**Mini Project**

**(Archery Game)**

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**EXPERIMENT 8:**

**code :**

#include<stdio.h>

#include<conio.h>

#include<graphics.h>

#include<C:\TURBOC3\BIN\INSERT\_I.c>

#include<C:\TURBOC3\BIN\song.c>

int a=0,point=0,remain=5,stop=30,max=0;

void elements();

void result1()

{ int i=0;

cleardevice();

while(1)

{ if(kbhit())

{getch();

break;

}

setcolor(WHITE);

rectangle(235,190,395,290);

setcolor(YELLOW);

outtextxy(265,240,"!! YOU WON !!");

delay(80);

setcolor(GREEN);

outtextxy(265,240,"!! YOU WON !!");

setcolor(GREEN);

rectangle(245,200,385,280);

delay(80);

if(i==0)

{

won();

i++;

}

}

}

void result2()

{ int i=0;

cleardevice();

while(1)

{ if(kbhit())

break;

setcolor(WHITE);

rectangle(235,190,395,290);

setcolor(BLUE);

outtextxy(260,240,"!! YOU LOST !!");

delay(80);

setcolor(RED);

outtextxy(260,240,"!! YOU LOST !!");

rectangle(245,200,385,280);

delay(80);

if(i==0)

{

lost();

i++;

}

}

}

void erase(int i)

{

setcolor(BLACK);

line(450-i,200,525-i,200);

line(450-i,200,453-i,203);

line(450-i,200,453-i,197);

}

void draw(int i)

{

setcolor(WHITE);

line(450-i,200,525-i,200);

line(450-i,200,453-i,203);

line(450-i,200,453-i,197);

}

void points\_display(int score)

{ char str[100];

sprintf(str,"%d",point);

setcolor(BLACK);

outtextxy(470,20,str);

point=point+score;

sprintf(str,"%d",point);

setcolor(WHITE);

outtextxy(470,20,str);

}

void anime(int i)

{ hit();

erase(i);

delay(200);

draw(i);

delay(200);

erase(i);

delay(200);

draw(i);

delay(200);

erase(i);

}

void arrow(int level)

{ int i=0 , color;

while(1)

{ delay(1);

if(525-i+1<435){

setcolor(BLACK);

line(450-i+1,200,525-i+1,200);

line(450-i+1,200,453-i+1,203);

line(450-i+1,200,453-i+1,197);

setcolor(WHITE);

line(450-i,200,525-i,200);

line(450-i,200,453-i,203);

line(450-i,200,453-i,197);

}

if(200>=45+a && 200<=60+a && 450-i>=44 && 450-i<=54)

{

points\_display(5);

anime(i);

break;

}

else if(200>=35+a && 200<=70+a && 450-i>=33 && 450-i<=43)

{

points\_display(4);

anime(i);

break;

}

else if(200>=25+a && 200<=80+a && 450-i>=22 && 450-i<=32)

{

points\_display(3);

anime(i);

break;

}

else if(200>=15+a && 200<=90+a && 450-i>=11 && 450-i<=21)

{

points\_display(2);

anime(i);

break;

}

else if(200>=5+a && 200<=100+a && 450-i>=1 && 450-i<=10)

{

points\_display(1);

anime(i);

break;

}

else if(450-i==0)

{ anime(i);

break;

}

//level 3

if(level==3 || level ==5)

{

//rectangle(300,30+stop,320,100+stop);

if(450-i>=300 && 450-i<=320 && 200>=30+stop && 200<=100+stop)

{

anime(i);

break;

}

//rectangle(200,330-stop,220,400-stop);

if(level==5)

{

if(450-i>=200 && 450-i<=220 && 200>=330-stop && 200<=400-stop)

{

anime(i);

break;

}

}

}

i++;

}

}

void target(int level)

{

int ch,i;

char str[100];

while(1)

{ if(level==1)

delay(3);

else if(level == 2)

delay(2);

else if(level == 3)

delay(3);

else if(level == 4)

{

delay(0);

level=3;

