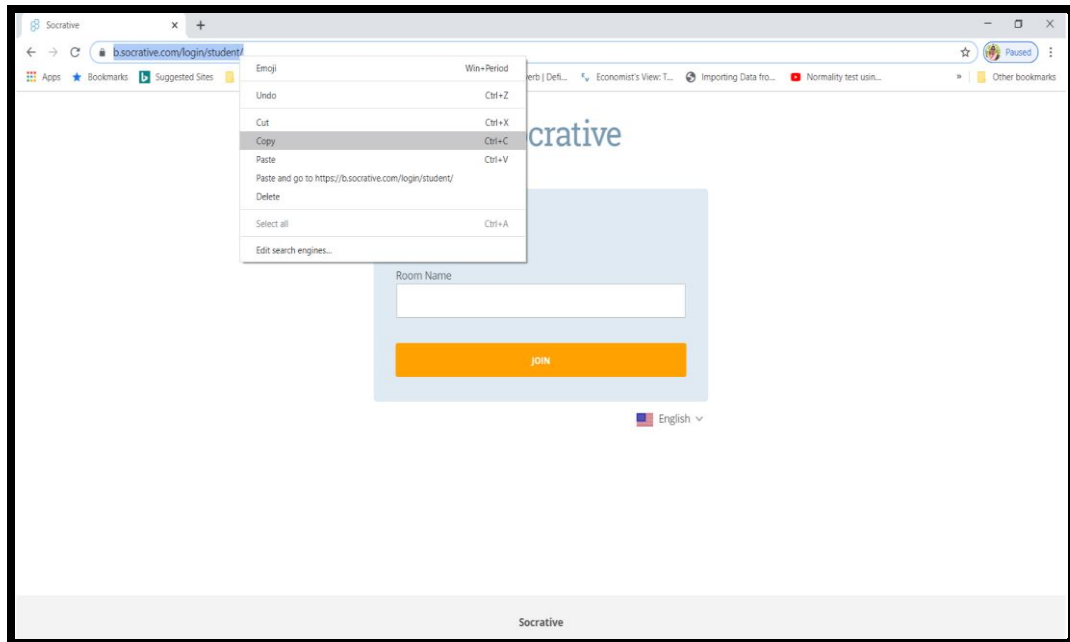
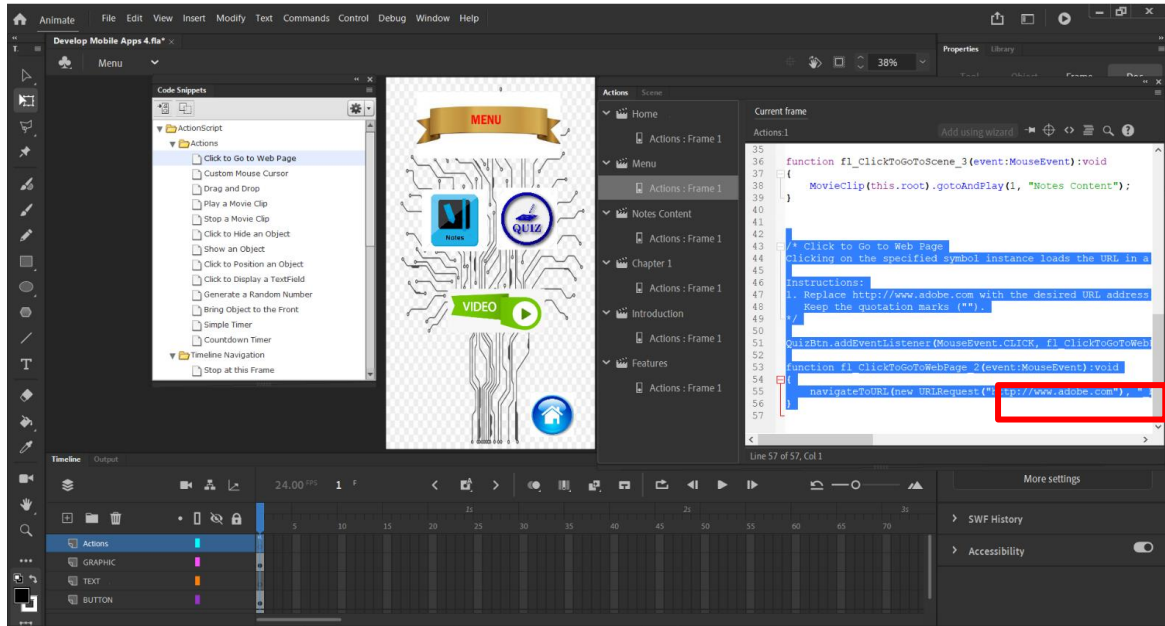
```
function fl_ClickToGoToScene_17(event:MouseEvent):void
{
    MovieClip(this.root).gotoAndPlay(1, "Introduction");
}
```

SECTION F: CREATE LINK WITH ONLINE FEATURES (WEBSITE)

1. **Button also can link into online features** for example Socrative @ Flexi Quiz Link @ other quiz platform. **Click the Quiz button -> Click Code Snippet, and then select Actions -> Click to Go to Web Page.**



- Then change the URL <http://www.adobe.com> into URL of Socrative room for student
<https://b.socrative.com/login/student/>



/* Click to Go to Web Page

Clicking on the specified symbol instance loads the URL in a new browser window.

Instructions:

1. Replace <http://www.adobe.com> with the desired URL address.

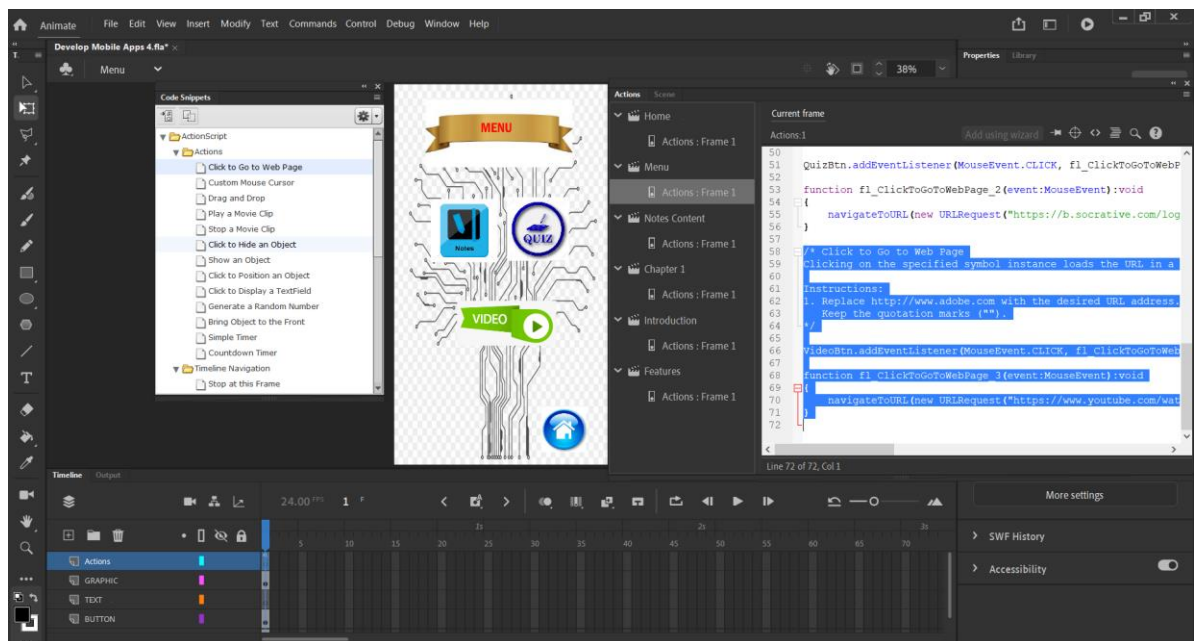
Keep the quotation marks ("").

*/

```
QuizBtn.addEventListener(MouseEvent.CLICK, fl_ClickToGoToWebPage_2);
```

```
function fl_ClickToGoToWebPage_2(event:MouseEvent):void
{
    navigateToURL(new URLRequest("https://b.socrative.com/login/student/"),
    "_blank");
}
```

3. Click the **VIDEO** button -> **Click Code Snippet**, and then **select Actions** -> **Click to Go to Web Page**. Change the URL <http://www.adobe.com> into URL of YouTube link for example link of video about Intro to Adobe Animate 2020 [1/4] Beginners Tutorial ["https://www.youtube.com/watch?v=7huMYp7WpsI"](https://www.youtube.com/watch?v=7huMYp7WpsI)



/* Click to Go to Web Page

Clicking on the specified symbol instance loads the URL in a new browser window.

Instructions:

1. Replace <http://www.adobe.com> with the desired URL address.

Keep the quotation marks ("").

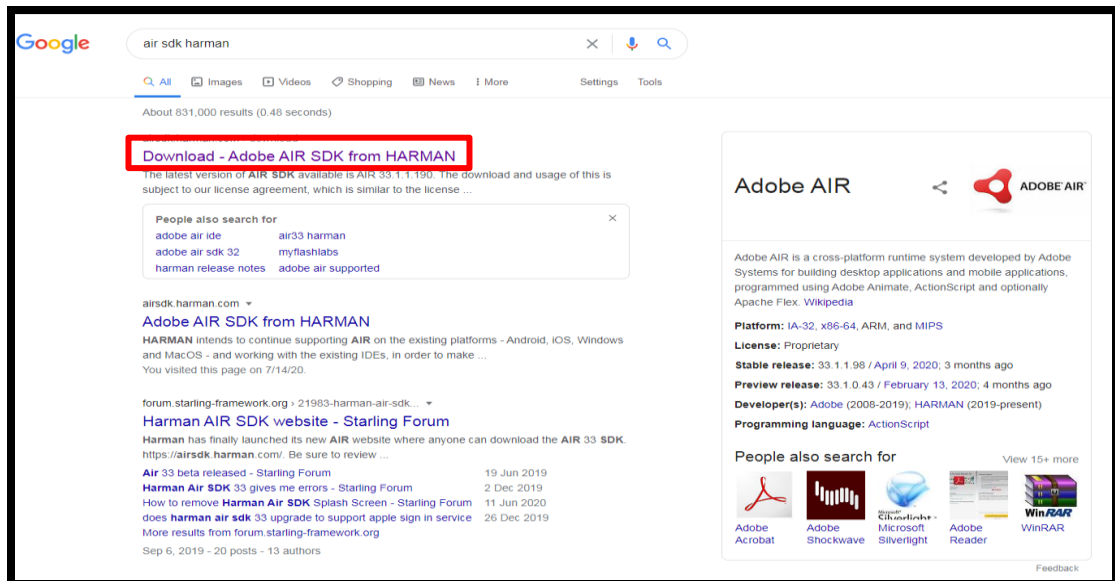
*/

```
VideoBtn.addEventListener(MouseEvent.CLICK, fl_ClickToGoToWebPage_3);
```

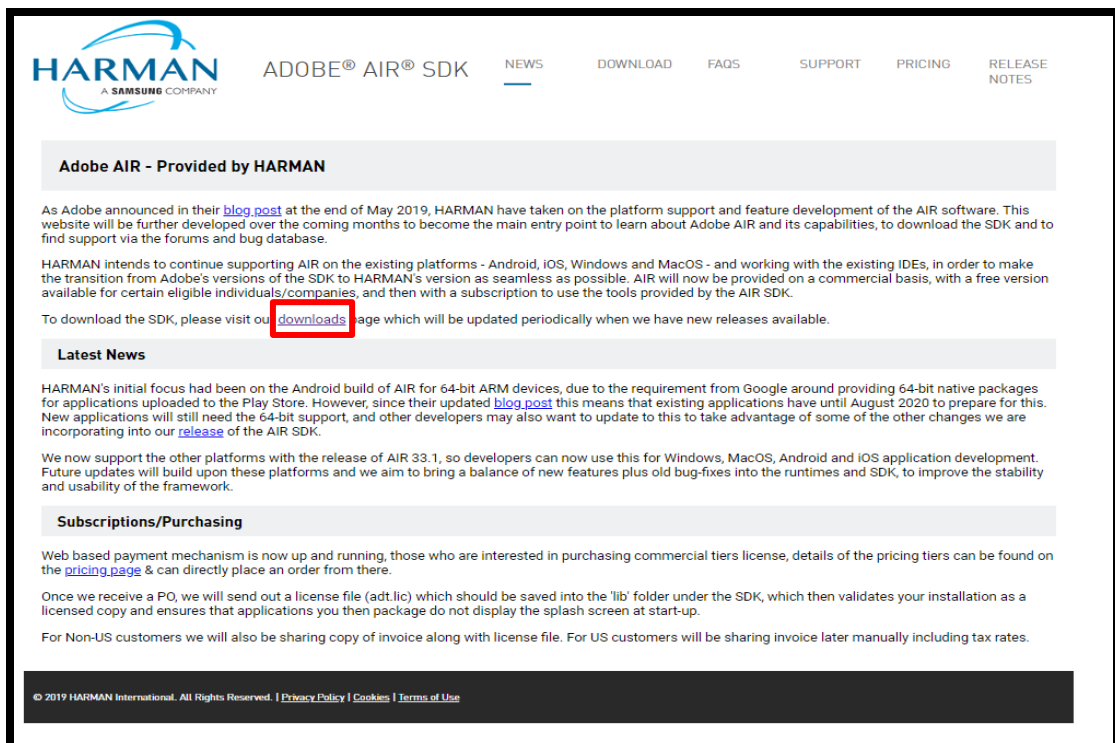
```
function fl_ClickToGoToWebPage_3(event:MouseEvent):void
{
    navigateToURL(new URLRequest("https://www.youtube.com/watch?v=7huMYp7
WpsI"), "_blank");
}
```

SECTION G: ATTACH .apk FILE TO ADOBE FOLDER

1. Adobe AIR is a cross-platform runtime system developed by Adobe Systems for building desktop applications and mobile applications, programmed using Adobe Animate, ActionScript and optionally Apache Flex. The free **Adobe AIR SDK** provides a set of command line tools for packaging **AIR** applications. The **SDK** can be **used with** any text editor to build and deploy an **AIR** application. Starting version 20.0.2, AIR SDK is no longer shipped with Animate to optimize and installation experience. But the latest version still can be downloading from Adobe or Harman website.
2. Open Google Platform then type AIR **SDK HARMAN** -> <https://airsdk.harman.com/>

