**Department Of Computer Science And Engineering**

**University Of Dhaka**

**Software project Title : SURVIVING CAR**

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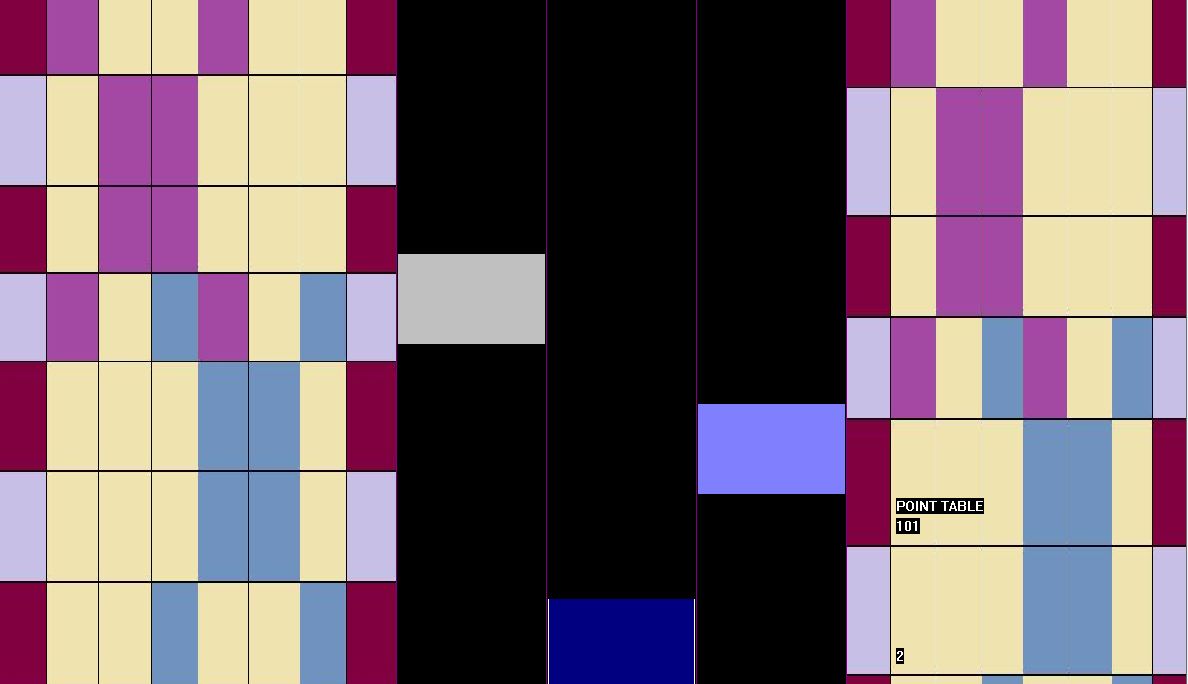
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**Introduction:**

This is a simple game of car surving . This program is written in the language C and using Microsoft Visual C++ compiler.