}

else

{

delay(0) ;

}

if(kbhit())

{ ch=getch();

if(ch==27)

break;

if(ch==' ')

{ if(level==3)

arrow(3);

else if(level==5)

arrow(5);

else

arrow(1);

sprintf(str,"No. of Arrows : %d",remain);

setcolor(BLACK);

outtextxy(395,35,str);

remain--;

sprintf(str,"No. of Arrows : %d",remain);

setcolor(WHITE);

outtextxy(395,35,str);

/\*

setcolor(WHITE);

line(450,200,525,200);

line(450,200,453,203);

line(450,200,453,197);

\*/

if(remain==0)

break;

}

}

if(a==300) {

back\_sound();

setcolor(5);

rectangle(1,5+a-1,54,100+a-1);

setfillstyle(SOLID\_FILL,BLACK);

floodfill(2,350,5);

floodfill(50,350,5);

setcolor(BLACK);

rectangle(1,5+a-1,54,100+a-1);

a=0;

}

if(stop==300)

{ setcolor(WHITE);

rectangle(290,310,330,420);

setfillstyle(SOLID\_FILL,BLACK);

floodfill(310,399,15);

floodfill(310,331,15);

setcolor(BLACK);

rectangle(300,325,320,395);

rectangle(290,310,330,420);

if(level==5){

setcolor(2);

rectangle(200,60,220,130);

setfillstyle(SOLID\_FILL,BLACK);

floodfill(210,129,2);

floodfill(210,61,2);

setcolor(BLACK);

rectangle(200,60,220,130);

}

stop=30;

}

setcolor(BLACK);

if(level==3 || level==5)

{ for(i=0;i<=5;i++)

{delay(1);

if(level==5 && 330-stop+i>=60)

rectangle(200,330-stop+i,220,400-stop+i);

rectangle(300,30+stop-i,320,100+stop-i);

}

}

rectangle(1,5+a-1,10,100+a-1);

rectangle(11,15+a-1,21,90+a-1);

rectangle(22,25+a-1,32,80+a-1);

rectangle(33,35+a-1,43,70+a-1);

rectangle(44,45+a-1,54,60+a-1);

setcolor(WHITE);

if(level==3 || level==5)

{

rectangle(300,30+stop,320,100+stop);

setfillstyle(SOLID\_FILL,BROWN);

floodfill(310,99+stop,15);

}

if(level==5 && 330-stop>=60)

{

rectangle(200,330-stop,220,400-stop);

setfillstyle(SOLID\_FILL,BROWN);

floodfill(210,331-stop,15);

}

rectangle(1,5+a,10,100+a);

setfillstyle(SOLID\_FILL,WHITE);

floodfill(5,99+a,15);

rectangle(11,15+a,21,90+a);

setfillstyle(SOLID\_FILL,8);

floodfill(16,89+a,15);

rectangle(22,25+a,32,80+a);

setfillstyle(SOLID\_FILL,CYAN);

floodfill(26,79+a,15);

rectangle(33,35+a,43,70+a);

setfillstyle(SOLID\_FILL,RED);

floodfill(34,69+a,15);

rectangle(44,45+a,54,60+a);

setfillstyle(SOLID\_FILL,YELLOW);

floodfill(45,59+a,15);

a++;

if(level==3 || level==5)

stop=stop+5;

}

}

void elements()

{ char str[100];

//goal

setcolor(WHITE);

outtextxy(90,5,"Target : ");

setcolor(CYAN);

outtextxy(160,5,"Score More Than 10 Points");

//no of asetcolor(CYAN);

sprintf(str,"No. of Arrows : %d",remain);

setcolor(WHITE);

outtextxy(395,35,str);

//points

outtextxy(395,20,"Points : ");

//arrow

line(450,200,525,200);

line(450,200,453,203);

line(450,200,453,197);

//action

setcolor(GREEN);

outtextxy(135,35,"!! Press Space to Shoot !!");

//wall

ShowBMP(0,430,"wall.BMP");