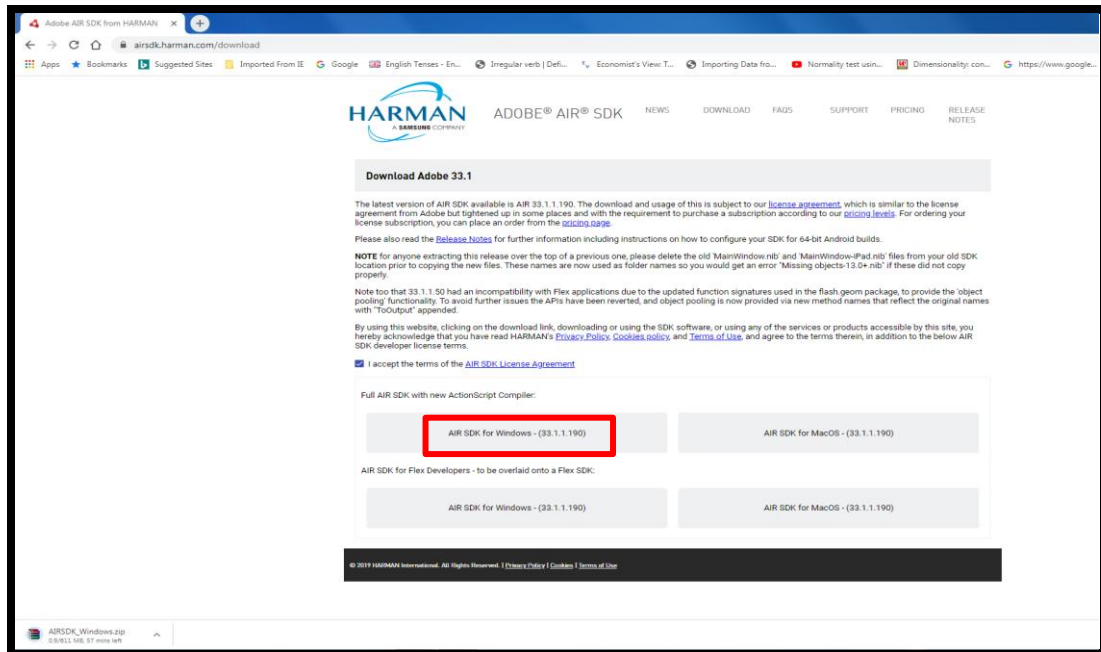


3. Click downloads then tick the checkbox **I accept the terms of the AIR SDK Licence Agreement**.

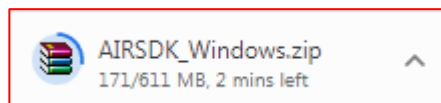


4. Then select AIR SDK for Windows – (33.1.1.190). This is the latest version for 64-bit ARM processor. Starting 2019, almost apps running on Android and IOS must support 64-bit.

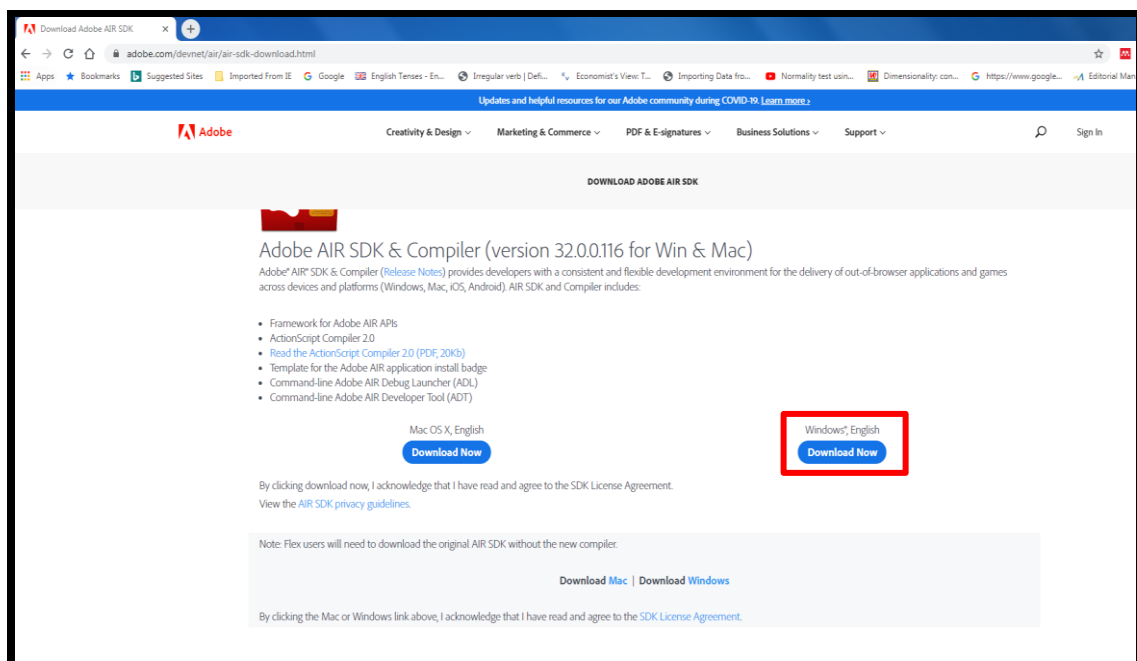
<https://airsdk.harman.com/download>



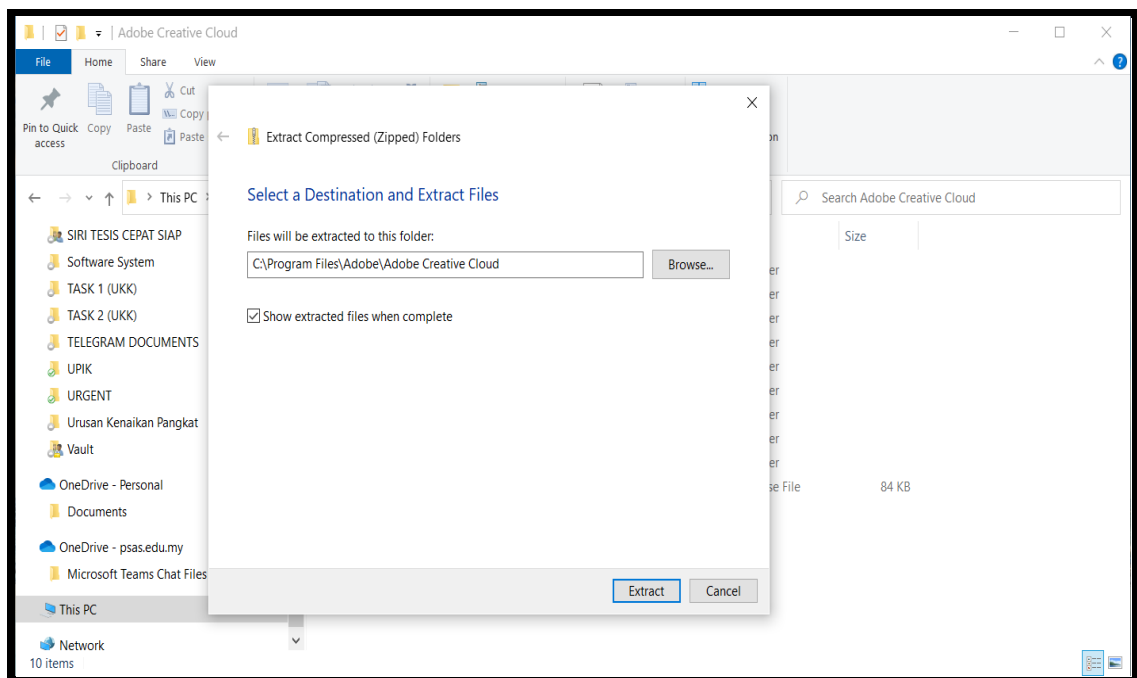
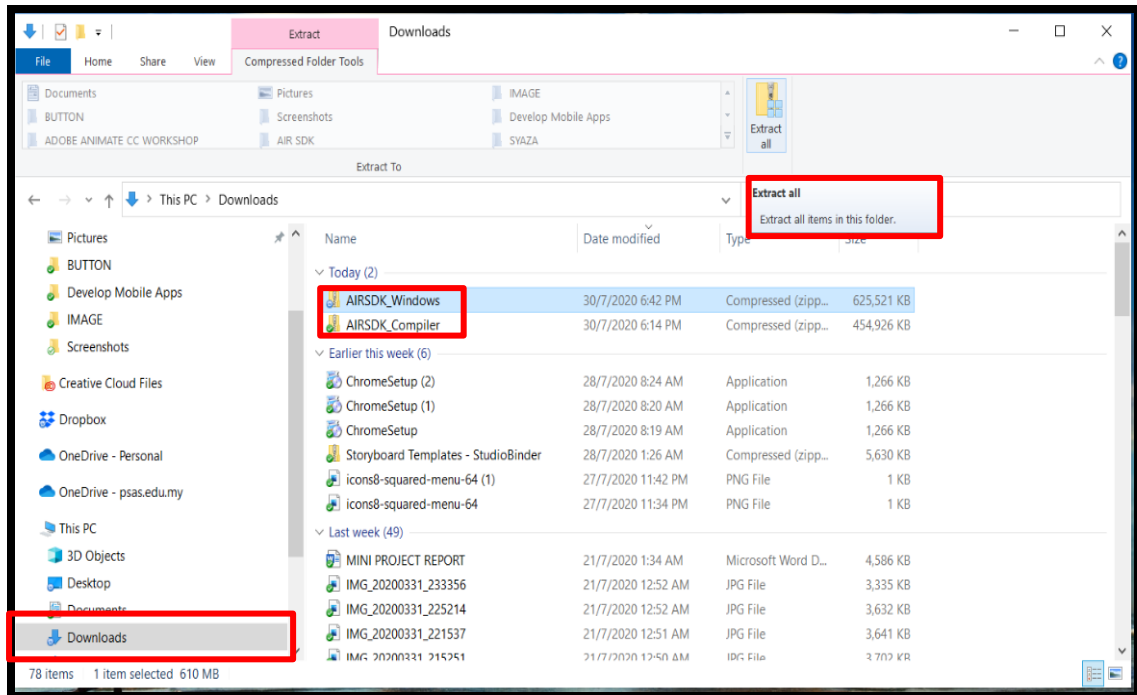
5. We can get **SDK FILE**



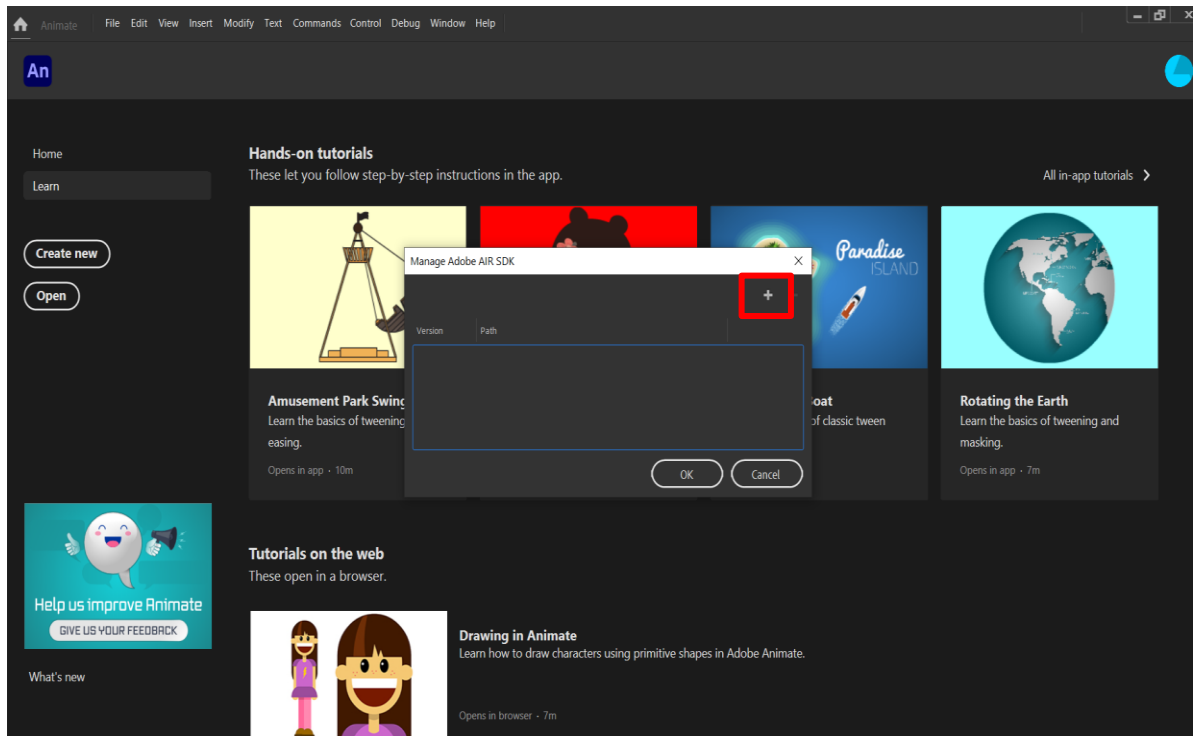
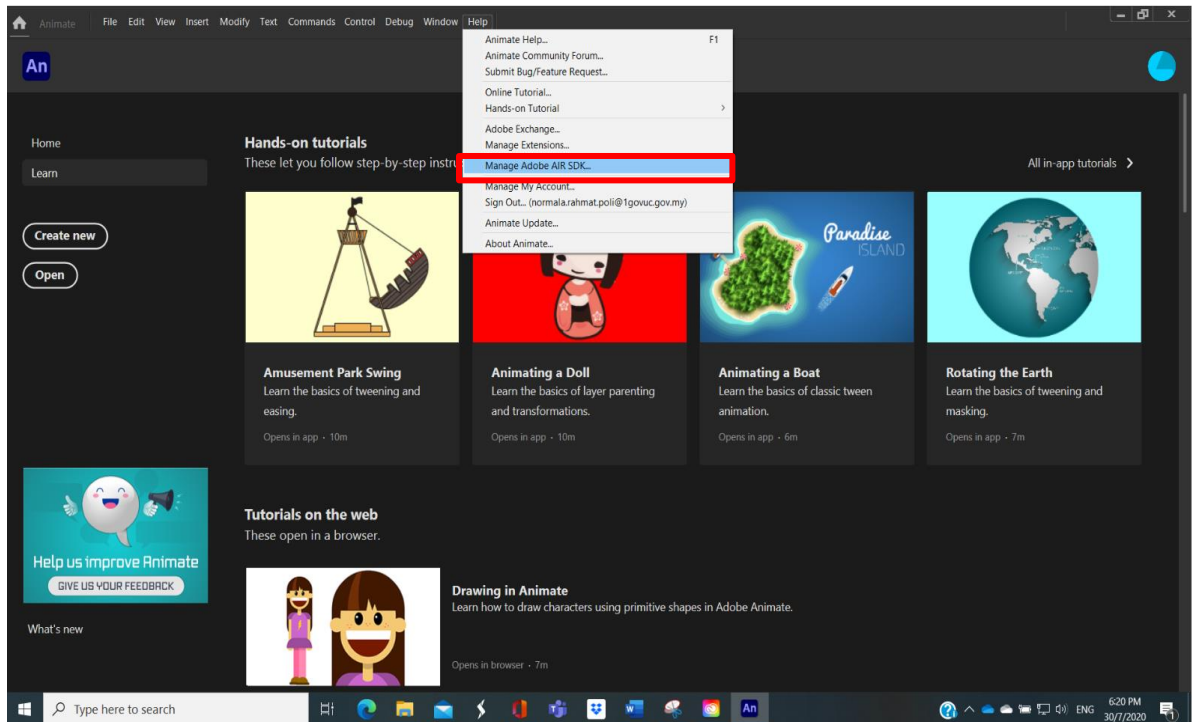
6. Adobe AIR SDK and compiler can also download from Adobe official website -> <https://www.adobe.com/devnet/air/air-sdk-download.html>. Then select Windows to download AIR SDK_Windows. This is for handphone and Windows and Mac that support 32-bit processor.



