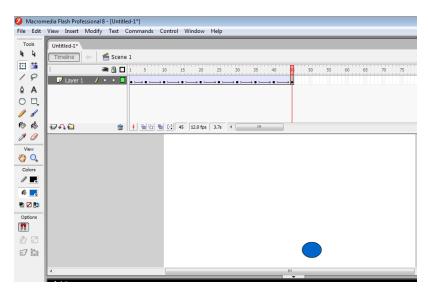
SDNB Vaishnav College for Women

Department of Computer Science

III & II year B.Sc Flash Lab Programs

Exercise 1: Bouncing ball

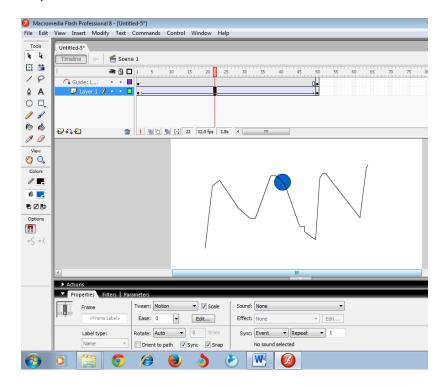
- Step 1: Open a new flash document.
- Step 2: Draw a circle in the first frame and keep it in the lower left corner using circle tool.
- Step 3: Insert a key frame in the fifth frame by pressing F6.
- Step 4: Move the circle slightly upwards and reduce its size using the free transform tool at key frame 5.
- Step 5: Repeat the step from 3 to 4 by inserting key frames with an interval of 5 frames each,(10th,15th etc) till the ball reaches the top of work area.
- Step 6:After repeating the above step bring the ball downwards by increasing its size in the respective key frame .
- Step 7: In the property inspector, select shape from tween drop down, in between every key frames.
- Step 8: Click ctrl+enter to view the result



Exercise 2: move an object in a path

- Step 1: Open a new flash document.
- Step 2: Rename the layer as "circle"
- Step 3: Draw a circle on the stage area of circle layer.
- Step 4: Insert a guide layer. Rename it as "path"
- Step 5: Select pencil tool from the tool box and place it at the center of that object and draw a path, along which your object should travel.
- Step 6: Insert a keyframe at 50th frame of both guide layer and circle layer by pressing F6.
- Step 7: Go to circle layer and using the selection tool, move the object along the path to the other end.

 The end point must be at the centre of the object.
- Step 7: Select any one of the frames between 1 and 50 of circle layer, right click and select "create motion tween" option.
- Step 8: Press ctrl + enter to view the result.



Exercise 3 : Flip text

- Step 1: Open a new flash document.
- Step 2: Rename the layer1 as "text". In this layer insert a text using text tool on the 1st frame.
- Step 3: select the typed text and Press ctrb+B twice to break the letters and convert them into graphics.
- Step 4: Insert keyframes at 5 and 15, by pressing F6.
- Step 5: select modify -> transform -> flip vertical
- Step 6: Select any one of the frames between 5 and 15, select shape from the tween drop down list, in the property inspector.
- Step 7: Insert keyframes at 20 and 30, by pressing F6.
- Step 8: Select modify-> transform -> flip horizontal
- Step 9: Select any one of the frames between 20 and 30, select shape from the tween drop down list from property inspector.
- Step 10: Insert new layer and rename it as flipbutton.
- Step 11: Insert keyframe at 1st frame of flipbutton layer and create a button with caption "flipvertical"

Creation of button

- a. Insert a rectangle and insert text "flip vertical" inside that using text tool.
- b. Using selection tool, select the rectangle along with the text.
- c. Right click in it, select convert to symbol->button->ok.
- Step 12: Insert another rectangle at 1st frame of flipbutton layer and using the above "creation of button" steps create a button with text "flip horizontal" inside that.
- Step 13: Select "flip vertical" button and change the instance name as "vert"
- Step 14: Select "flip horizontal" button and change the instance name as "hori"
- Step 15: In the "flipbutton" layer on the 1st keyframe, right click and select action-> screen->