ShowBMP(256,430,"wall.BMP");

//img pillar

ShowBMP(393,379,"obj.BMP");

//img

ShowBMP(400,143,"cgg\_img2.BMP");

//img moon

ShowBMP(570,3,"moon.BMP");

setcolor(WHITE);

rectangle(385,0,535,50);

rectangle(386,1,536,49);

rectangle(85,0,534,50);

rectangle(86,1,535,49);

}

void max1()

{ char str[100];

if(point>=max)

{

setcolor(BLACK);

sprintf(str,"HIGH SCORE : %d",max);

outtextxy(393,7,str);

max=point;

setcolor(13);

sprintf(str,"HIGH SCORE : %d",max);

outtextxy(393,7,str);

}

else

{

setcolor(13);

sprintf(str,"HIGH SCORE : %d",max);

outtextxy(393,7,str);

}

}

void gameover()

{

char str[100];

int i=0;

cleardevice();

sprintf(str,"HIGH SCORE : %d",max);

outtextxy(15,10,str);

setcolor(RED);

settextstyle(0,0,5);

outtextxy(135,160,"GAME OVER");

settextstyle(0,0,3);

while(1)

{ if(kbhit())

{getch();

settextstyle(0,0,1);

break;

}

setcolor(WHITE);

// rectangle(235,190,395,290);

setcolor(YELLOW);

outtextxy(165,245,"!! YOU WON !!");

delay(80);

setcolor(GREEN);

outtextxy(165,245,"!! YOU WON !!");

setcolor(GREEN);

// rectangle(245,200,385,280);

delay(80);

if(i==0)

{

won();

i++;

}

}

}

int main()

{ int gm,gd;

char str[100];

gd=DETECT;

initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");

elements();

outtextxy(90,20,"Info : ");

setcolor(YELLOW);

outtextxy(160,20,"Hit the target");

max1();

//level 1

setcolor(YELLOW);

outtextxy(550,10,"Level 1");

//sound

my\_sounds();

//arrow end

target(1);

//end

if(point>=10)

result1();

else{

result2();

exit(0);

}

//max

//level 2

cleardevice();

max1();

setcolor(WHITE);

outtextxy(90,20,"Info : ");

setcolor(YELLOW);

outtextxy(160,20,"Hit the target with 2x speed");

point=0;

remain=5;

a=0;

elements();

setcolor(YELLOW);

outtextxy(550,10,"Level 2");

//sound

my\_sounds();

//arrow end

target(2);

//end

if(point>=10)

result1();

else{

result2();

exit(0);

}

//level 3

cleardevice();

max1();

point=0;

remain=5;

a=0;

elements();

setcolor(WHITE);

outtextxy(90,20,"Info : ");

setcolor(YELLOW);

outtextxy(160,20,"Avoid the obstacle");

setcolor(YELLOW);

outtextxy(550,10,"Level 3");

//sound

my\_sounds();

//arrow end

target(3);

//end

if(point>=10)

result1();

else{

result2();

exit(0);

}

//level 4

cleardevice();

max1();

point=0;

remain=5;

a=0;

elements();

setcolor(YELLOW);

outtextxy(550,10,"Level 4");

setcolor(WHITE);

outtextxy(90,20,"Info : ");

setcolor(YELLOW);

outtextxy(160,20,"Avoid obstacle with 2x speed");

//sound

my\_sounds();

//arrow end

target(4);

//end

if(point>=10)

result1();

else{

result2();

exit(0);

}

//level 5

cleardevice();

max1();

point=0;

remain=5;

a=0;

elements();

setcolor(YELLOW);

outtextxy(550,10,"Level 5");

setcolor(WHITE);

outtextxy(90,20,"Info : ");

setcolor(YELLOW);

outtextxy(160,20,"Avoid two obstacles");

//sound

my\_sounds();

//arrow end

target(5);

//end

if(point>=10)

gameover();

else{

result2();

exit(0);

}

closegraph();

return 0;

}

**output :**

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