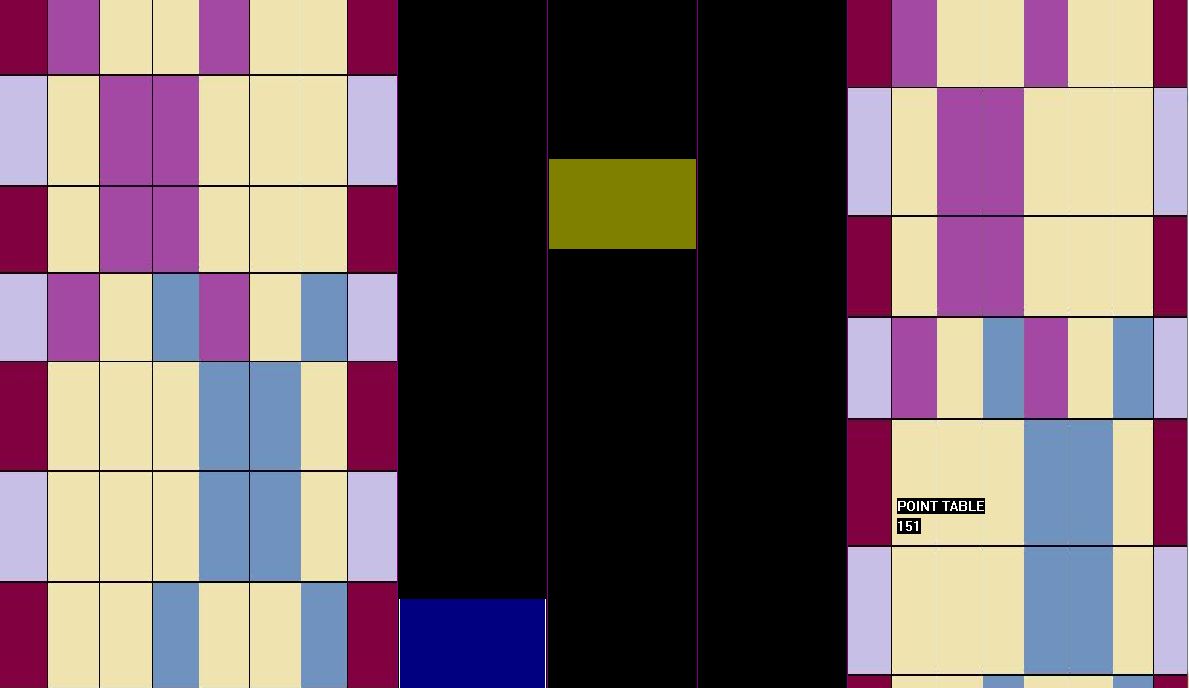
**Description:**

There are three lane in the game window . Enemy cars are coming from every lane in a different time .There is a car in the bottom of the window and the player has to move the car to avoid collision from the enemy car .

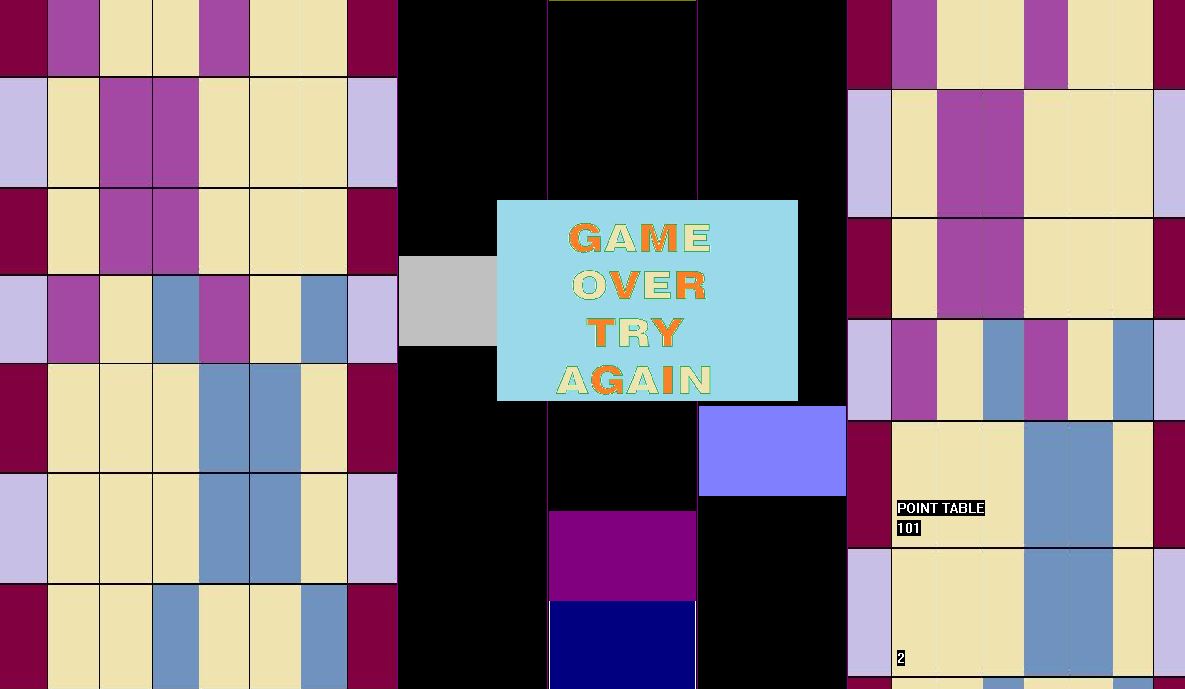
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Though there is no level in the game it has different difficulty as the score goes up.