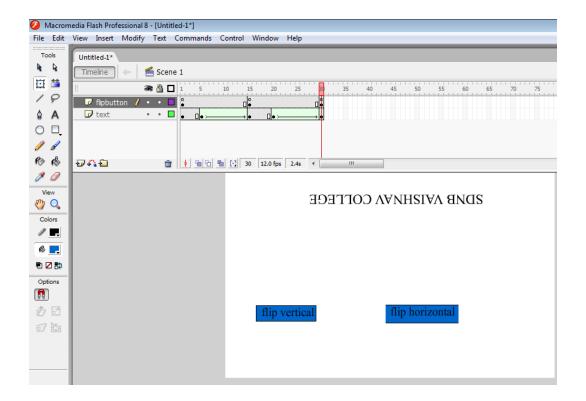
Type the following

```
stop()
vert.onPress = function()
{
         gotoAndPlay(5);
}
hori.onPress = function()
{
         gotoAndPlay(20);
}
```

Step 16: In the "flipbutton" layer, insert a keyframe on 15th frame. Right click ->action-> and type stop();

Step 17: : In the "flipbutton" layer, insert a keyframe on 30th frame. Right click ->action-> and type stop();

Step 18: Press ctrl + enter to view the result.



Exercise 4: Create link using objects

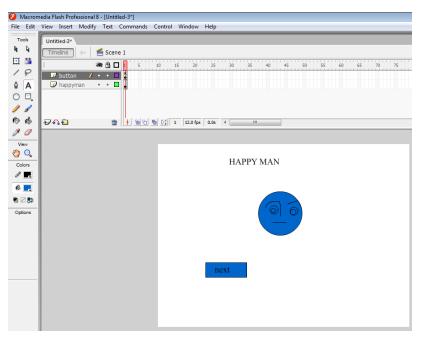
- Step 1: Open a new flash document.
- Step 2: Rename layer1 as "happyman"
- Step 3: Draw a face using circle tool.
- Step 4: Insert->new symbol -> movieclip is selected. Now you are in symbol editing mode. Draw mouth of the face.
- Step 5: At the 35th frame insert a keyframe.
- Step 6: Use selection tool and place it near the line.
- Step 7: When the pointer changes, pull the line downwards.
- Step 8: Give shape tweening.
- Step 9: to come out of symbol editing mode select scene1. From the library drag the month and place it in the face.
- Step 10: Insert a new layer "button" and Insert a button in it and give its instance name as next_scene.
- Step 11: Right click the 1st frame of button layer and select actions:
- Step 12: Type the following code in it:

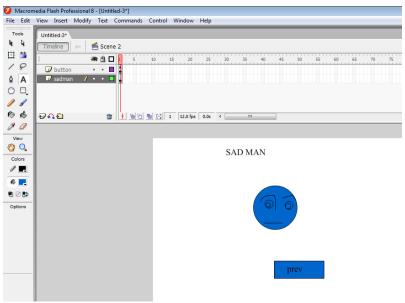
```
stop()
next_scene.onPress=function()
{
nextScene();
}
```

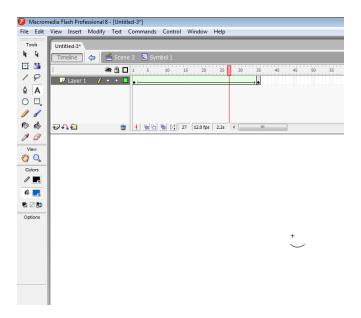
- Step 13: Insert a new scene.
- Step 14: Repeat steps 2 to 10 with little changes that includes pulling the line upwards (step 7) and changing the instance name of the second button as prev_scene (step 10)
- Step 15: Type the following in the actions of 1st frame of scene 2

```
stop()
prev_scene.onPress=function()
{
prevScene();
}
```

Step 16: Press ctrl + enter to view the result.







Exercise 5a. Text color change

Aim: To change the color of the text dynamically.

Step 1: Open a new flash document.

Step 2: Create a dynamic text and change the instance name as "color"

Step 3: In frame1, right click, go to actions and type

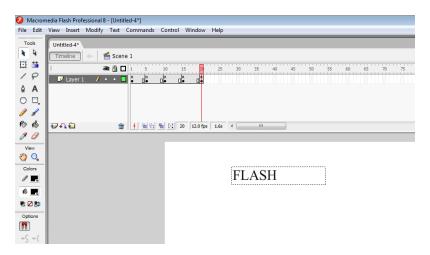
color.textColor=0x0D2F0D

Step 4: Go to frame 5, right click->actions and type

color.textColor=0x0D54B11

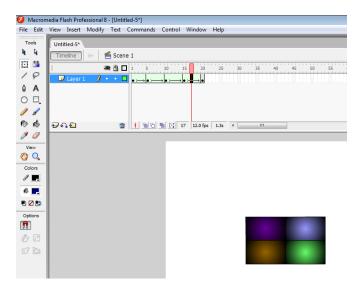
Step 5: Repeat the same process for different color and repeat for 30 frames.