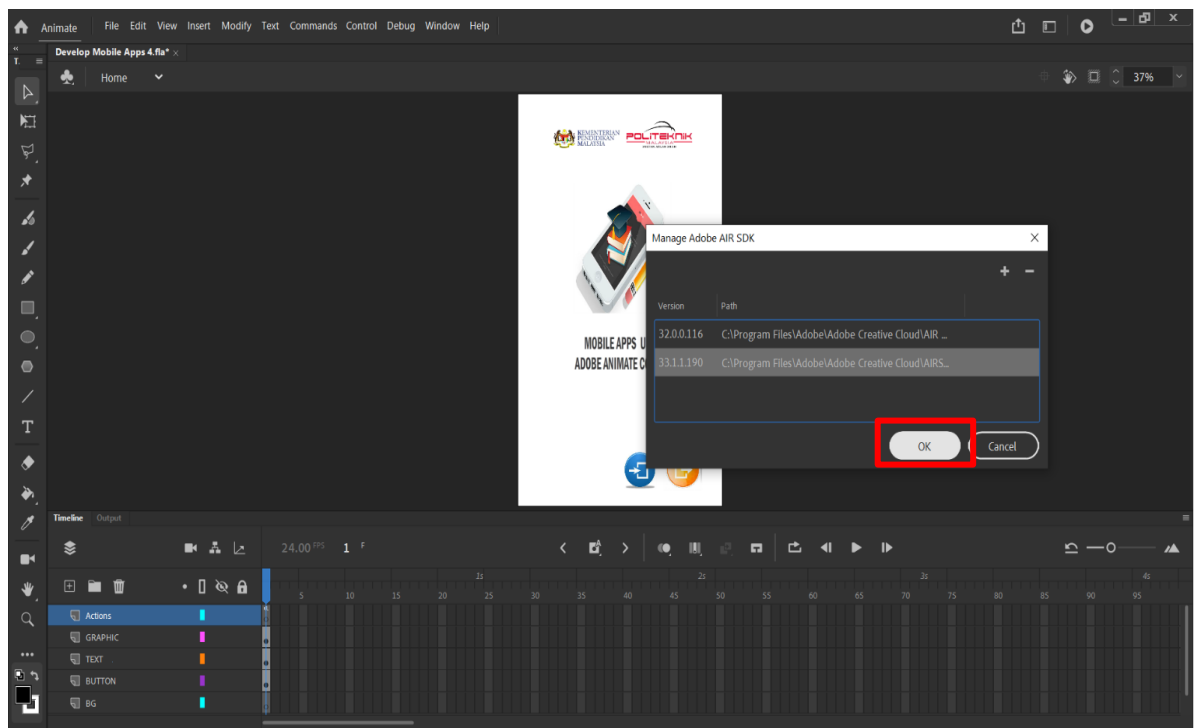
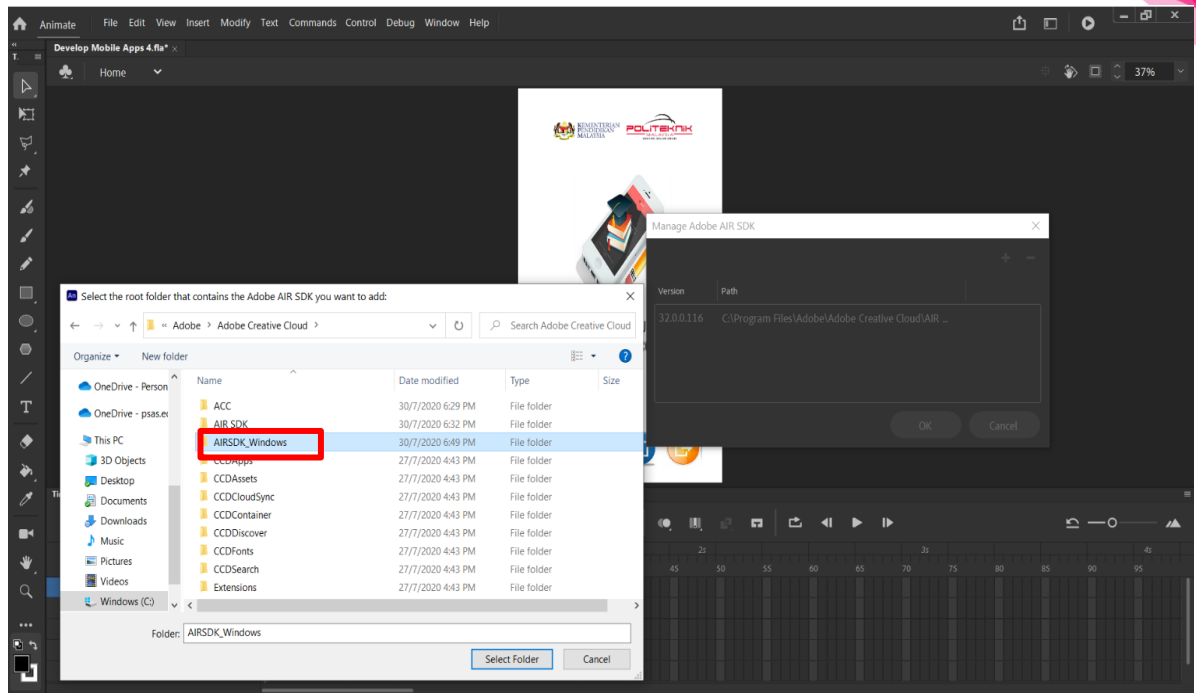
7. Create a new folder and rename the folder **AIRSDK_Windows** for **33.1.1.190** and **AIRSDK_Compiler** for **32.0.0.116** at location where Adobe Animate CC 2020 inside. Extract the downloaded SDK File from Downloads Folder into the folder.



8. Then in Animate, select **Help -> Manage Adobe AIR SDK** -> then click button + at popup menu to Add New SDK button -> then search folder **AIRSDK_Windows for 33.1.1.190** and **AIRSDK_Compiler for 32.0.0.116** at location where Adobe Animate CC 2020 (don't double click) -> then click **OK**.

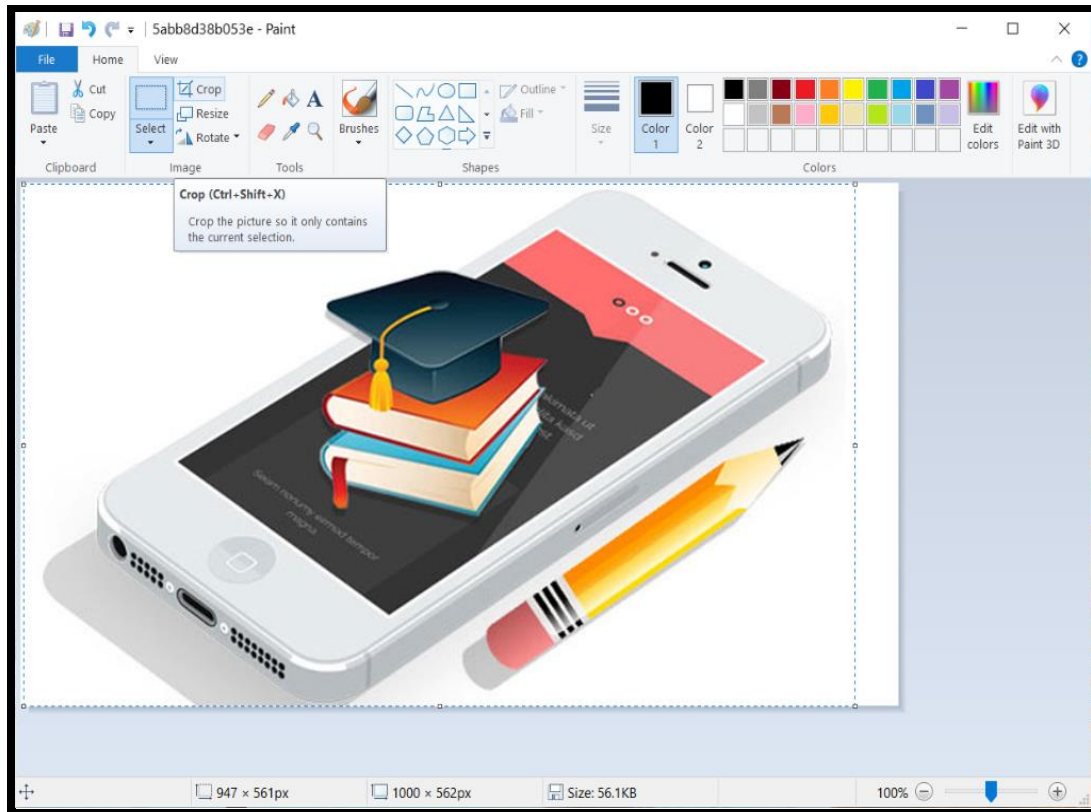


CREATE ANDROID MOBILE APP LESS THAN AN HOUR USING ADOBE ANIMATE CC 2020

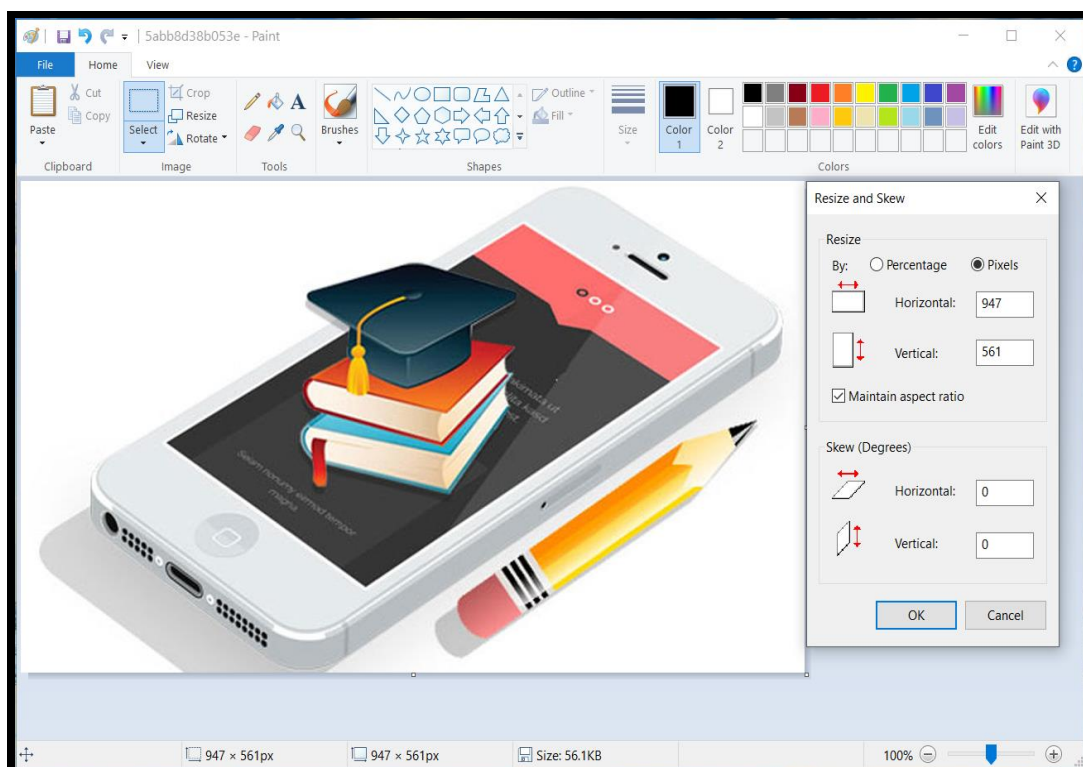


SECTION H: CREATE ICON AND SETUP IMAGE SIZE DISPLAYED FOR MOBILE APPS

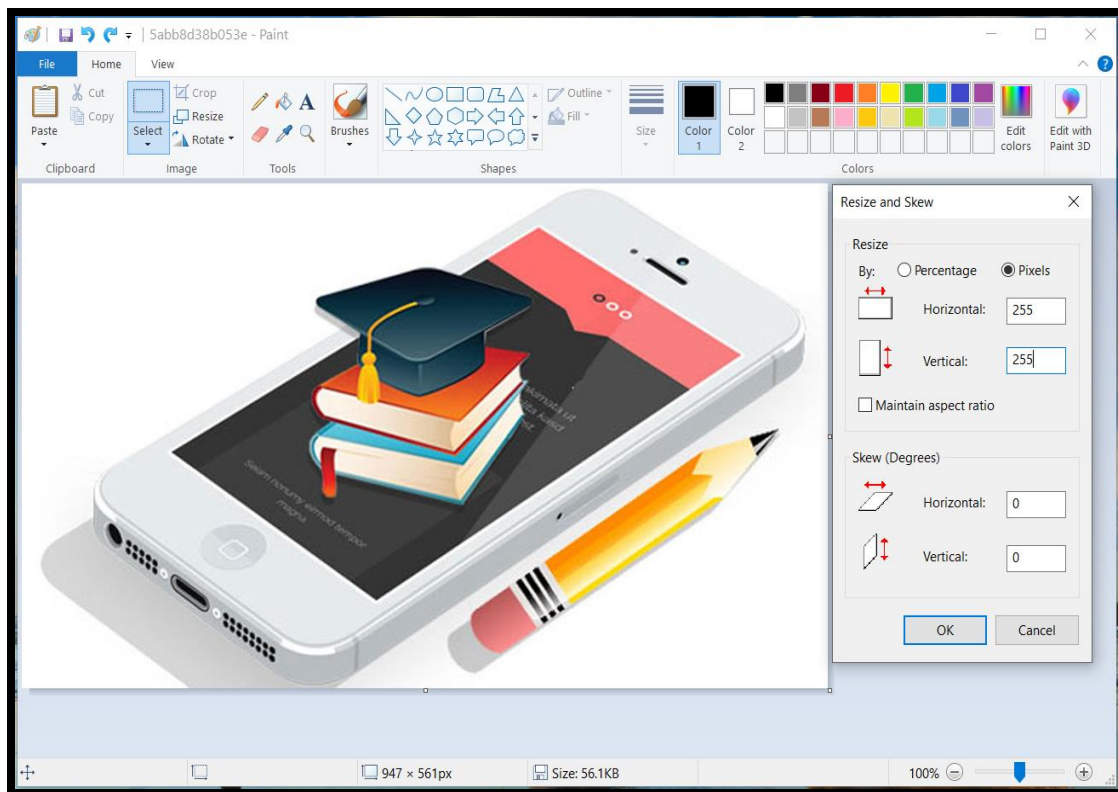
1. Find or search image from Google (that suit with our task) and **Save As** in **.PNG**. Then **OPEN** in **PAINTS**. **Select the image** then **Crop the image** and **Save As – Crop Image.PNG**.