By pressing ‘a’ or ‘s’ or ‘d’ car can be moved.



If any enemy car either touch or run over the player car game will be over.



**Functional** **Features:**

|  |
| --- |
| main () |

A player must play a game from the beginning . player can move his car by key button ‘a’,’s’,’d’.

Button ‘a’ always move the car to the most left lane , ‘s’ move the car to the middle lane and ‘d’ move the car to the most right lane.

**Description of the user defined functions:**

1. my\_car()
2. my\_front\_enemy
3. my\_left\_eneme\_car
4. my\_right\_eneme\_car
5. void outintxy

**Header files used in the project :**

1. Header file stdio.h: This header file is used for these functions:

scanf() : Takes input.

getchar(): Takes character input.

2. Header file stdlib.h: exit(0): Exits the program.

3. Header file conio.h: kbhit(): Detects any hit from the keyboard.

gotoxy(): Moves cursor to the (x, y) position.

4. Header file graphics.h:

initwindow(): Get a window .

setcolor(): Sets the current colour.

settextstyle(): Imposes the style, direction and size of a text.

outtextxy(): Shows message on a given coordinate.

rectangle(): Draws a rectangle.

setfillstyle(): Imposes the colour and pattern of filling.

bar(): Draws a solid rectangle.

setbkcolor(): Sets current background colour.

line(): Draws a line between two given coordinates.

**Source Code:**

#include"graphics.h"

//#include <stdlib.h>

//#include <stdio.h>

//#include <conio.h>

//#include "winbgim.h"

char key;

int chek1,chek2;

int in1,in2;

char name[20];

int my\_car\_black(int leftm)

{

int count;

int x=0;

setfillstyle(SOLID\_FILL,0);

setcolor(0);

bar(leftm+552+x,600,leftm+698+x,690);

rectangle(leftm+552+x,600,leftm+698+x,690);

return 0;

}

int my\_car(int leftm,int chek3,int chek4,int position)

{

int count;

int a,b,c,d;

int x=0;

setfillstyle(SOLID\_FILL,1);

setcolor(1);

bar(leftm+552+x,600,leftm+698+x,690);

rectangle(leftm+552+x,600,leftm+698+x,690);

//readimagefile("game\_hero.jpg",leftm+552+x,600,leftm+698+x,690);

count=2;

position=count;

chek3=leftm+552+x,chek4=630;

return (leftm,chek3,chek4,position);

}

int my\_front\_enemy(int y,int chek5,int chek6,int position)

{

int val=0;

//val=-y;

int num=0;

num=chek6;

int z=0;

int chek3,chek4,push=-400;

//MY FRONT ENYMY

setfillstyle(SOLID\_FILL,5);

setcolor(5);

bar(552+z,0+y+val,698+z,90+y);

rectangle(552+z,0+y+val,698+z,90+y);

//delay(200);

setfillstyle(SOLID\_FILL,0);

setcolor(0);

bar(552+z,0+y+val-90,698+z,90+y-90);

rectangle(552+z,0+y+val-90,698+z,90+y-90);

setfillstyle(SOLID\_FILL,6);

setcolor(6);

bar(552,0+y+val+push,698,90+y+push);

rectangle(552,0+y+val+push,698,90+y+push);

//delay(200);

setfillstyle(SOLID\_FILL,0);

setcolor(0);

bar(552,0+y+val-90+push,698,90+y-90+push);

rectangle(552,0+y+val-90+push,698,90+y-90+push);

chek3=552+z,chek4=90+y;

int chekf1,chekf2=90+y+push;

int up1=0,up2=0;

up2=0+y+val+push;

up1=0+y+val;

//down chek

if(chek4>=600&&chek4<=614&&position==2&&chek3==chek5)

{

readimagefile("apu1.jpg",500,200,800,400);

outtextxy(900,600,"GAME OVER");

scanf("%s",name);