Step 6: Press ctrl + enter to view the result.



Exercise 5b. Object color change

- Aim: To design a flash document which changes the color of a rectangle continuously.
- Step 1: Open a new flash document.
- Step 2: Draw a rectangle. Use line tool and draw lines in between the sides of a rectangle.
- Step 3: Select the free transform tool and select any one part of the rectangle. Change the gradient color from the color panel.
- Step 4: Continue doing the above step for all the 4 parts of a rectangle.
- Step 5: At frame 5, insert keyframe and again change the color of the 4 rectangles.
- Step 6: At frame 10, insert keyframe and again change the color of the 4 rectangles.
- Step 7: Give shape tween between frames
- Step 8: Press ctrl + enter to view the result.



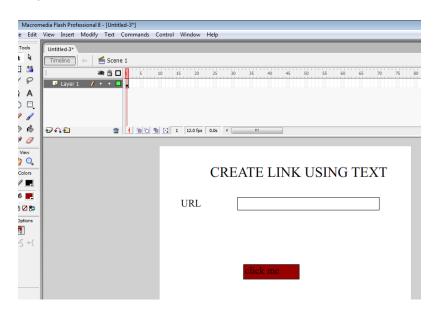
Exercise 6. Create link using text

Aim: To design a flash document which would produce a link to an existing text document file.

- Step 1: Open a new flash document.
- Step 2: Check in the drives whether there is any text or word document file. If it is not available, create a new word document.
- Step 3: In a new flash document, select the text tool and type "creating link using text" as a static text.
- Step 4: Type another text "URL" as static text.
- Step 5: Create an empty input text box. Give its instance name as 'url'.
- Step 6: Draw a rectangle & type the static text "clickme" on it. Right click and convert it into a button.
- Step 7: In the action panel of the button, type the following code

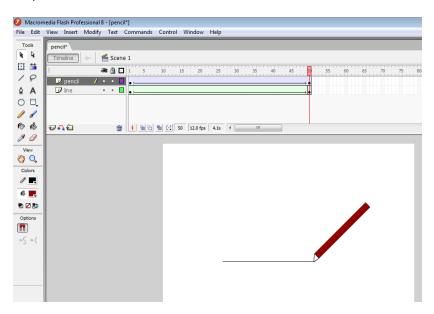
```
on(Press)
{
getURL(url.text)
}
```

- Step 8: At the runtime specify the path of the word file along with extension.
- Step 9: Press ctrl + enter to view the result.



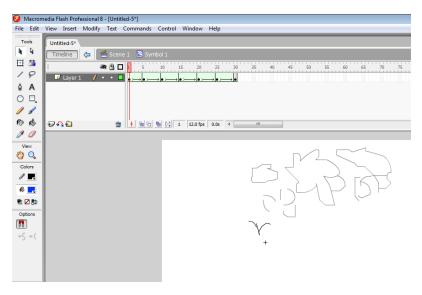
Exercise 7: Shape and Motion Tweening

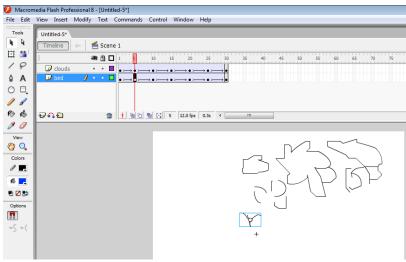
- Aim: To demo the effect of a pencil drawing a line using shape and motion tweening
- Step 1: Open a new flash document.
- Step 2: Select the line tool and draw a small line.
- Step 3: Change the layer name as 'line'. At 50th frame of the line layer insert keyframe.
- Step 4: Select window->info. Change the width of the line to 200. The line will be extended at the 50th frame. Give shape tweening.
- Step 5: Insert a new layer and rename it as 'pencil'. In the 'pencil' layer draw an image which looks like a pencil. (use rectangle and line tool to draw pencil, select and then convert it to symbol)
- Step 6: Select the pencil and right click->convert it to a symbol->movie clip->ok.
- Step 7: Using the free transform tool, move the pencil at the end of the line.
- Step 8: Insert a keyframe at 50th frame of 'pencil' layer and move the pencil at the end of the line
- Step 9: Give motion tween in the pencil layer by keeping the cursor any ware between 1 and 50th frame.
- Step 10: Press ctrl + enter to view the result.



