

Flag Hoisting

Software Development Capstone Project

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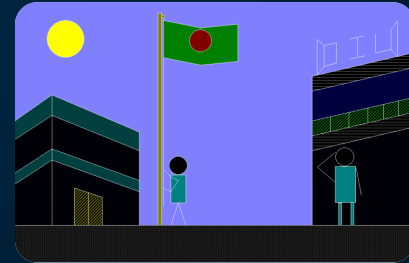
PC: B

**Department of Software
Engineering**



Flag Hoisting

The projects objective to show graphically hoisting of a Flag.



WHAT I AM WORKING ON



WAVING FLAG

Flag go up with national anthem and waves out



CHOOSE THE COUNTRY

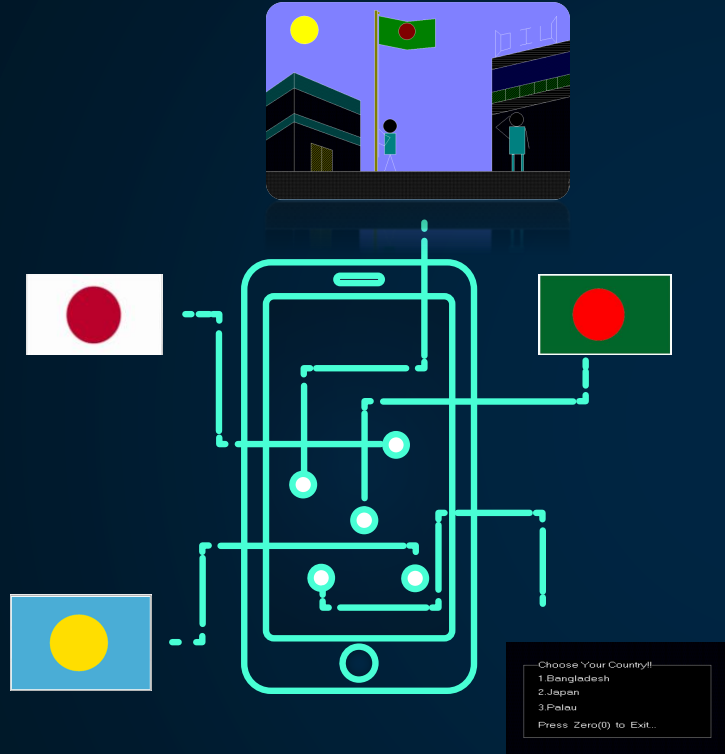
Choosing the 3 country option.



REALISTIC, MUSIC ANTHEM, IMAGE, Bird Fly

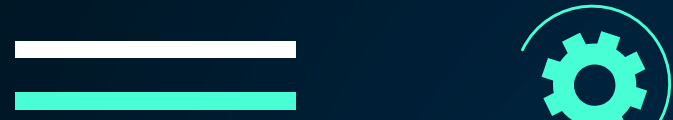
Sound system, image, birds flying added look like Realistic.

ABOUT THE PROJECT



In this project we have 2 people, a flag pole, buildings and sun. All these objects are drawn using the basic functions provided in `<graphics.h>`. At the beginning flag is down, which is hoisted by a person. I try to look some realistic.

The person approaches the flag post and host the flag, which is shown with a good animation. Flag go up with national anthem and waves out, which look awesome.



```
1
2  #include <stdio.h>
3  #include <graphics.h>
4  #include<windows.h>
5  #include <MMSystem.h>
6  #include <stdlib.h>
7  #include <windows.h>
```

Header File





User-Defined Function

```
int a,b,c,d,e;

void bird()
{
    //bird
    circle(50+b,100,5);
    line(53+b,98,60+b,100);
    line(53+b,102,60+b,100);
    circle(50+b,98,1);
    ellipse(35+b,100,0,360,10,5);
    line(28+b,100,15+b,95);
    line(28+b,100,14+b,96);
    line(29+b,100,13+b,97);
    line(29+b,101,12+b,98);
    line(29+b,102,10+b,99);
    line(29+b,103,12+b,100);
}

void handdown()
{
    c=b;
```

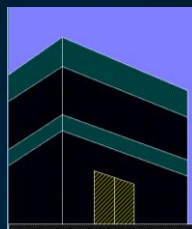
For Man and
others objects

```
void setSun()
{
    setfillstyle(SOLID_FILL,YELLOW);
    circle(137,100,50);
    floodfill(126,104,WHITE);
}
```

