#include<simplecpp>

main\_program

{

initCanvas("GAMEPLAY",800,600);

//HOME PAGE

for(int f=0; f<8888; f++)

{

Rectangle bkgrd(400,300,810,610);

bkgrd.setColor(COLOR("blue"));

bkgrd.setFill();

Rectangle game(400,50,400,100);

game.setColor(COLOR("yellow"));

game.setFill();

Text gamename(400,50,"SCRAPPY");

gamename.imprint();

gamename.scale(5);

Rectangle play(400,200,190,40);

play.setFill();

play.setColor(COLOR("white"));

Text playgame(400,200,"Play Game"); //to start the game

Rectangle inst(400,300,190,40);

inst.setFill();

inst.setColor(COLOR("white"));

Text instr(400,300,"Instructions"); //to guide players

Rectangle exit(400,400,190,40);

exit.setFill();

exit.setColor(COLOR("white"));

Text exits(400,400,"Exit"); //to exit the game

Rectangle cred(400,500,190,40);

cred.setColor(COLOR("white"));

cred.setFill();

Text credt(400,500,"Credits"); //credits

int clickPos=getClick();

int cx=clickPos/65536;

int cy=clickPos%65536;

//INSTRUCTIONS

if(cx>300&&cx<500&&cy>280&&cy<320)

{

playgame.hide();

instr.hide();

exits.hide();

credt.hide();

play.hide();

inst.hide();

exit.hide();

cred.hide();

Text bak1(270,150,"Click anywhere to return to homepage");

Rectangle ins(350,270,420,50);

ins.setColor(COLOR("white"));

ins.setFill();

Text in(350,270,"Press the SPACEBAR to go up and leave to go down");

Rectangle res(350,370,420,50);

res.setColor(COLOR("white"));

res.setFill();

Text re(350,370,"Press key 'r' to go back to homepage in the middle of the game");

int clickPos=getClick();

}

//GAMEPLAY

if(cx>300&&cx<500&&cy>180&&cy<220)

{

playgame.hide();

instr.hide();

exits.hide();

credt.hide();

game.hide();

play.hide();

inst.hide();

exit.hide();

cred.hide();

gamename.hide();

//creating 3 obstacles

Rectangle obs1(810,90,20,80), obs2(810,300,20,80), obs3(810,510,20,80);

obs1.setColor(COLOR("black"));

obs1.setFill();

obs2.setColor(COLOR("black"));

obs2.setFill();

obs3.setColor(COLOR("black"));

obs3.setFill();

Rectangle obsup(400,25,800,50), obsdown(400,575,800,50);

obsup.setColor(COLOR("black"));

obsup.setFill();

obsdown.setColor(COLOR("black"));

obsdown.setFill();

double obs1x=300,obs2x=600,obs3x=900,obs1y=100,obs2y=randuv(50,550),obs3y=randuv(50,550);

double obssp=3;

// Array for coordinates of helicopter in two different positions.

double ycord = 300;

double a[19][2]={{0,-50},{-30,-45},{-30,-55},{30,-45},{30,-55},{0,-50},{0,-30},{25,-30},{50,0},{25,30},{-25,30},{-50,5},{-80,5},{-90,20},{-90,-20},{-80,-5},{-50,-5},{-25,-30},{0,-30}};

double b[19][2]={{0,-50},{5,-35},{-5,-35},{5,-65},{-5,-65},{0,-50},{0,-30},{25,-30},{50,0},{25,30},{-25,30},{-50,5},{-80,5},{-90,20},{-90,-20},{-80,-5},{-50,-5},{-25,-30},{0,-30}};

Polygon heli(200,ycord,a,19);

while (true)

{

//for moving the obstcales from right to left

obs1x-=obssp;

obs2x-=obssp;

obs3x-=obssp;

if(obs1x<=0)

{

obs1x=900;

}

if(obs2x<=0)

{

obs2x=900;

}

if (obs3x<=0)

{

obs3x=900;

}

beginFrame();

obs1.reset(obs1x,obs1y,20,100);

obs2.reset(obs2x,obs2y,20,100);

obs3.reset(obs3x,obs3y,20,100);

endFrame();

//for rotating the blades of the helicopter

beginFrame();

heli.reset(200,ycord,a,19);

heli.setColor(COLOR("yellow"));

heli.setFill();

endFrame();

beginFrame();

heli.reset(200,ycord,b,19);

heli.setColor(COLOR("yellow"));

heli.setFill();

endFrame();

// MOVING THE HELICOPTER

XEvent e;

if (checkEvent(e))

{

if (keyPressEvent(e))

{

char c = charFromEvent(e);

if((int)c == 32)

{

ycord -= 20; //helicopter goes up

}

if((int)c == 114)

{

break;

}

else

{

ycord += 0.8;

}

}

}

else

{

ycord += 0.8;

}

//checking for collisions

if(ycord>=520 || ycord<=105 || ((200<obs1x+100 && 200>obs1x-60) && (ycord<obs1y+95 && ycord>obs1y-70))||((200<obs2x+100 && 200>obs2x-60) && (ycord<obs2y+95 && ycord>obs2y-70)) || ((200<obs3x+100 && 200>obs3x-60) && (ycord<obs3y+95 && ycord>obs3y-70)))

{

wait(1);

Text gameover(400,300,"GAME OVER");

wait(4);

break;

}

}

}

//TO EXIT THE GAME

if(cx>300&&cx<500&&cy>380&&cy<420)

{

break;

}

if(cx>300&&cx<500&&cy>480&&cy<520)

{

playgame.hide();

instr.hide();

exits.hide();

credt.hide();

play.hide();

inst.hide();

exit.hide();

cred.hide();

Rectangle rr(400,330,300,300);

rr.setColor(COLOR("white"));

rr.setFill();

Text t1(400,250,"BY TEAM 16 DEJ");

Text t2(400,300,"DRUVI TENDULKAR(1914014)");

Text t3(400,350,"ENID FERNANDES(1914015)");

Text t4(400,400,"JAYSEL SILVEIRA(1914018)");

Text t5(400,550,"Click anywhere to return to HomePage");

int clickPos=getClick();

}

}

}