Exercise 8: Object Animation

- Aim: To create an object and give animation to that.
- Step 1: Open a new flash document.
- Step 2: Rename the layer1 as 'bird'. Go to insert->new symbol->movie clip->ok
- Step 3: Pick the pencil tool and draw a bird.
- Step 4: Take free-transform tool and change the shape of the bird.
- Step 5: Move the bird slightly upwards.
- Step 6: Repeat the steps 4 and 5 for every 5 frames.
- Step 7: Give shape tween between frames.
- Step 8: Go to edit-> edit document.
- Step 9: Drag the symbol to the stage area.
- Step 10: Insert another layer and name it as 'clouds'.
- Step 11: Take the pencil tool and draw clouds.
- Step 12: Select the 'clouds' layer. Right click -> convert to symbol-> movie clip ->ok
- Step 13: Insert key frame at 5 in 'clouds' layer and move the clouds.
- Step 14: Go to 'bird' layer and insert key frame and move the bird.
- Step 15: Repeat the steps 13 and 14 till 50 frames.
- Step 16: Press ctrl + enter to view the result.

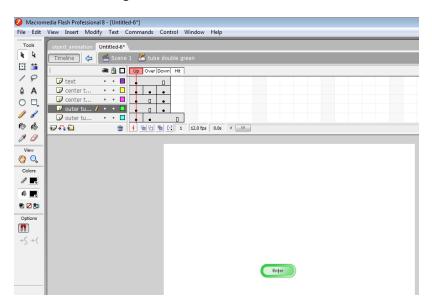




Exercise 9: Drawing image

Aim: To create a flash document in which images can be drawn by the user and cleared when 'clear' button is clicked.

- Step 1: Open a new flash document.
- Step 2: In layer1, frame 1 insert a button.
- Step 3: goto window->common library-> button (you will have lot of choices. Choose any one)
- Step 4: drag the button and keep it on the stage. Double click the button . now you will be in button editing mode. To Change the text on it as 'CLEAR' select the text layer. Now the text on the button will be selected . Change it as "CLEAR". To come out either select Edit->edit document or just click scene1



Step 3: Now you are in layer1 work area with the button caption changed as "CLEAR" on it. Give instance name as clear me.

Step 4: Right click on the frame1 and select actions. Type the following code:

```
var paper: MovieClip=this.createEmptyMovieClip("paper",100);
paper.onMouseDown=function()
{
    this.isDrawing=true;
paper.lineStyle(2,0xFF0000,100);
paper.moveTo(_xmouse,_ymouse);
}
paper.onMouseMove=function()
{
    if(this.isDrawing)
    paper.lineTo(_xmouse,_ymouse);
}
```

```
updateAfterEvent();
}
paper.onMouseUp=function()
{
this.isDrawing=false;
}
clearme.onPress=function()
{
paper.clear();
}
```

Step 5: Press ctrl + enter to view the result.

Exercise 10: Change color of text using buttons

Aim: To design a flash document which changes the color of the text continuously using buttons.

Step 1: Open a new flash document.

Step 2: Select the text tool and type some <u>dynamic text</u>. Give the instance name as 'text1'.

Step 3: Insert buttons from windows ->common libraries ->buttons. Drag and keep buttons of different colors.

Step 4: Right click on each button and select actions. Type the following code:

```
on(Press)
{
text1.textColor=0x003399;
}
```

Step 5: The value changes according to the code needed

[Blue: 0x003399; Green: 0x00FF00; Red: 0xFF0000; yellow: 0xB1B101; sandal: 0xFF9900]

Step 6: Press ctrl + enter to view the result.

Exercise 11: Create Link between Frames

Aim: To create link between frames.