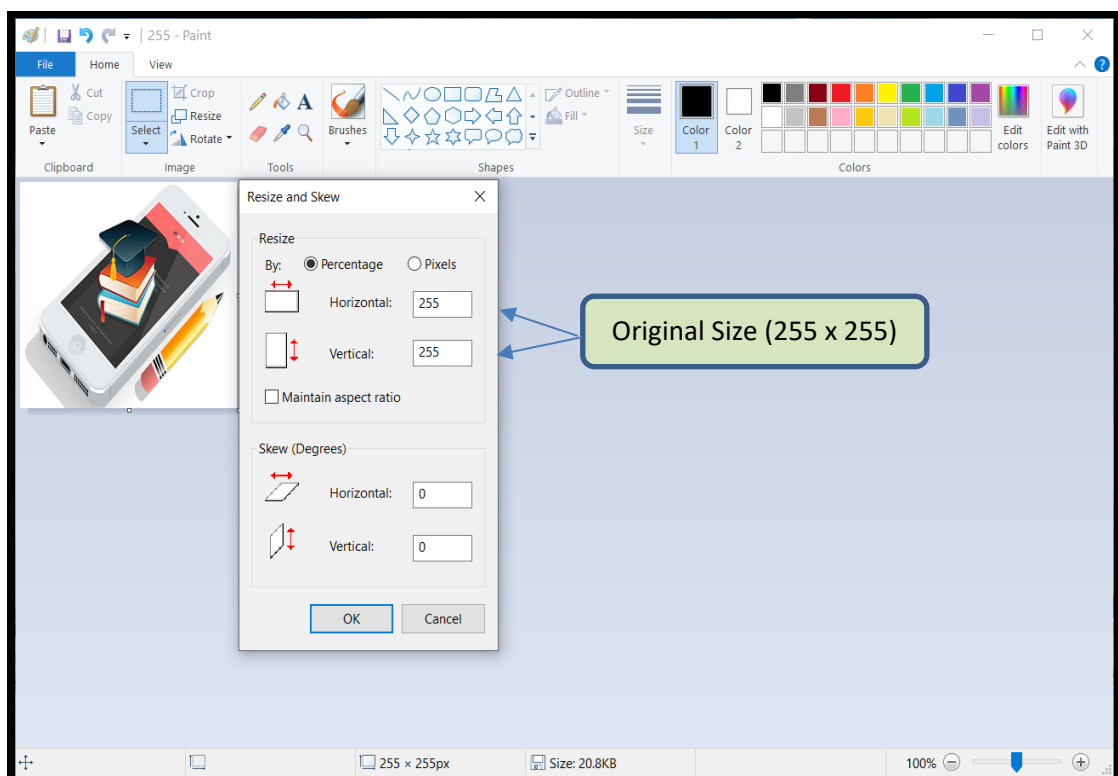
2. **Original Size of the image after Crop is 947 x 561 px.**



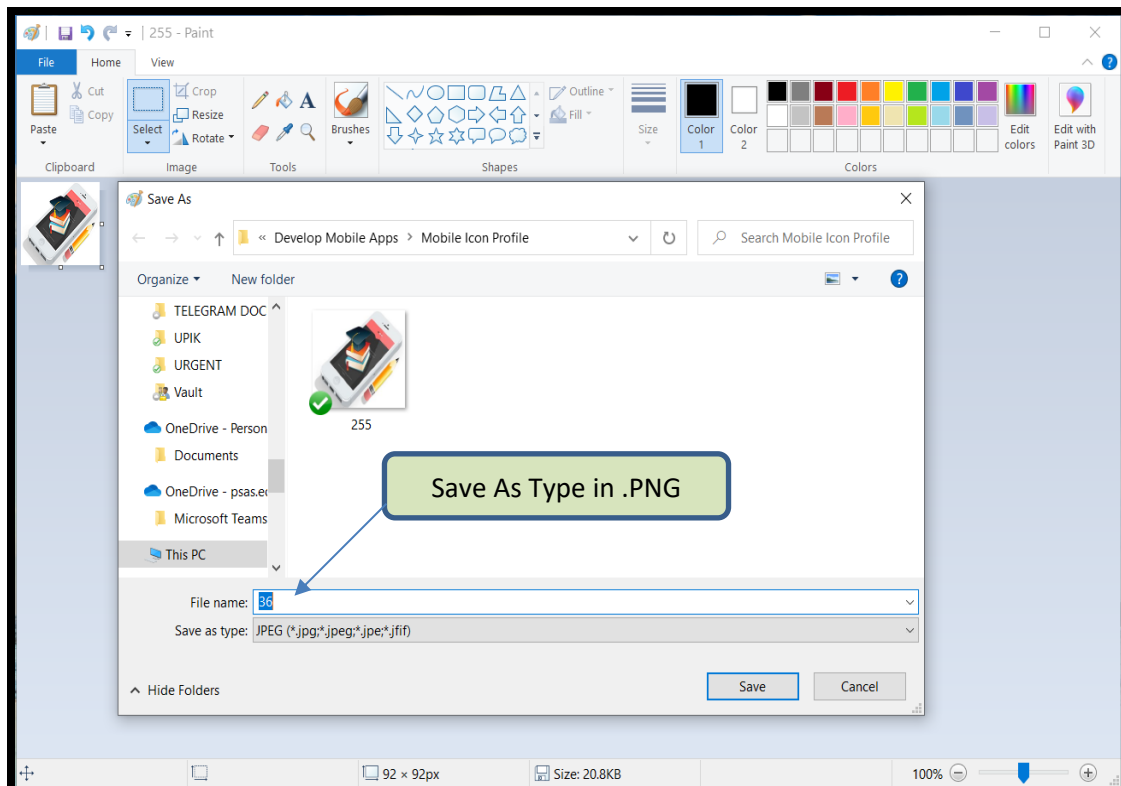
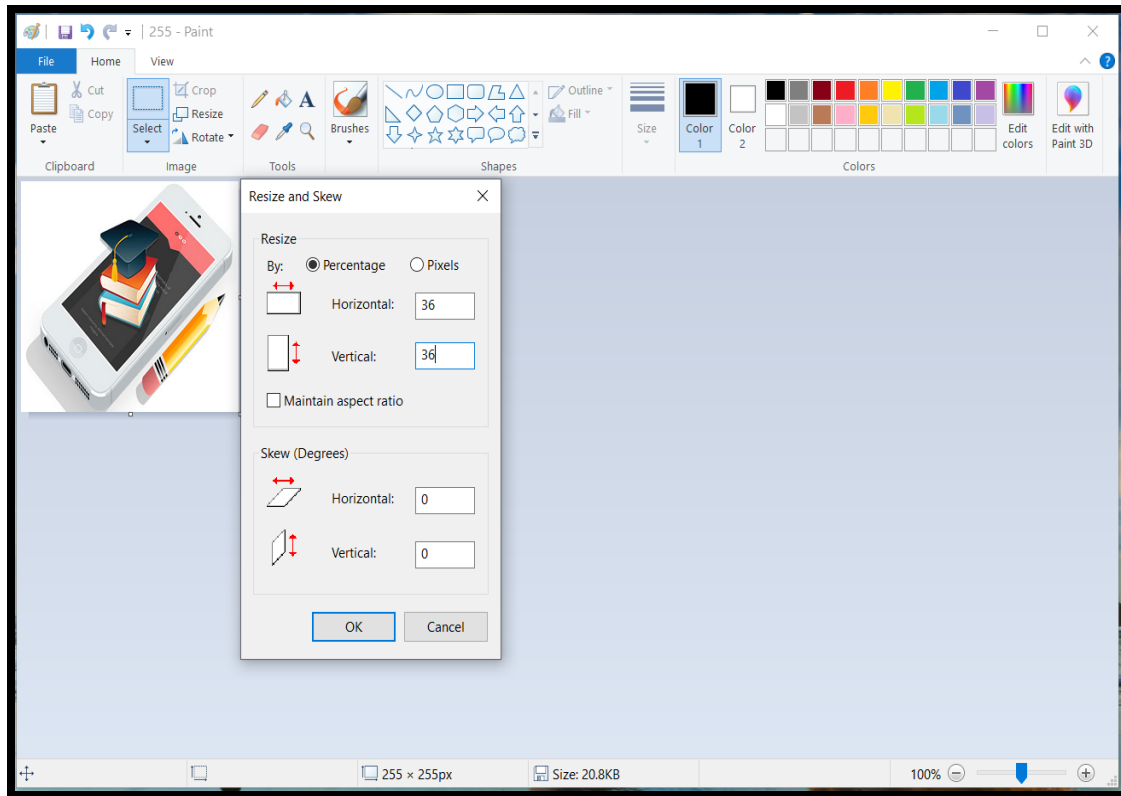
3. **Set the image pixel to 255x255. Click Resize Tabs -> then Untick Maintain aspect ratio -> then click Pixels -> then change the size as 255 x 255. Save as 255.PNG.**



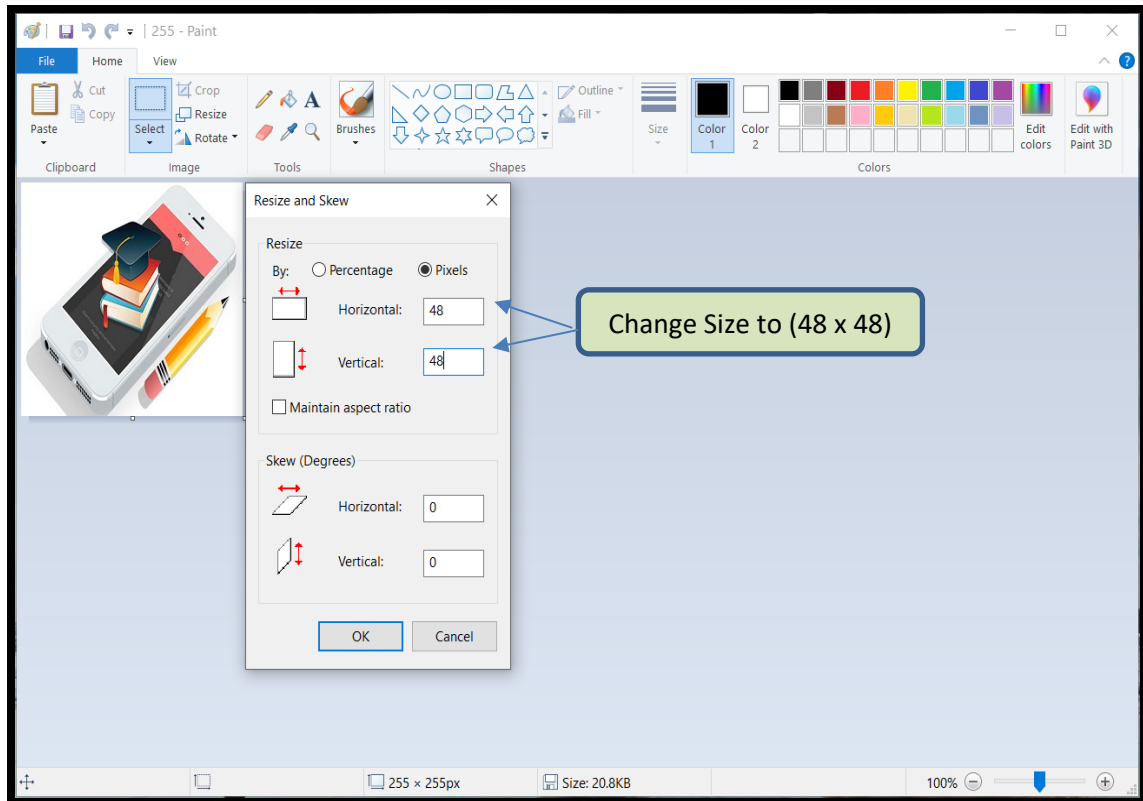
4. Use the image with the size 255 x 255 as main image to resize to 36 x 36, 48 x 48, 72 x 72, 96 x 96, 144 x 144 and 192 x 192.