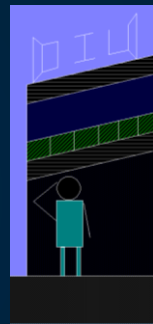
For Birds

```
void setOthers()
{
    setfillstyle(SOLID_FILL,BROWN);
    rectangle(385,30,395,600);
    floodfill(390,414,WHITE);
    //stand flag
    setfillstyle(SOLID_FILL,BROWN);
    circle(400,40,5);
    floodfill(401,41,WHITE);
    //Ribbon
    line(400,45,400,550);
    //down floor
    setfillstyle(CLOSE_DOT_FILL,LIGHTGRAY);
    rectangle(0,600,1080,700);
    floodfill(98,627,WHITE);

    //flag man
    setfillstyle(CLOSE_DOT_FILL,BLACK);
    circle(440,440,25);
    floodfill(441,441,WHITE);
    setfillstyle(SOLID_FILL,CYAN);
    rectangle(420,465,460,540);
    floodfill(421,466,WHITE);
    line(440,540,420,600);
    line(440,540,460,600);
```



For Sun



For Left and
Right
Buildings

```
}
void leftbuilding()
{
    //gate left
    setfillstyle(SLASH_FILL,BROWN);
    line(160,500,235,525); //1
    line(160,500,160,600); //2
    line(198,512,198,600); //4
    line(160,600,235,600); //5
    floodfill(183,551,WHITE);
    setfillstyle(SLASH_FILL,BROWN);
    line(160,500,235,525); //1
    line(235,525,235,600); //3
    line(198,512,198,600); //4
    line(160,600,235,600); //5
    floodfill(221,556,WHITE);

    //building left
    setfillstyle(9,CYAN);
```

```
void rightbuilding()
{
    //building right
    setfillstyle(2,DARKGRAY);
    line(800,200,1080,135); //1
    line(800,200,800,600); //2
    line(800,240,1080,175); //3
    floodfill(818,210,WHITE);
    setfillstyle(9,BLUE);
    line(800,320,1080,255); //6
    line(800,240,1080,175); //3
    line(800,200,800,600); //2
    floodfill(842,247,WHITE);
    setfillstyle(2,DARKGRAY);
    line(800,360,1080,295); //4
    line(800,400,1080,335); //5
    floodfill(853,359,WHITE);
    setfillstyle(10,BLUE);
    line(800,200,800,600); //2
    line(800,400,1080,335); //5
    line(800,600,1080,600); //7
    floodfill(1043,376,WHITE);
    floodfill(888,580,WHITE);

    //rill
    setfillstyle(SLASH_FILL,GREEN);
    line(800,360,1080,295); //4
    line(849,309,849,349); //1
```

```
int main()
```

```
{  
    initwindow(1080, 700, "Flag Hoisted");  
    int i;  
    b=0;  
    c=0;  
    d=0;
```

Main Function

Initialized BGI window
Initial for loop

For Birds

```
int points[] = {400,50, 500, 70, 600, 60, 600, 160, 500, 170, 400, 150, 400, 50}, base[] = {400,50, 600,50, 600,150, 400,150, 400,  
    frame2[] = {400,50, 470, 60, 600, 65, 600, 165, 570, 160, 400, 150, 400, 50};  
int a,b,c,d,e;
```

**Initialized points,
base & frame for
waving flag**

```
//=====INTRO=====//

settextstyle(10,0,5);
outtextxy(170,50,"DAFFODIL INTERNATIONAL UNIVERSITY");
settextstyle(10,0,2);
outtextxy(350,100,"Department of Software Engineering");
settextstyle(8,0,4);
outtextxy(300, 83+150, "Name : Md. Ashiqur Rahman");
outtextxy(300, 110+170, "ID : 201-35-611");
outtextxy(300, 137+190, "Project Name : Flag Hoisting");
outtextxy(300, 207+170, "Press any key to start...");

readimagefile("diu.jpg", 50,50,150,100);
```

Intro Screen



DAFFODIL INTERNATIONAL UNIVERSITY

Department of Software Engineering

Name : Md. Ashiqur Rahman

ID : 201-35-611

Project Name : Flag Hoisting

Press any key to start...

Choose Your Country!!

1.Bangladesh

2.Japan

3.Palau

Press Zero(0) to Exit..

Using by While(1), User don't need to off project for another select option. Users can be continues select any option.