//scanf("%s",name);

exit(1);

}

else if(chekf2>=600&&chekf2<=614&&position==2&&chek3==chek5)

{

readimagefile("apu1.jpg",500,200,800,400);

outtextxy(900,600,"GAME OVER");

scanf("%s",name);

//scanf("%s",name);

exit(1);

}

//up chek

else if(up1>=600&&up1<=614&&position==2&&chek3==chek5)

{

readimagefile("apu1.jpg",500,200,800,400);

outtextxy(900,600,"GAME OVER");

scanf("%s",name);

//scanf("%s",name);

exit(1);

}

else if(up2>=600&&up2<=614&&position==2&&chek3==chek5)

{

readimagefile("apu1.jpg",500,200,800,400);

outtextxy(900,600,"GAME OVER");

scanf("%s",name);

//scanf("%s",name);

exit(1);

}

else if(up1>=600+90&&up1<=614+90&&position==2&&chek3==chek5)

{

readimagefile("apu1.jpg",500,200,800,400);

outtextxy(900,600,"GAME OVER");

scanf("%s",name);

//scanf("%s",name);

exit(1);

}

else if(up2>=600+90&&up2<=614+90&&position==2&&chek3==chek5)

{

readimagefile("apu1.jpg",500,200,800,400);

outtextxy(900,600,"GAME OVER");

scanf("%s",name);

//scanf("%s",name);

exit(1);

}

position=2;

return (y,chek5,chek6,position);

}

int my\_left\_eneme\_car(int y,int chek7,int chek8,int position)

{

int val=0;

// val=-y;

int num=0;

num=chek8;

int chek3,chek4;

//int zz,add,back;

int z=0,zz=0,add=-250,back=-200,push=-240;

//readimagefile("game6.jpg",552+z,0+y+val,698+z,90+y);

setfillstyle(SOLID\_FILL,7);

setcolor(7);

bar(402+z,add+0+y+val,548+z,add+90+y+val);

rectangle(402+z,add+0+y+val,548+z,add+90+y+val);

//delay(200);

setfillstyle(SOLID\_FILL,0);

setcolor(0);

bar(402+z,add+0+y+val-90,548+z,add+90+y+val-90);

rectangle(402+z,add+0+y+val-90,548+z,add+90+y+val-90);

setfillstyle(SOLID\_FILL,8);

setcolor(8);

bar(402,add+0+y+val+push,548,add+90+y+val+push);

rectangle(402,add+0+y+val+push,548,add+90+y+val+push);

//delay(200);

setfillstyle(SOLID\_FILL,0);

setcolor(0);

bar(402,add+0+y+val-90+push,548,add+90+y+val-90+push);

rectangle(402,add+0+y+val-90+push,548,add+90+y+val-90+push);

//enemy car

//1

int chekl1,chekl2;

chek3=402+z,chek4=add+90+y;

chekl2=add+90+y+val+push;

int lef1=0,lef2=0;

lef1=add+0+y+val;

lef2=add+0+y+val+push;

//front up chek

if(chek4>=600&&chek4<=614&&position==1&&(chek3==chek7))

{

readimagefile("apu1.jpg",500,200,800,400);

//outtextxy(900,600,"GAME OVER");

scanf("%s",name);

outtextxy(900,565,name);

delay(200);

exit(1);

}

else if(chekl2>=600&&chekl2<=614&&position==1&&(chek3==chek7))

{

readimagefile("apu1.jpg",500,200,800,400);

//outtextxy(900,600,"GAME OVER");

scanf("%s",name);

outtextxy(900,565,name);

delay(200);

exit(1);

}

//front down chek

else if(chek4>=600+90&&chek4<=614+90&&position==1&&(chek3==chek7))

{

readimagefile("apu1.jpg",500,200,800,400);

//outtextxy(900,600,"GAME OVER");

scanf("%s",name);

outtextxy(900,565,name);

delay(200);

exit(1);

}

else if(chekl2>=600+90&&chekl2<=614+90&&position==1&&(chek3==chek7))

{

readimagefile("apu1.jpg",500,200,800,400);

//outtextxy(900,600,"GAME OVER");

scanf("%s",name);

outtextxy(900,565,name);

delay(200);

exit(1);