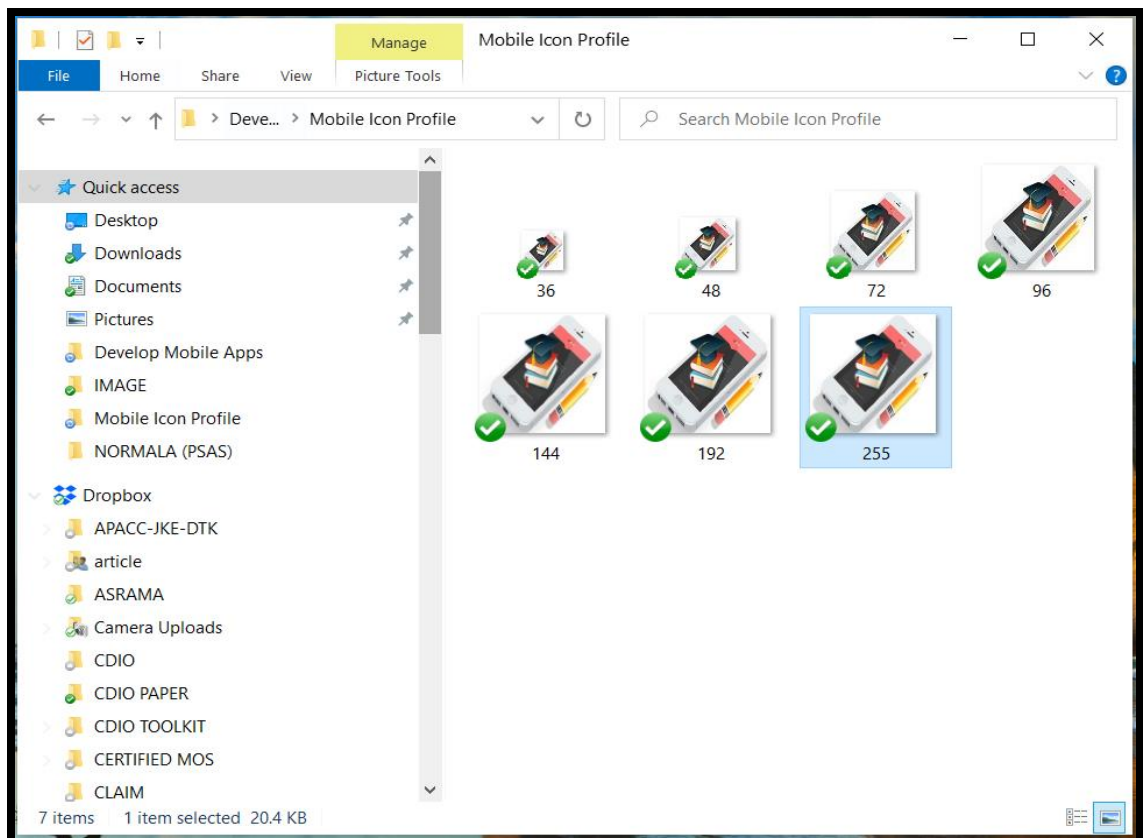
5. Then click **Resize Tabs** -> then **Untick Maintain aspect ratio** -> then click **Pixels** -> then **change the size as 36 x 36**. **Save as 36.PNG**.



6. Open again the image size 255 x 255 -> then click **Resize Tabs** -> **Untick Maintain aspect ratio** -> then click **Pixels** -> then **change the size as 48 x 48**. **Save as 48.PNG**.

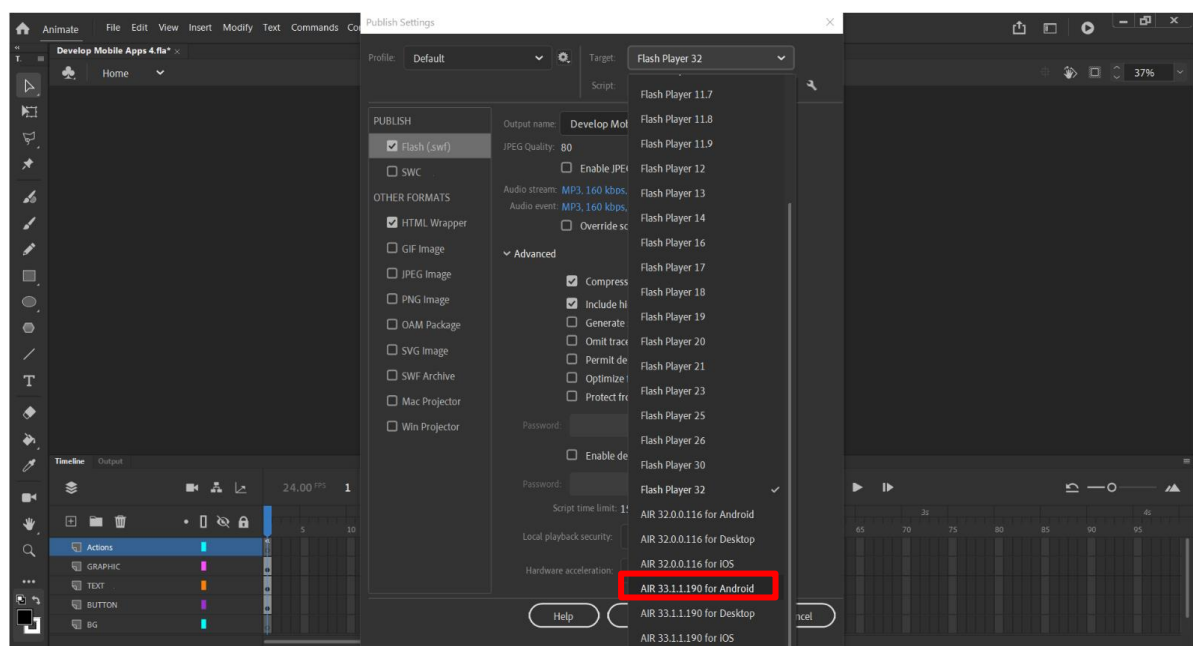
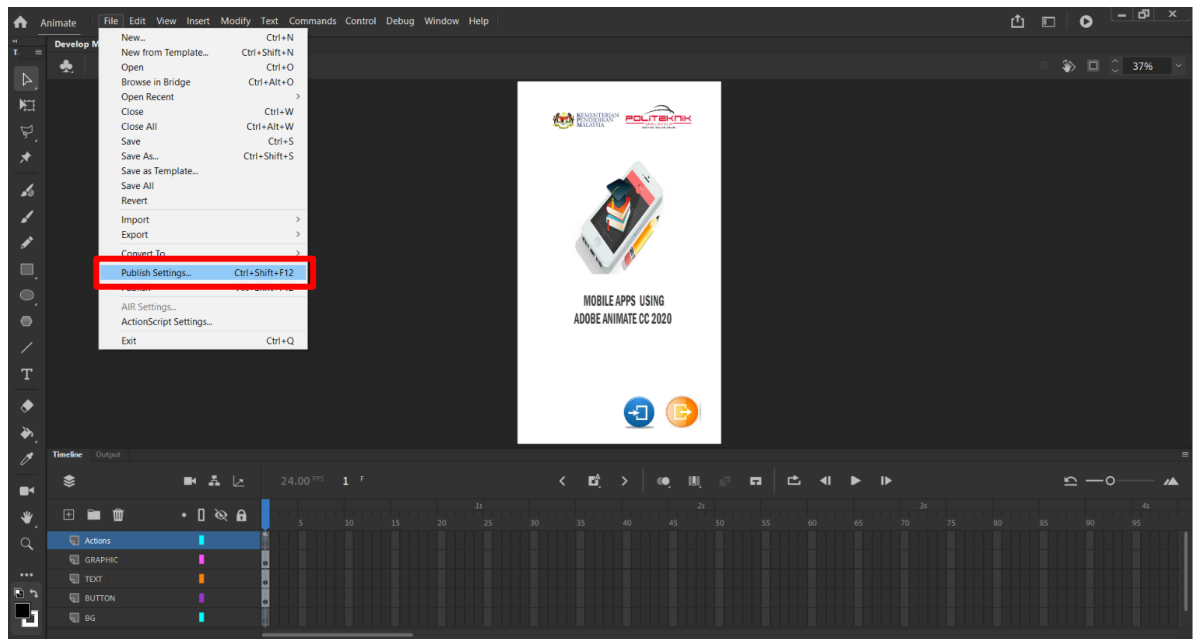


7. Do for another size **48 x 48**, **72 x 72**, **96 x 96**, **144 x 144** and **192 x 192**. Make sure all the images put in one folder and in the same folder of your flash file and also in **.PNG** type.

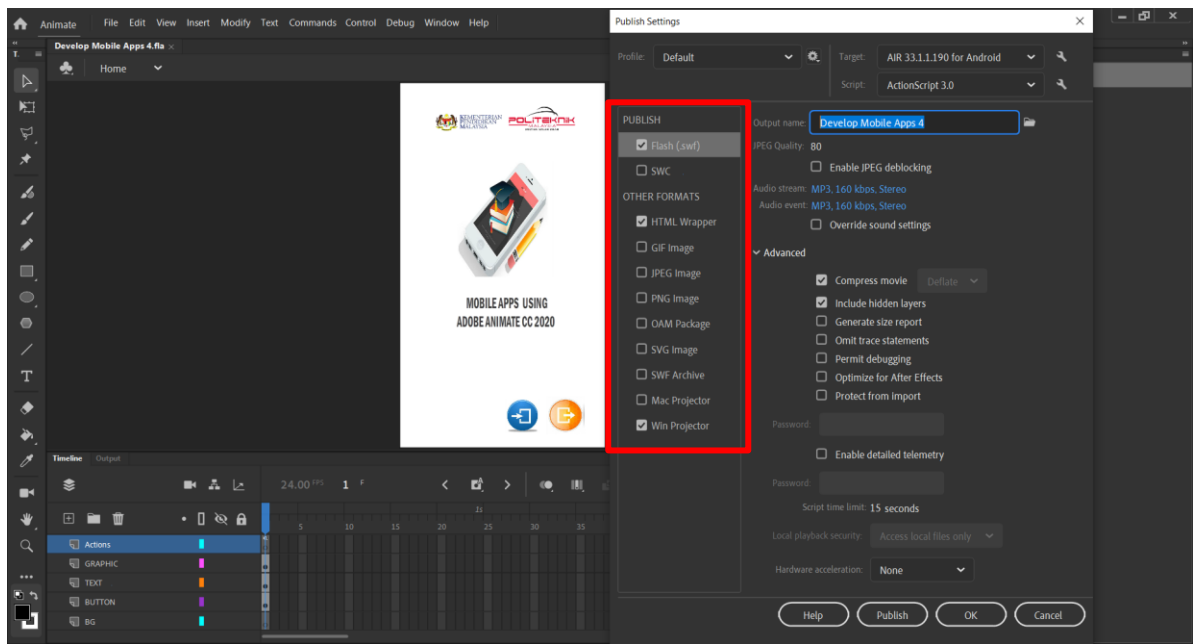


SECTION I: PUBLISH THE FLASH FILE TO ANDROID FILE FORMAT (.apk)

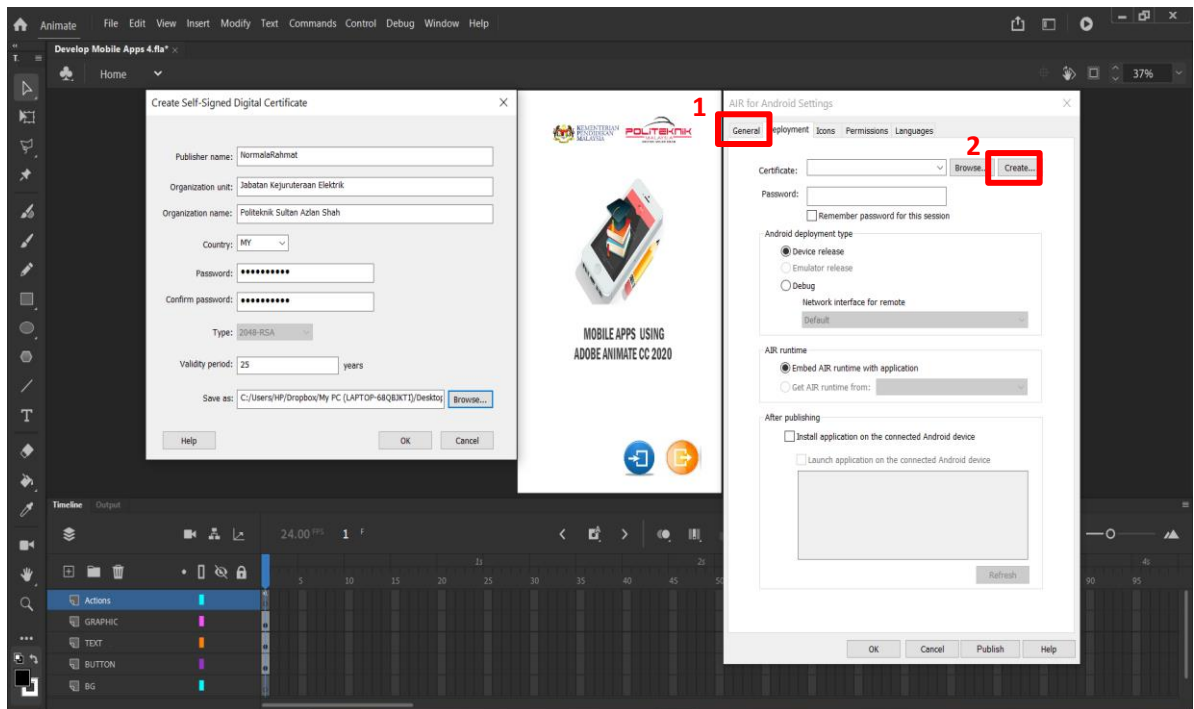
1. Click **File Tab** -> then select **Publish Settings** -> in **Target** tab, please choose **AIR 33.3.3.1 for Android**.