- Step 1: Open a new flash document.
- Step 2: Select frame 1 and give the frame name as 'login'.
- Step 3: Create static text with caption 'LOGIN FORM'.
- Step 4: Create two more static text with caption 'USERNAME' and 'PASSWORD'.
- Step 5: Create two input box respectively for step 4: and give instance name as 'user' and 'pass'
- Step 6: Goto window->common library-> button (you will have lot of choices. Choose any one)
- Step 7: Drag the button and keep it on the stage. Double click the button . now you will be in button editing mode. To Change the text on it as 'LOGIN' select the text layer. Now the text on the button will be selected . Change it as "LOGIN". To come out either select Edit->edit document or just click scene1. Give instance name as 'loginbut'
- Step 7: Set keyframe at frame 1, select frame 10 and make it as keyframe and give instance name as 'accept'. Create two static text called 'LOGIN FORM', and 'WELCOME TO FLASH' and insert a picture.
- Step 8: In the actions panel of frame 1, type

```
gotoAndStop("login");
loginbut.onPress=function()
{
    If((user.text=="admin") && (pass.text=="1234"))
    gotoAndStop("accept");
    else
    gotoAndStop("reject");
}
```

Step 9: Set keyframe at frame 20 and give instance name as 'reject'. Create two static text called 'LOGIN FORM', and 'SORRY TRY AGAIN' and insert a picture.

Step 10: Insert a button and give caption as "LOGIN" of 'reject' frame. Keep the cursor on the button right click->actions and type the following

```
on(Press)
{
  gotoAndStop("login");
}
```

Step 11: Press ctrl + enter to view the result.

Exercise 12: Date and Time

Aim: To display today's date and current time.

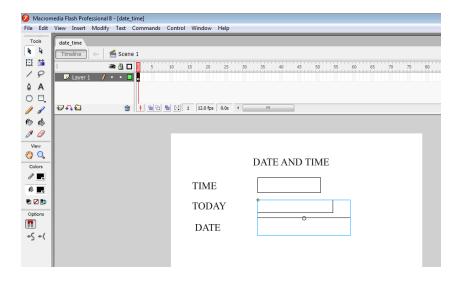
- Step 1: Open a new flash document.
- Step 2: Create 4 static text displaying 'Date and Time' as title and 'Time', 'Day' and 'Date'
- Step 3: Create a dynamic text box and give variable name as 'time1' and convert it to movie clip.
- Step 4: Create 2 more <u>dynamic text box</u> and give variable names as 'day1' and 'date1' respectively. Select both text box and convert it to movie clip.
- Step 5: Right click on movie clip1 and type the following code:

```
onClipEvent(enterFrame)
mytime=new Date();
nseconds=mytime.getSeconds();
nminutes= mytime.getMinutes();
nhours=mytime.getHours();
if (nhours>=12)
ampm="pm";
}
else
ampm="am";
if(nhours>=13)
nhours=nhours-12;
if(length(nminutes)==1)
nminutes="0" + nminutes;
if (length(nseconds)==1)
nseconds="0"+nseconds;
time1=nhours+":"+nminutes+":"+nseconds+" "+ampm;
```

Step 6: Right click on movie clip 2 and select actions and type the following code:

```
onClipEvent(load)
{
mon=["jan","Feb","Mar","Apr","May","Jun","Jul","Aug","Sep","Oct","Nov","Dec"];
weekdays=["Sunday","Monday","Tuesday","Wednesday", "Thursday","Friday","Saturday"];
}
onClipEvent(enterFrame)
{
now=new Date();
nday=weekdays[now.getDay()];
nmonth=mon[now.getMonth()];
ndate=now.getDate();
nyear=now.getFullYear();
day1=nday;
date1=nmonth+" "+ndate+","+nyear;
}
```

Step 7: Press ctrl + enter to view the result.



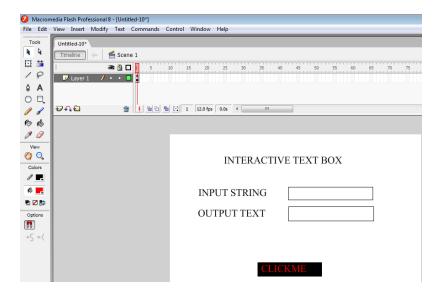
Exercise 13. Interactive text box

Aim: To design a flash document which would interact with the user.