}

//back up chek

else if(lef1>=600&&lef1<=614&&position==1&&(chek3==chek7))

{

readimagefile("apu1.jpg",500,200,800,400);

//outtextxy(900,600,"GAME OVER");

scanf("%s",name);

outtextxy(900,565,name);

delay(200);

exit(1);

}

else if(lef2>=600&&lef2<=614&&position==1&&(chek3==chek7))

{

readimagefile("apu1.jpg",500,200,800,400);

//outtextxy(900,600,"GAME OVER");

scanf("%s",name);

outtextxy(900,565,name);

delay(200);

exit(1);

}

position=1;

return (y,chek7,chek8,position);

}

int my\_right\_eneme\_car(int yy,int chek9,int chek10,int position)

{

// int zz,add,back;

int val=0;

// val=-yy;

int num=0;

num=chek10;

int add=-300,back=-100,push=-700;

int chek3,chek4;

setfillstyle(SOLID\_FILL,9);

setcolor(9);

bar(702,back+0+yy+val,848,back+90+yy);

rectangle(702,back+0+yy+val,848,back+90+yy);

//delay(200);

setfillstyle(SOLID\_FILL,0);

setcolor(0);

bar(702,back+0+yy+val-90,848,back+90+yy-90);

rectangle(702,back+0+yy+val-90,848,back+90+yy-90);

setfillstyle(SOLID\_FILL,10);

setcolor(10);

bar(702,back+0+yy+val+push,848,back+90+yy+push);

rectangle(702,back+0+yy+val+push,848,back+90+yy+push);

//delay(200);

setfillstyle(SOLID\_FILL,0);

setcolor(0);

bar(702,back+0+yy+val-90+push,848,back+90+yy-90+push);

rectangle(702,back+0+yy+val-90+push,848,back+90+yy-90+push);

int chekf1,chekr2;

chek3=702,chek4=back+90+yy;

chekr2=back+90+yy+push;

int rig1=0,rig2=0;

rig1=back+0+yy+val;

rig2=back+0+yy+val+push;

//front up chek

if(chek4>=600&&chek4<=614&&position==3&&(chek3==chek9))

{

readimagefile("apu1.jpg",500,200,800,400);

outtextxy(900,600,"GAME OVER");

scanf("%s",name);

exit(1);

}

else if(chekr2>=600&&chekr2<=614&&position==3&&(chek3==chek9))

{

readimagefile("apu1.jpg",500,200,800,400);

//outtextxy(900,600,"GAME OVER");

scanf("%s",name);

exit(1);

}

//front down chek

else if(chek4>=600+90&&chek4<=614+90&&position==3&&(chek3==chek9))

{

readimagefile("apu1.jpg",500,200,800,400);

outtextxy(900,600,"GAME OVER");

scanf("%s",name);

exit(1);

}

else if(chekr2>=600+90&&chekr2<=614+90&&position==3&&(chek3==chek9))

{

readimagefile("apu1.jpg",500,200,800,400);

//outtextxy(900,600,"GAME OVER");

scanf("%s",name);

exit(1);

}

//back up chek

else if(rig1>=600&&rig1<=614&&position==3&&(chek3==chek9))

{

readimagefile("apu1.jpg",500,200,800,400);

outtextxy(900,600,"GAME OVER");

scanf("%s",name);

exit(1);

}

else if(rig2>=600&&rig2<=614&&position==3&&(chek3==chek9))

{

readimagefile("apu1.jpg",500,200,800,400);

//outtextxy(900,600,"GAME OVER");

scanf("%s",name);

exit(1);

}

position=3;

return (yy,chek9,chek10,position);

}

void outintxy(int x, int y, int value)

{

char digit\_string[20];

sprintf(digit\_string, "%d", value);

outtextxy(x, y, digit\_string);

}

int main()

{

//if(ismouseclick(WM\_LBUTTONDOWN))

int car\_position;

char score[10];

int count=0;

//char apu="";

int leftm=0;

//my\_car(leftm);