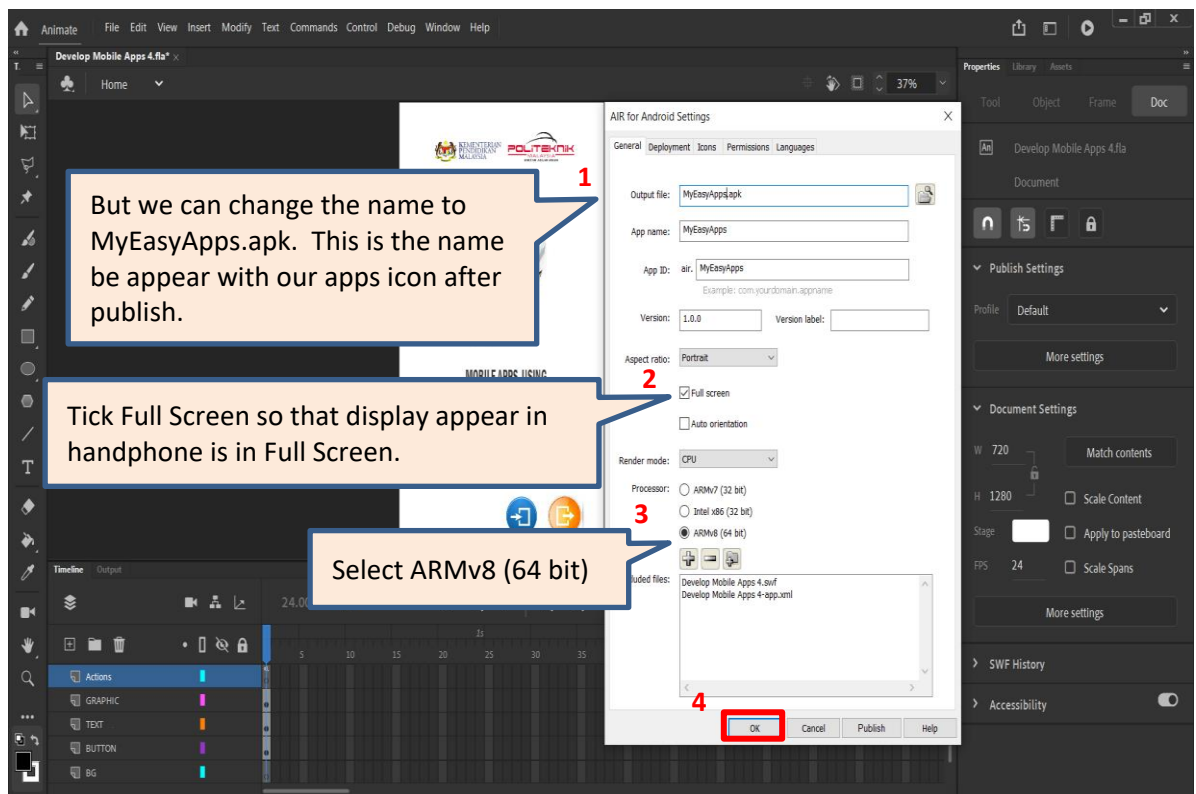
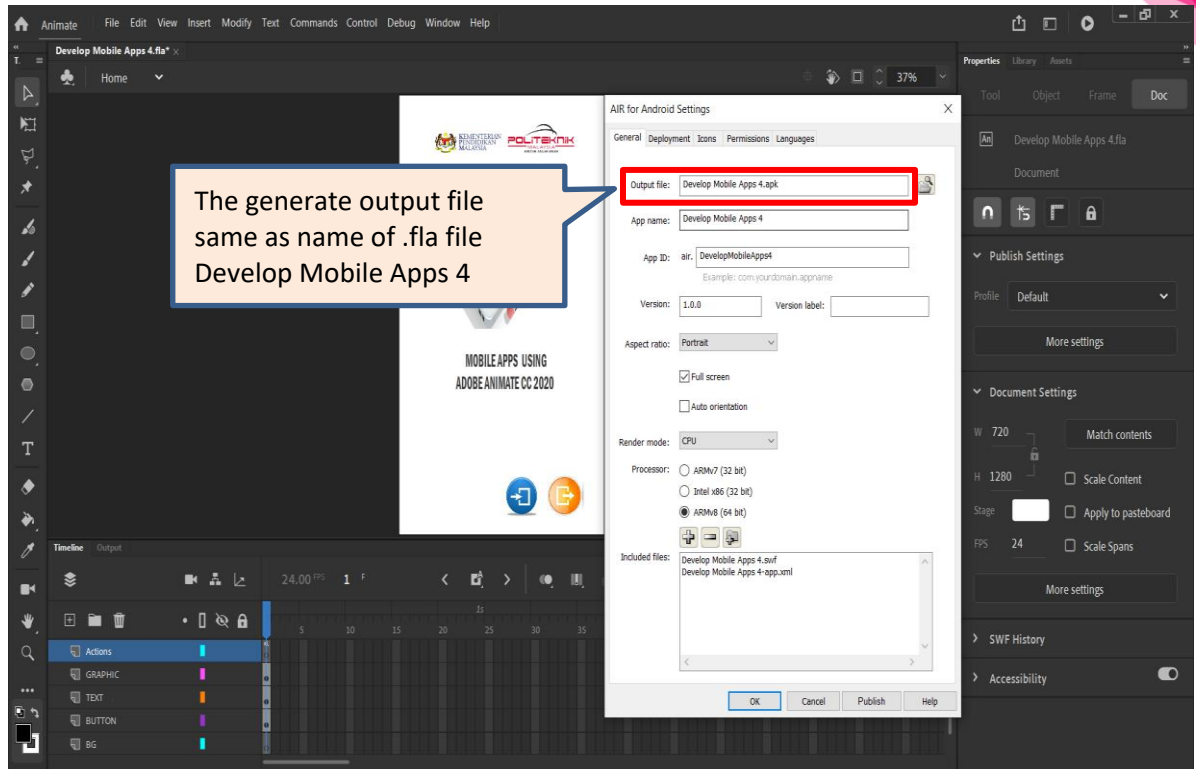


2. Then tick select type of output file to be publish -> **Flash (.swf), HTML Wrapper and Win Projector** (so the output can be play in computer as flash file)

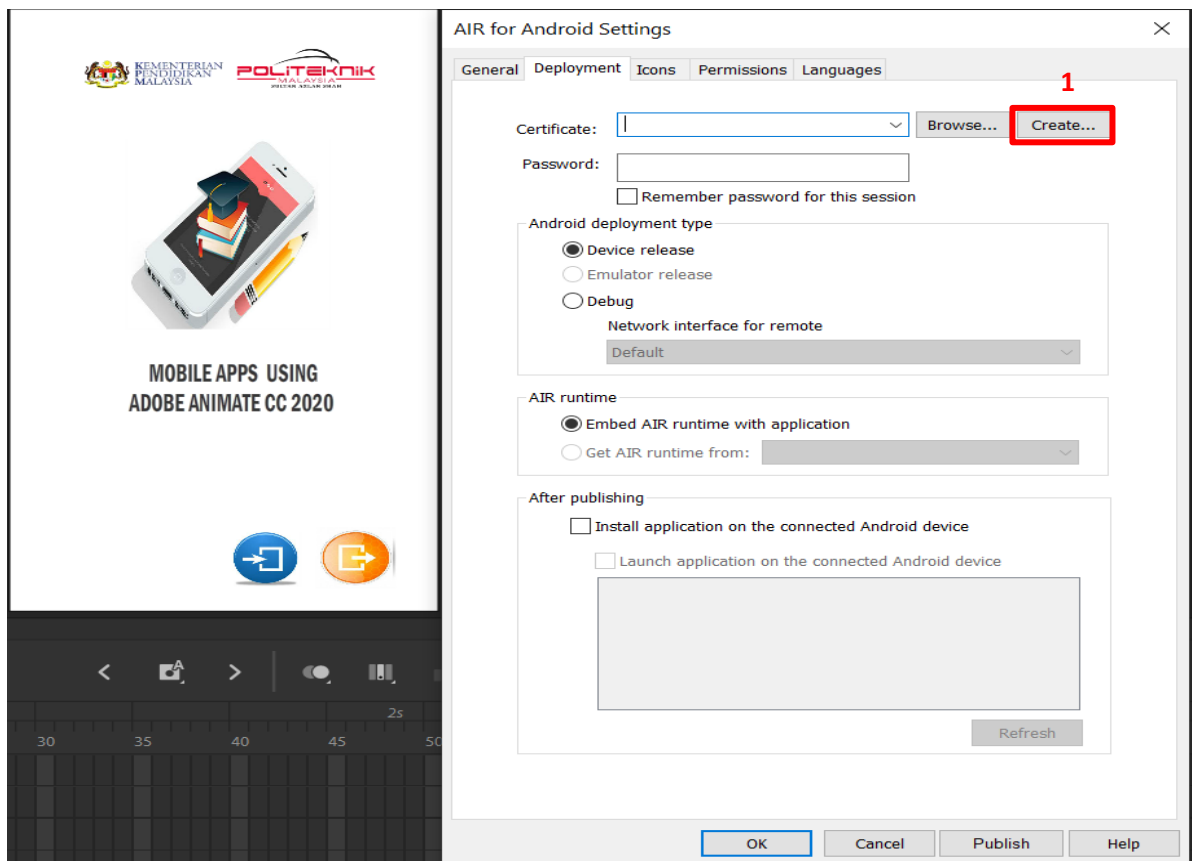


3. In **General** tab, set as below. At **Output File**, browse file name with **.apk**, for example **Develop Mobile Apps4.apk**.

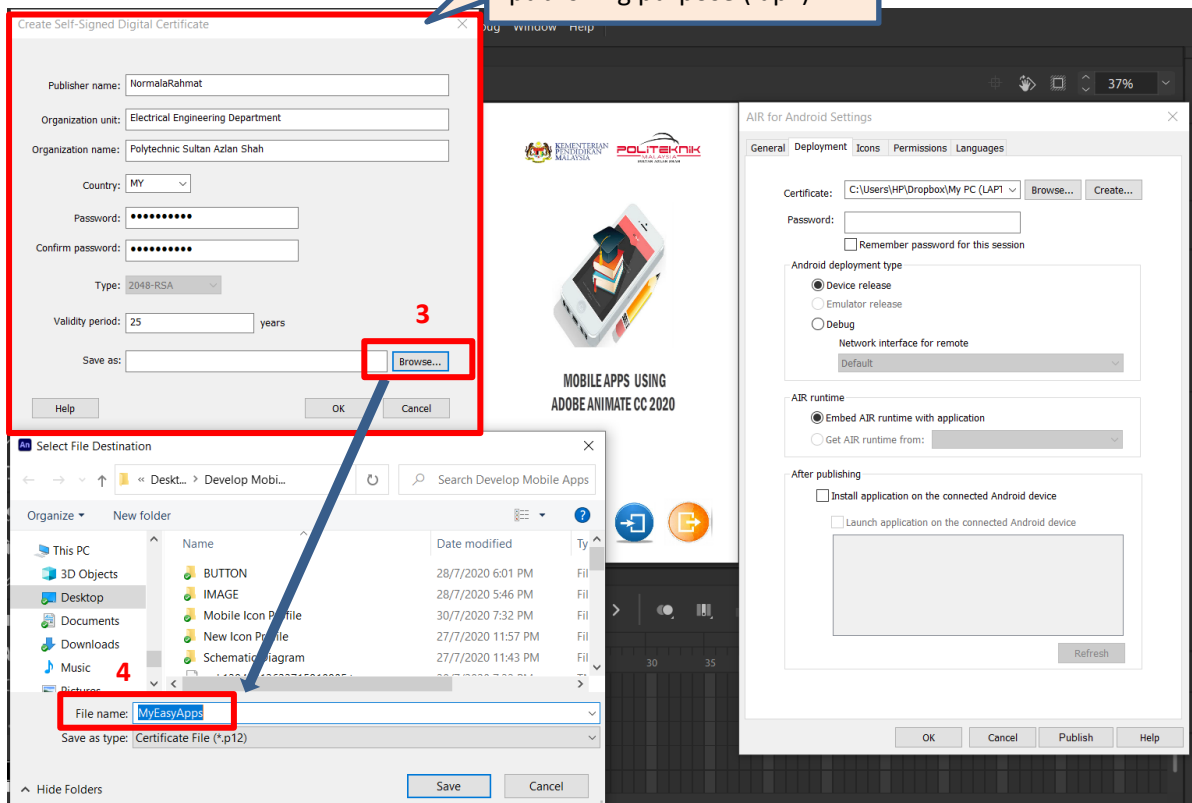


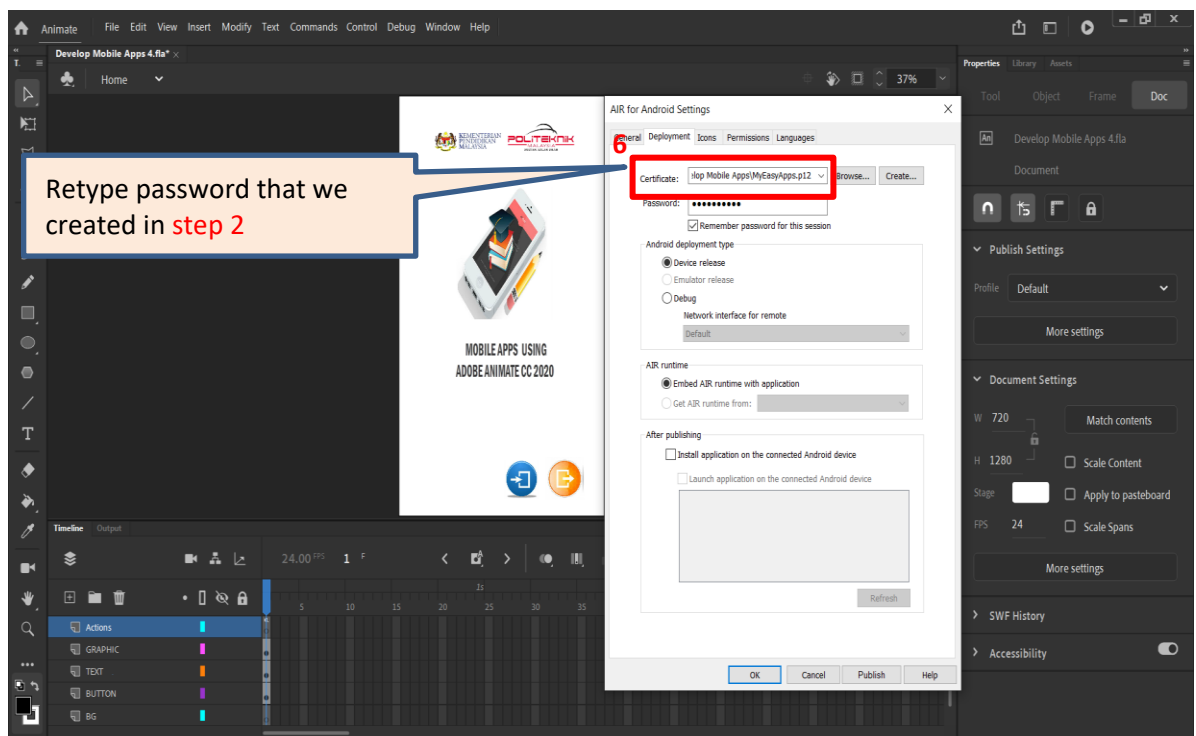
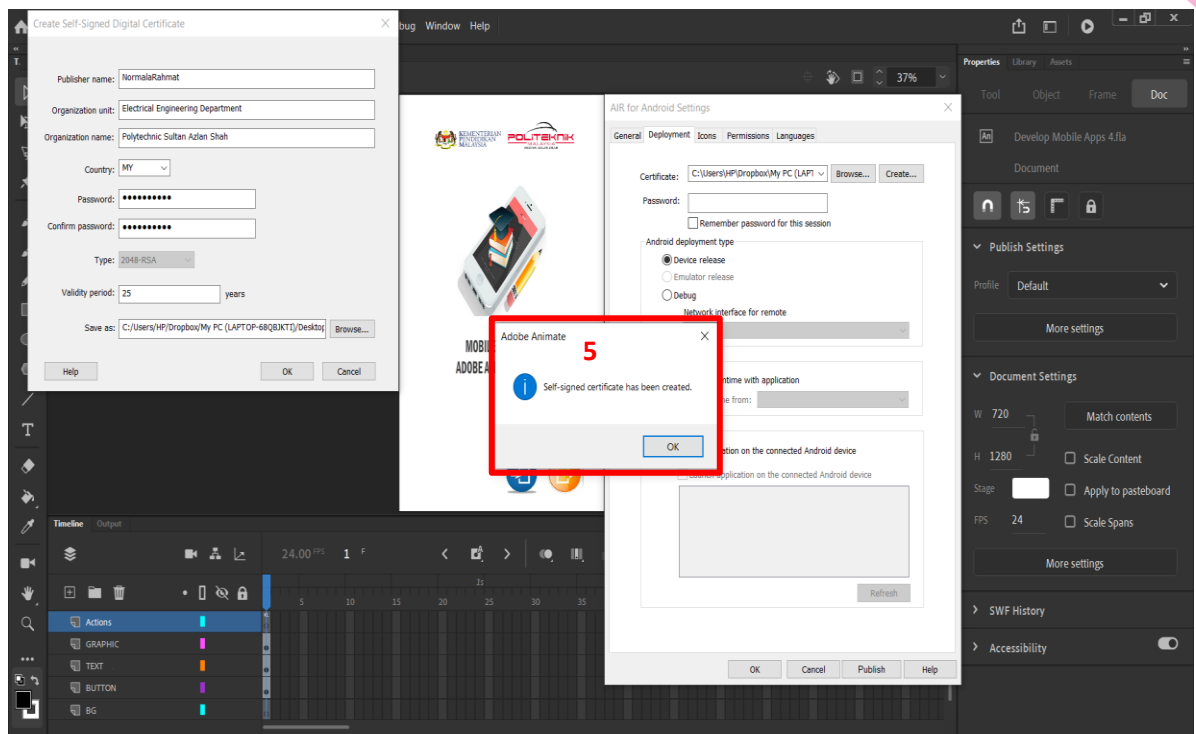