- Step 1: Open a new flash document.
- Step 2: Select the text tool and type "INTERACTIVE TEXT BOX" as static text.
- Step 3: In the same way type "INPUT STRING" and "OUTPUT TEXT" as static text.
- Step 4: Select the text tool and just drag and keep an <u>input text</u> box. Give the variable name as 'v1' and activate the border property.
- Step 5: Select the text tool and just drag and keep a <u>dynamic text</u> box. Give the variable name as 'v2' and activate the border property.
- Step 6: Create a button. Give the instance name as clickme.
- Step 7: Right click on the frame1 of layer1->actions. Type the following code:

```
clickme.onPress=function()
{
    v2="hello " + v1+ " welcome"
}
```

Step 8: Press ctrl + enter to view the result.



Exercise 14 Simple Calculator

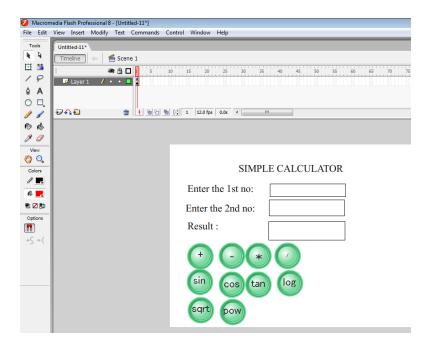
Aim: To design a flash document which would perform simple calculator operations.

- Step 1: Open a new flash document.
- Step 2: Create a static text "Simple Calculator" as heading.
- Step 3: Create three static text called "Enter the 1st no:" "Enter the 2nd no:", "Result:"
- Step 4: Create two input text box besides the first two static text. Give the variable name for the input text box as v1 and v2 respectively. Uncheck the autokern property of these three text boxes.
- Step 5: Create a dynamic text to the side of "Result" static text and give the variable name as v1.
- Step 6: Create 9 buttons called "+,-,*,/, sin, cos, tan, sqrt, pow and give instance name as plus, sub1, mul, div1, sin1, cos1, tan1, sqrt1 and pow1 respectively. (you can take the buttons from the common libraries. In order to use the button of same instance first drag one instance on the stage. In order to use it for some other label you must create copies of these symbols. In order to do that in your library panel right-click on the icon of the symbol and select *duplicate* from the popup menu. Now you will get a copy of the symbol. Drag it to the stage and give another label by double clicking it and changing its text in symbol edit mode. To do this unlock the text layer and after editing it lock it again.

Step 7: Right click on frame 1 and select actions. Type the following code:

```
sin1.onRelease=function()
       x=Number(v1)*(3.14/180)
       r1=Math.sin(x);
cos1.onRelease=function()
       x=Number(v1)*(3.14/180)
       r1=Math.cos(x);
tan1.onRelease=function()
       x=Number(v1)*(3.14/180)
       r1=Math.tan(x);
sqrt1.onRelease=function()
       r1=Math.sqrt(Number(v1));
pow1.onRelease=function()
       r1=Math.pow(Number(v1),Number(v2));
log1.onRelease=function()
       r1=Math.log(Number(v1));
```

Step 8: Press ctrl + enter to view the result.



Masking

- Step 1: create two layers and name them as "mask" and "background". Make sure that the background layer is below the mask layer.
- Step 2: Import your picture to the "background" layer.
- Step 3: Using Oval tool from your tool box, draw a circle in your "Mask" layer and delete it's border.
- Step 4: Drag the circle to one end of your picture.
- Step 5: Now go to "frame 40" of your "Mask" layer and press "F6" to insert a new keyframe.
- Step 6: Now go to "frame 40" of your "background" layer and press "F6" to insert a keyframe, so that your background image is available all through your mask.
- Step 7: Select "frame 40" of your "Mask" layer, that is your new keyframe, Keeping the playhead on "frame 40" of "Mask" layer, drag the circle to other end of your picture.
- Step 8: Now go back to "frame 1" of your "Mask" layer, keeping the playhead on "frame 1" of your "Mask" layer, select Shape tween in your properties window.
- Step 9: Right click on the "Mask" layer (the area where you named the layer not where the frames exist) and select Mask
- Step 10: Press Ctrl+Enter to view your Mask.