Option Selection Screen

```
while(1)
{
    PlaySound("intro.wav", NULL, SND_ASYNC);
    setfillstyle(10,BLUE);
    rectangle(250,200,900,450);
    floodfill(0,0,WHITE);
    settextstyle(SANS_SERIF_FONT,0,4);
    outtextxy(300, 83+100, "Choose Your Country!!");
    outtextxy(300, 110+120, "1.Bangladesh");
    outtextxy(300, 137+140, "2.Japan");
    outtextxy(300, 180+150, "3.Palau");
    //settextstyle(SANS_SERIF_FONT,0,3);
    outtextxy(300, 240+150, "Press Zero(0) to Exit...");
```


/Flag go up

```
char key;  
key = (char) getch();  
cleardevice();
```



Initialized Key

Loading Bar



```
if(key == '1') //Bangladesh  
{  
    outtextxy(105, 200, "Loading graphics...");  
    rectangle(106, 261, 518, 286);  
    setfillstyle(SOLID_FILL, GREEN);  
    rectangle(433, 445, 640, 540);  
    floodfill(607, 463, WHITE);  
    setfillstyle(SOLID_FILL, RED);  
    circle(530, 490, 30);  
    floodfill(520, 490, WHITE);  
    outtextxy(400, 566, "BANGLADESH");  
  
    settextstyle(9, 0, 3);  
    outtextxy(750, 240, "Bangladesh");  
    outtextxy(650, 300, "This is Country of ASIA");  
    outtextxy(550, 360, "Dhaka is the capital city of Bangladesh");  
    readimagefile("logo.jpg", 280, 50, 800, 150);  
  
    for(i=113; i<=513; i++)  
    {  
        rectangle(112, 267, i, 281);  
        delay(1);  
    }  
}
```

Option1:Pressed keyboard 1
for Flag Hoisted of
Bangladesh

```
else if(key == '2') //Japan  
{  
    outtextxy(105, 200, "Loading graphics...");  
    rectangle(106, 261, 518, 286);  
  
    setfillstyle(SOLID_FILL, RED);  
    circle(530, 490, 30);  
    floodfill(520, 490, WHITE);  
    setfillstyle(SOLID_FILL, WHITE);  
    rectangle(433, 445, 640, 540);  
    floodfill(607, 463, WHITE);  
    outtextxy(470, 566, "JAPAN");  
  
    settextstyle(9, 0, 3);  
    outtextxy(800, 240, "Japan");  
    outtextxy(650, 300, "This is Country of ASIA");  
    outtextxy(600, 360, "Tokyo is the capital city of Japan");  
    readimagefile("logo.jpg", 280, 50, 800, 150);  
  
    for(i=113; i<=513; i++)  
    {  
        rectangle(112, 267, i, 281);  
        delay(1);  
    }  
}
```

Option2:Pressed keyboard 2
for Flag Hoisted of Japan

```
outtextxy(105, 200, "Loading graphics...");  
rectangle(106, 261, 518, 286);  
for(i=113; i<=513; i++)  
{  
    rectangle(112, 267, i, 281);  
    delay(1);  
}
```

```
else if(key == '3') //Palau  
{  
    outtextxy(105, 200, "Loading graphics...");  
    rectangle(106, 261, 518, 286);  
    setfillstyle(SOLID_FILL, LIGHTBLUE);  
    rectangle(433, 445, 640, 540);  
    floodfill(607, 463, WHITE);  
    setfillstyle(SOLID_FILL, YELLOW);  
    circle(520, 490, 30);  
    floodfill(520, 490, WHITE);  
    outtextxy(470, 566, "PALAU");  
  
    settextstyle(9, 0, 3);  
    outtextxy(800, 240, "Palau");  
    outtextxy(650, 300, "This is Country of ASIA");  
    outtextxy(550, 360, "Makaoak is the Capital City of Palau");  
    readimagefile("logo.jpg", 280, 50, 800, 150);  
  
    for(i=113; i<=513; i++)  
    {  
        rectangle(112, 267, i, 281);  
        delay(1);  
    }  
  
    delay(1000);  
}
```

Option3:Pressed keyboard 3
for Flag Hoisted of Palau

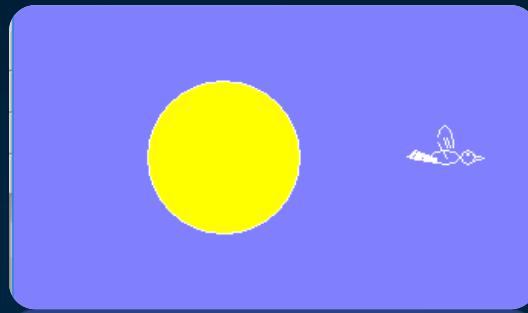
```

//flag stand
setOthers();
leftbuilding();
rightbuilding();
bird();
if(i%2==0)
{
    handup();
}
else
{
    handdown();
}
b=b+3;
delay(130);
}