4. In **Deployment** tab, set as below. **Create the certificate. Save the certificate in the same folder of your flash file.**

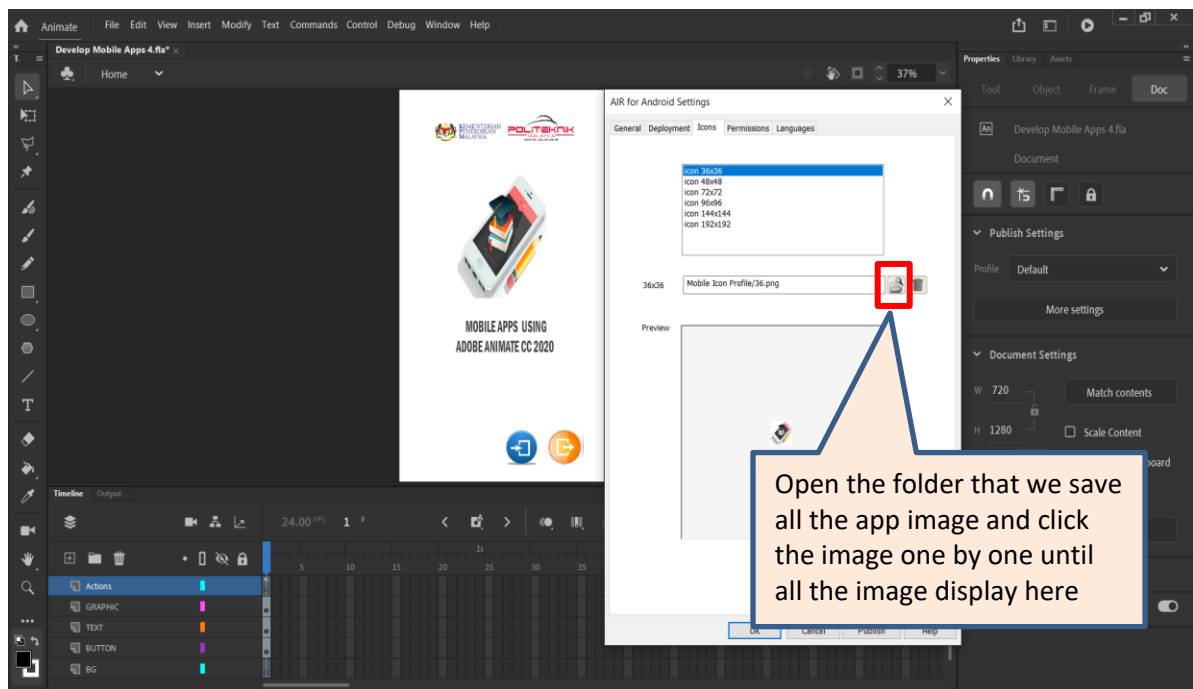


- 2 Fill up all the information to creating certificate for publishing purpose (.apk).

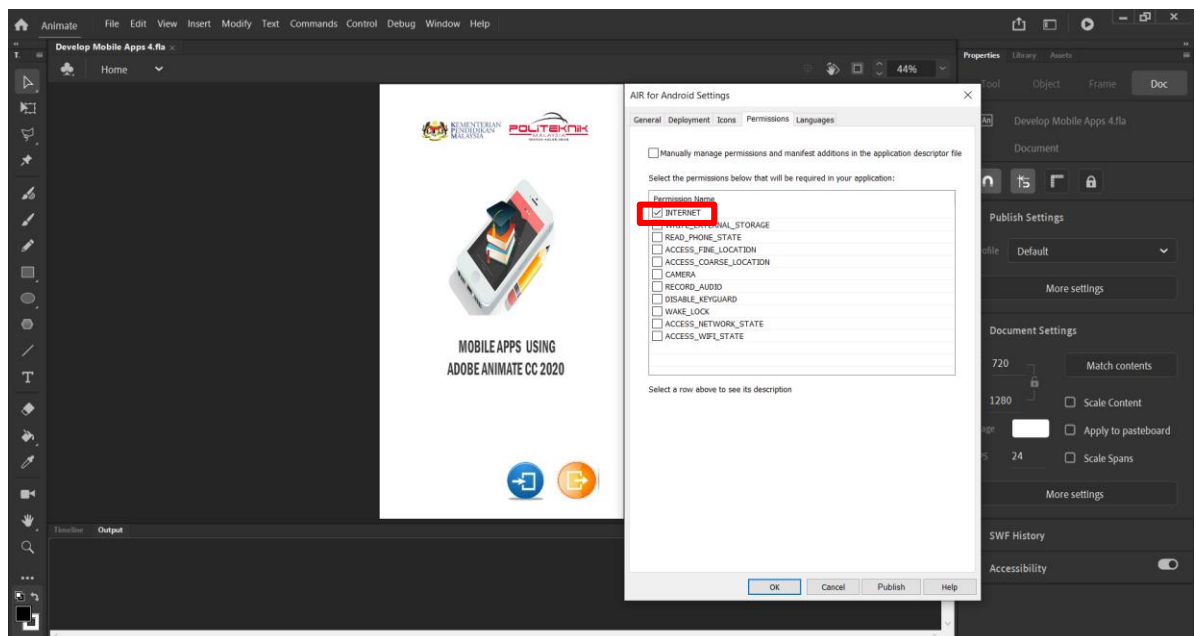




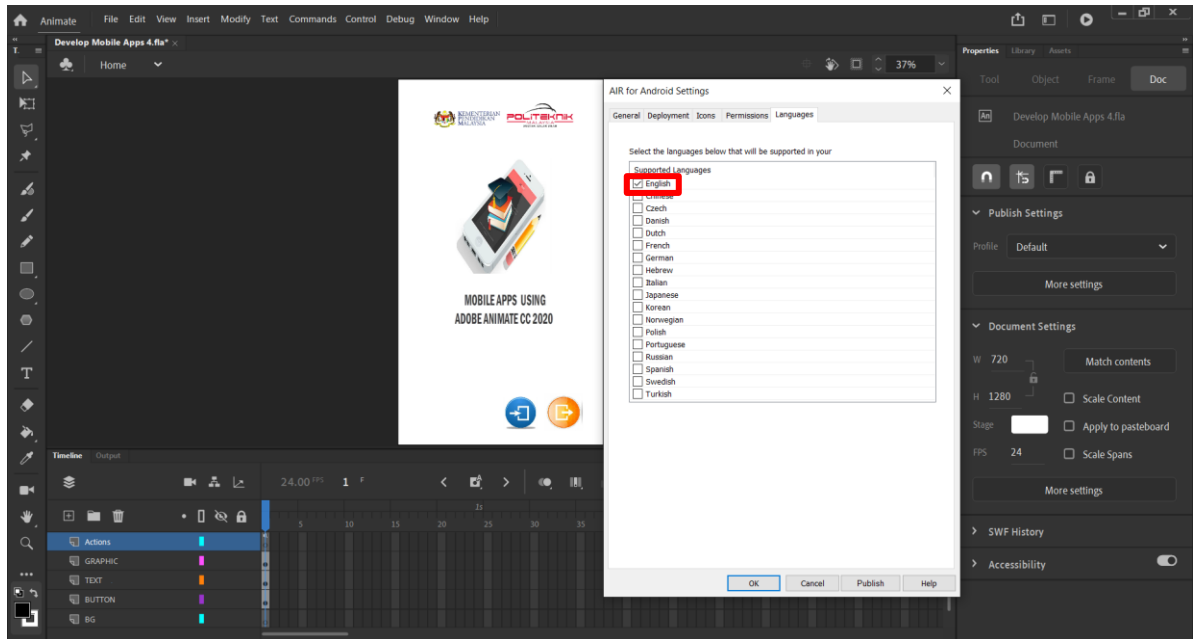
5. **Setup your apps icon image display in different size depends on your smart phone size screen in Icons Tab.**



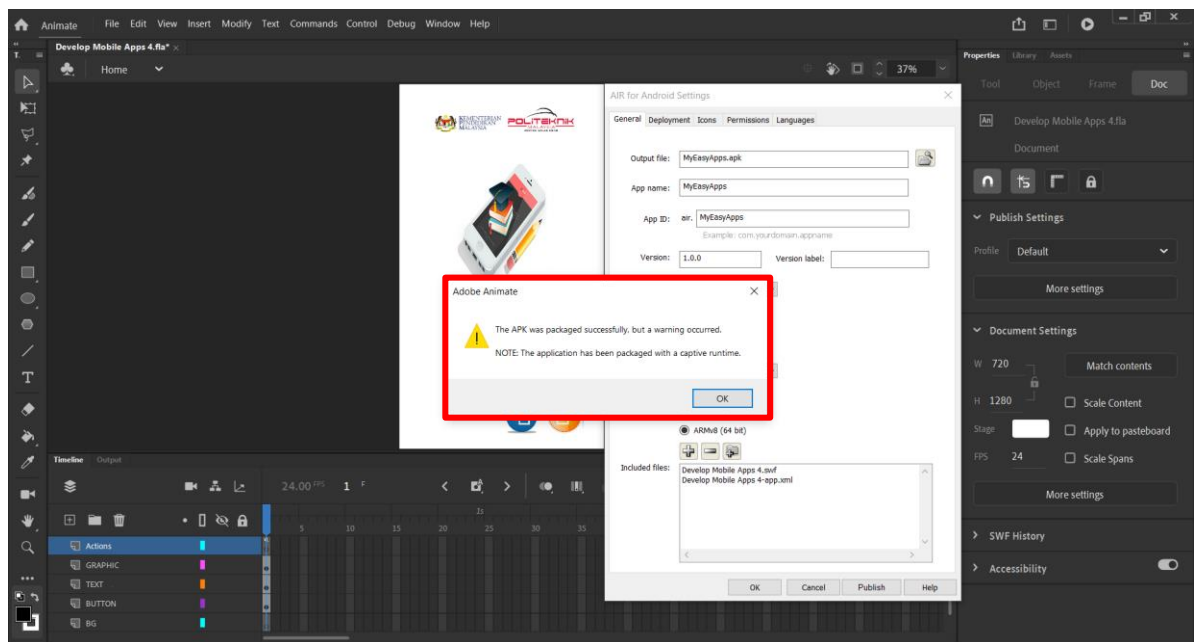
6. Before we setup the apps icon image displayed, we need to build the icon image in size **36x36**, size **48x48**, size **96x96**, size **144x144** and size **192x192**. Steps how to create the different size of apps icon image displayed was explain at [Section H](#).
7. In **Permissions Tab**, tick check box **Internet** as a permission during run our apps.



8. In Language Tab -> select **English** as supported languages.



9. Click **Publish**. This will create your apps in **.apk file format**. Transfer the file into your smartphone (Android OS) then install the that .apk file and enjoy the apps.