Exercise 15: Creating a simple Website

- Step 1: Open a new flash window
- Step 2: Rename the layer1 as "home" and Using the text tool, type a <u>static text</u> as heading of the scene
- Step 3: Take 4 buttons from window->common libraries and give the captions as "HOME", "DEPARTMENTS","LIBRARY", "SPORTS", "CONTACTUS".
- Step 4: For the 4 buttons created in step 3, give the instance name as home_but, dept_but, lib_but, sport_but, and contact_but respectively.
- Step 5: Rename the scene name as "home". This can be done by selecting window->otherpanel->scene (double click to change the name). (you can rename scene by selecting Shift + F2 also)
- Step 6: Using the <u>static text</u> tool type something in the scene "home" in layer "home".
- Step 7: insert one more layer and name it as "actions".
- Step 8: In the frame1 of actions which is by default a keyframe rightclick->actions and type the following code:

```
stop();
home_but.onRelease = function ()
{
    gotoAndStop("home",1);
}
    dept_but.onRelease = function ()
{
    gotoAndStop("dept",1);
}
    lib_but.onRelease = function ()
{
    gotoAndStop("library",1);
}
    sport_but.onRelease = function ()
{
    gotoAndStop("sport",1);
}
    contact_but.onRelease = function ()
{
    gotoAndStop("contact",1);
}
```

- Step 9: In the same way create scenes "dept", "library", "sport", "contact".
- Step 10: copy "home" scene and its content and go to respective scenes in step 9, right clickpaste in place. Now you can see the buttons and text boxes. In each scene create one more layer
 and name it as 'actions' and copy the code from 'action' layer of 'home' scene and paste it in all
 the 'actions' layer of other scenes.
- Step 11: go to "contact" scene and select windows->component->User Interface.
- Step 12. Double click User Interface and it unfolds and you can see several interface tools like button etc.
- Step 13. Select checkbox and drag it to work area. Like this select checkbox 4 times.
- Step 14: Select the first check box and select property inspector. In that select parameters. Your window look like below. Give the instance name as 'cb1'. Change its label as 'SPORTS'. Like wise select the other checkbox and give their instances as 'cb2', 'cb3', 'cb4' and change their labels as 'BOOK READING', 'TV WATCHING', and 'COMPUTER' respectively.



Step 15: Select two radiobutton from User Interface and drag it and paste it on the work area.

Step 16: Select the first radio button and select property inspector. In that select parameters. Your window look like below. Give the instance name as 'female'. Change its label as 'FEMALE'. Change the group name as 'r1'. Like wise select the other radio button and give its instances as 'male', and change its label as 'MALE'. Change the group name as 'r1'. So that both radion buttons are belong to the same group.

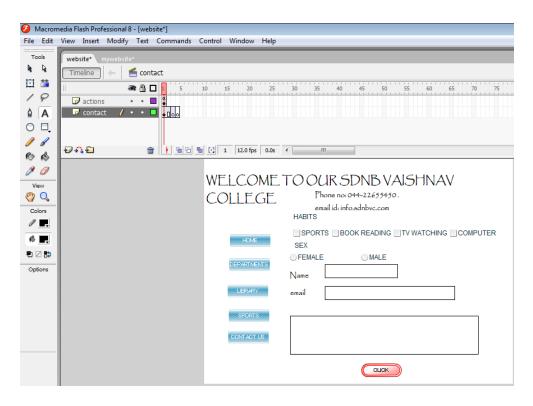


Step 17: Select text tool and draw a dynamic text with multiline property and give the variable name as 'v1' as given below.



Select 18: select a button from window->common libraries->button->(select your choice)

Select 19: After selecting the button drag it on the work stage and double click it. Now you will be in editing mode of button. Select its text and change it as 'CLICK'. To come out of editing mode either select edit->edit document or just click scene 'contact' on the bar. After doing this your screen will look like below:



Step 20: Select the button and right click->actions and type the following code

```
on(release)
{
    x=""
    if (cb1.selected=true)
    {
        x=x+ " sports"
    }
    if (cb2.selected=true)
    {
        x= x+ " book reading"
    }
    if (cb3.selected=true)
    {
        x=x+ " TV watching"
    }
    if (cb4.selected=true)
    {
        x=x+ " computer"
    }
    v1="welcome " +ip1 + "you are interested in : "+ x + " your email id: "+ ip2 +" and you are a :"+r1.getValue()
}
```

Step 21: press ctrl + enter to see the output.