```

Birds fly

Function Called



```

}
else if(key == '0')
{
    //break;
    closegraph();
}

```

For Exit from project
by pressing keyboard

0

```
readimagefile("diu.jpg", 50, 50, 150, 100);
```

Image Function



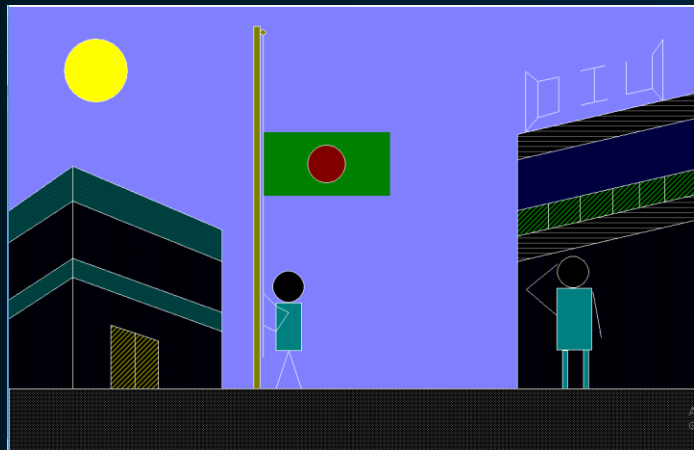
```
{
PlaySound("intro.wav", NULL, SND_ASYNC);
```

```
PlaySound("Anthem.wav", NULL, SND_ASYNC);
```

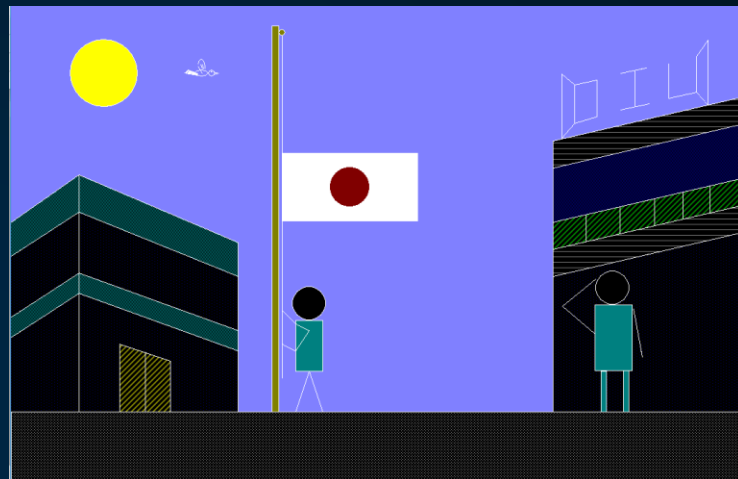
```
PlaySound("japan.wav", NULL, SND_ASYNC);
```

```
PlaySound("Palau.wav", NULL, SND_ASYNC);
```