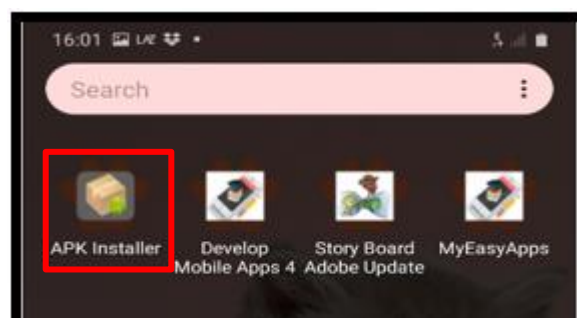
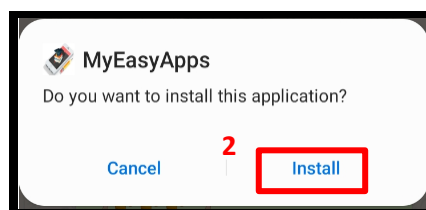


SECTION J: HOW TO INSTALL .APK FILE INTO ANDROID PHONE

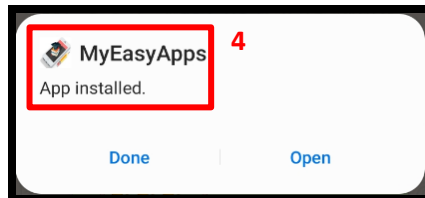
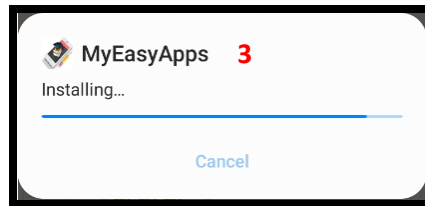
1. **Copy the .APK file** that we created for example MyEasyApps.apk from folder where the is saved -> **send to target user via email or WhatsApp's** -> **click the MyEasyApps.apk file.**



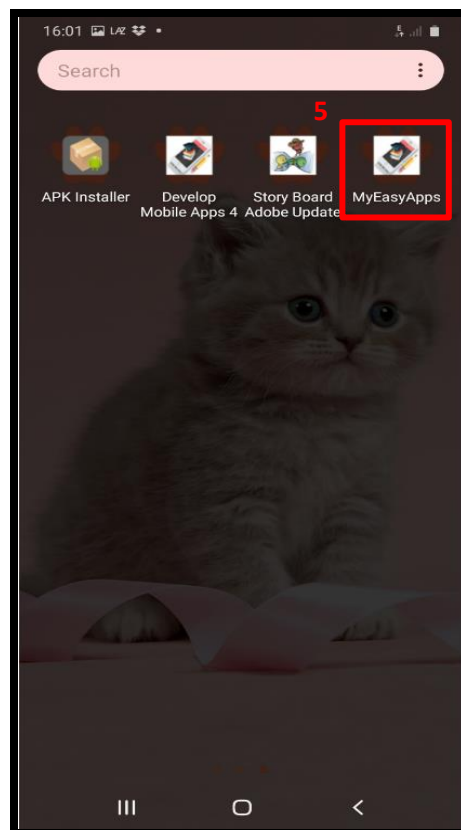
2. Click **Install** when the popup below appears. If the file can,t be installed and required **APK Installer**, so we need to download it from PlayStore.



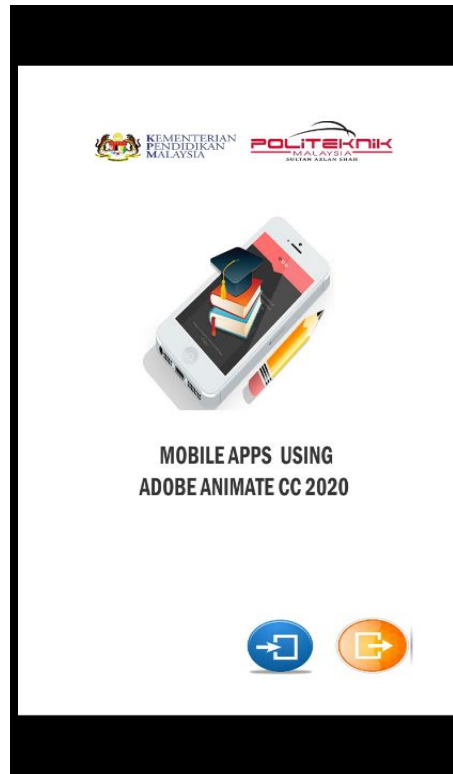
3. Installing process Done.



4. Click Done or Open then the MyEasyApps ready to use.



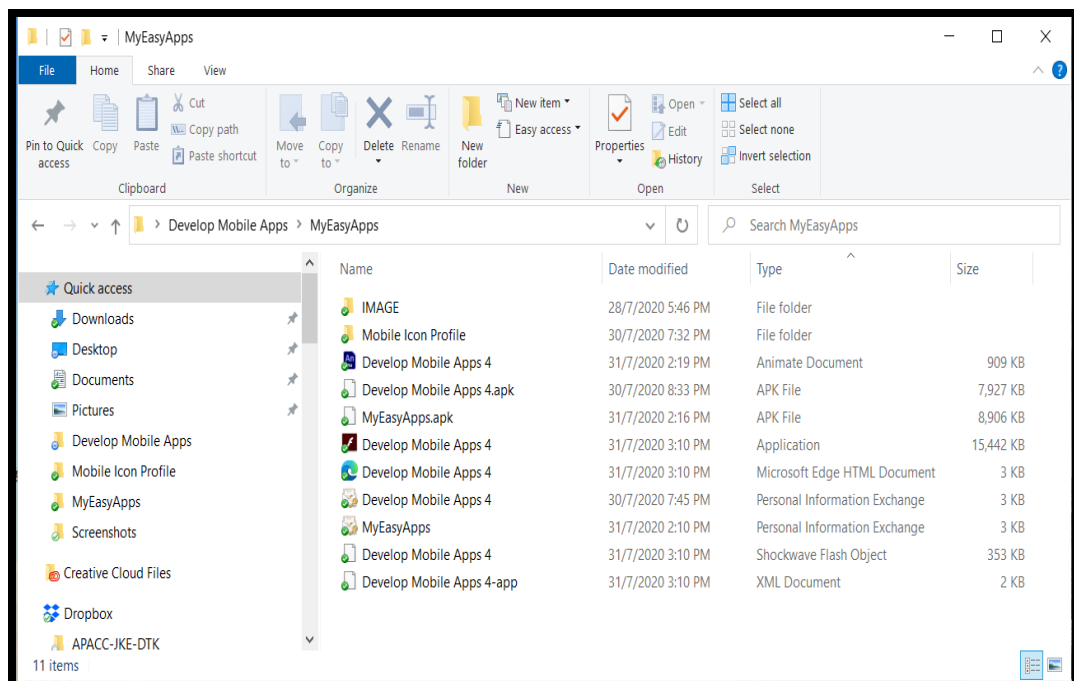
6



5. The mobile apps that we created also can upload to Google Play with one-time payment for creating account as developer to Android. After register as developer we can upload any .APK apps created through this link <https://www.easyeasyapps.net/en/how-to-publish-app-tutorials/how-to-publish-app-on-google-play/>

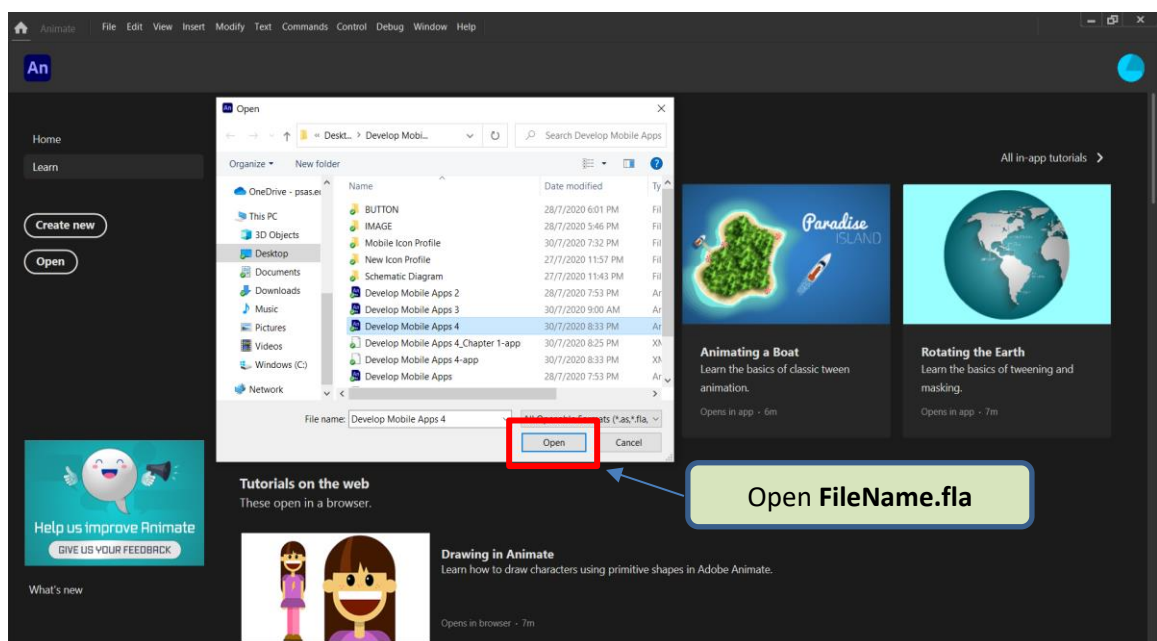
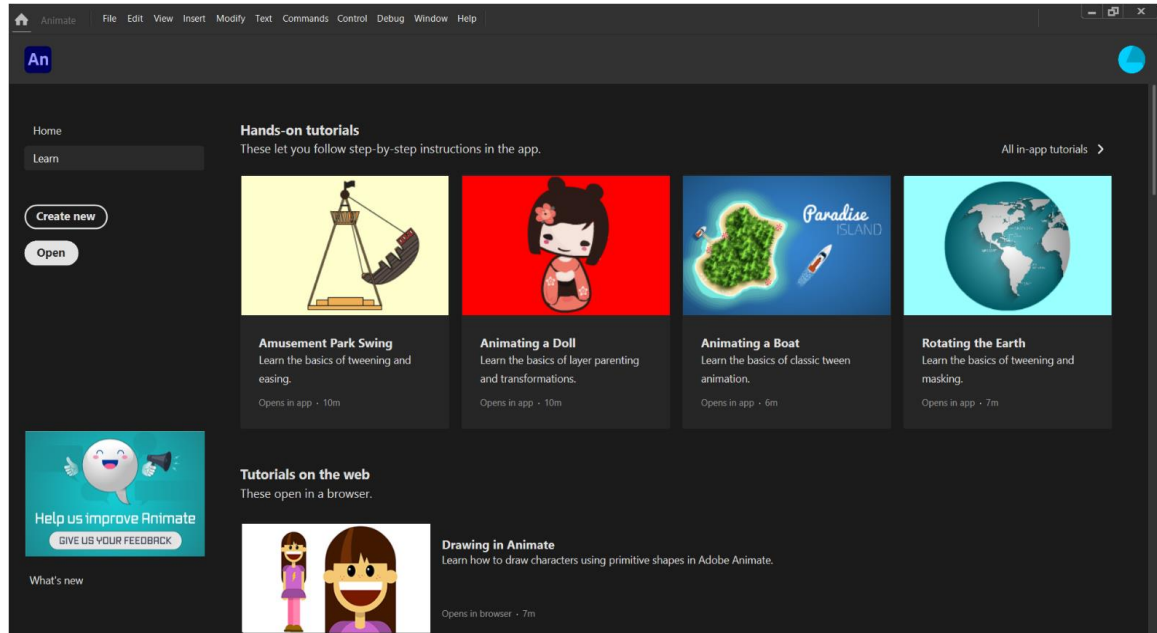
SECTION K: FOLDER AND FILE CREATED WHEN RUN ADOBE ANIMATE CC SOFTWARE

1. All our work will save and display in the same folder where we save our Adobe Animate CC software the we created before we start as shown below. In the folder will contents:
 - a. **Fla File (.fla)** - An Animate file that allow we to continue the works.
 - b. **License file (.p12)** – License file that allow we install in our Android mobile phone.
 - c. **APK File (.apk)** – File create after Publish our storyboard (flow of work). This is the file that we install in our Android mobile phone.
 - d. **Flash File (.exe)** – Another file create after Publish (Application file) and can play in our computer.

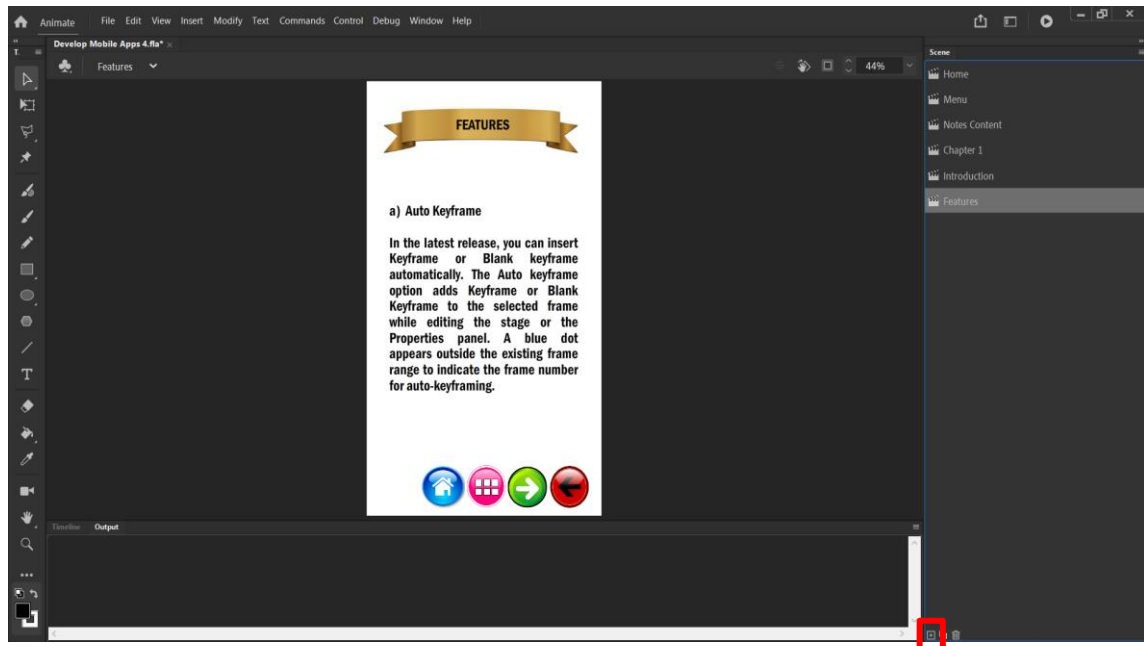


SECTION L: HOW TO CONTINUE AFTER CLOSING SOFTWARE @ AFTER PUBLISH

1. After we click and open Animate from Adobe Creative Cloud software, click Open Tab and select .fla file from folder that we saved our work before for example Develop Mobile Apps 4.



2. Then we just add New Scene or just add New Frame to continue previous work eventhough that file already publish. We just need to republish again for the updating information or just publish as a new .APK file with new identity.



Feel the Augmented Reality experience! Take your smartphone and scan the logo below using the Blippar app to access the VIDEOS inside.
Set the Test Code in the app setting to 1587523 to access the content.



ALL RIGHTS RESERVED.

NO PART OF THIS PUBLICATION MAY BE
REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED, IN ANY FORM OR BY
ANY MEANS, ELECTRONIC, MECHANICAL, PHOTOCOPYING, RECORDING OR OTHERWISE,
WITHOUT PRIOR PERMISSION OF POLITEKNIK SULTAN AZLAN SHAH.

AUTHOR : NORMALA RAHMAT, PHD & DARNI DARMIN

eISBN 978-967-2409-09-0