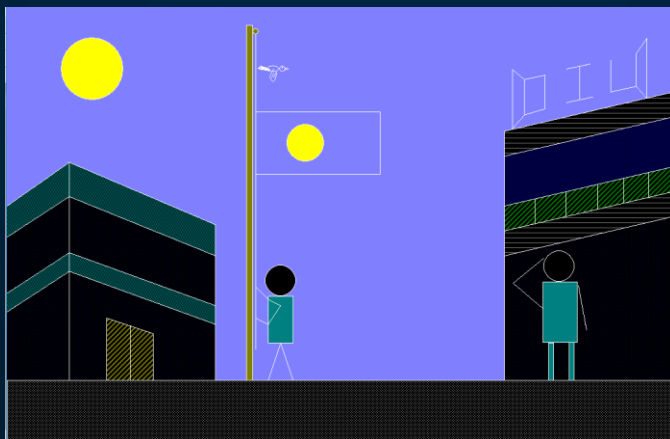
Sound function



Bangladesh

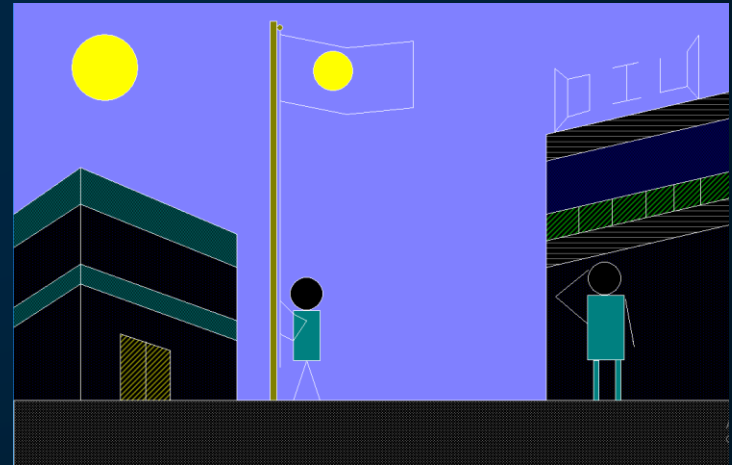
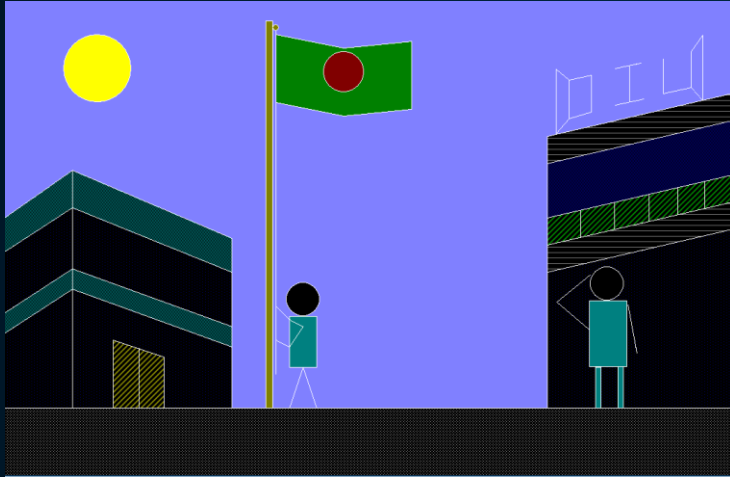


Japan



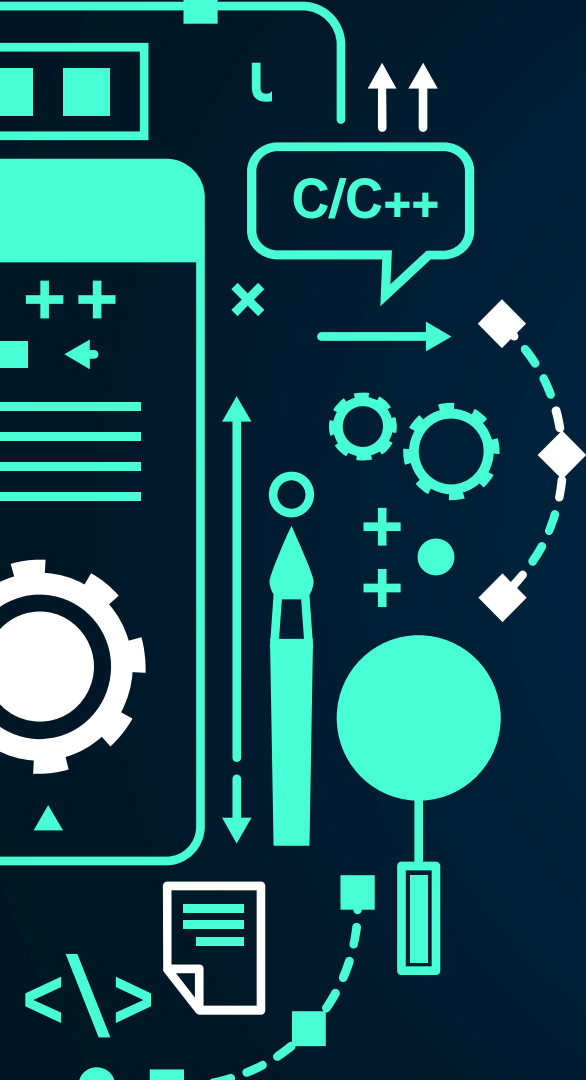
Palau

Waving Flag



Summary

- Make the motion realistic.
- Flag post and other can be improve with better quality of graphics design.
- Sound added with National anthem getting sung as flag get hoisted.
- Waving Flag after the Flag hoisting.
- Flag go up.
- Image added in this project (logo).
- Birds flying in the sky.



THANKS!