//getdisplaycolor(WHITE);

int incre=100,decre=-100,add=300,sub=-300;

int left=100,right=200,bottom=300,top=400,e=500,f=600,g=10;

int left1=400,right1=850,top1=0,bottom1=690;

initwindow(1200,700,"CAR GAME");

//left\_side

readimagefile("side13.jpg",0,0,left1,bottom1);

//right\_side

readimagefile("side13.jpg",850,0,1200,800);

//road

setfillstyle(SOLID\_FILL,RED+BLUE);

setcolor(RED+BLUE);

bar(left1,top1,left1,bottom1);

line(left1,top1,left1,bottom1);

line(right1,top1,right1,bottom1);

line(550,0,550,690);

line(700,0,700,690);

int x=0;

int point=0,position=0;

//count=0;

int chek1=0,chek2=0;

//my\_car(leftm,chek1,chek2,position);

int y=0,z=0,yy=0,zz=0;

int max=1600;

int in1=5,in2=5;

int a,b;

my\_car(0,552,0,2);

y=0,yy=0;

char prevkey='s';

//for(;y<=1000&&yy<=max;y=y+60,yy=yy+60)

car\_position=552;

//chek1=552;

while(1)

{

if(count<=300)

{

y=y+5,yy=yy+5;

}

else if(count>=301&&count<=1000)

{

y=y+10,yy=yy+10;

}

else

{

y=y+15,yy=yy+15;

}

chek2=5;

outintxy(900,520,count);

outtextxy(900,500,"POINT TABLE");

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

if(kbhit())

{

key=getch();

prevkey=key;

//left

if(key=='a')

{

leftm=-150;

chek1=-150+552;

//car\_position=chek1;

my\_car(leftm,chek1,chek2,position);

//chek1=chek1+150;

my\_car\_black(0);

//chek1=chek1+150;

my\_car\_black(150);

my\_front\_enemy(y,chek1,chek2,1);

//my\_front\_enemy\_black(y,chek1,chek2,1);

//my\_left\_eneme\_car\_balck(y-5,chek1,chek2,1);

my\_left\_eneme\_car(y,chek1,chek2,1);

// my\_left\_eneme\_car\_balck(y,chek1,chek2,1);

my\_right\_eneme\_car(yy,chek1,chek2,1);

}

else if(key=='d')

{

leftm=150;

chek1=552+150;

chek2=5;

my\_car(leftm,chek1,chek2,position);

my\_car\_black(-150);

my\_car\_black(0);

my\_front\_enemy(y,chek1,chek2,3);

my\_left\_eneme\_car(y,chek1,chek2,3);

my\_right\_eneme\_car(yy,chek1,chek2,3);

}

else if(key=='s')

{

leftm=0;

chek1=552+0;

chek2=5;

my\_car(leftm,chek1,chek2,position);

my\_car\_black(150);

my\_car\_black(-150);

my\_front\_enemy(y,chek1,chek2,2);

my\_left\_eneme\_car(y,chek1,chek2,2);

my\_right\_eneme\_car(yy,chek1,chek2,2);

}

}

else

{

//left

if(prevkey=='a')

{

leftm=-150;

chek1=-150+552;

my\_car(leftm,chek1,chek2,position);

my\_car\_black(0);

my\_car\_black(150);

my\_front\_enemy(y,chek1,chek2,1);

my\_left\_eneme\_car(y,chek1,chek2,1);

my\_right\_eneme\_car(yy,chek1,chek2,1);

}

else if(prevkey=='d')

{

leftm=150;

chek1=552+150;

my\_car(leftm,chek1,chek2,position);

my\_car\_black(-150);

my\_car\_black(0);

my\_front\_enemy(y,chek1,chek2,3);

my\_left\_eneme\_car(y,chek1,chek2,3);

my\_right\_eneme\_car(yy,chek1,chek2,3);

}

else if(prevkey=='s')

{

leftm=0;

chek1=552+0;

my\_car(leftm,chek1,chek2,position);

my\_car\_black(150);

my\_car\_black(-150);

my\_front\_enemy(y,chek1,chek2,2);

my\_left\_eneme\_car(y,chek1,chek2,2);

my\_right\_eneme\_car(yy,chek1,chek2,2);

}

}

my\_car(leftm,chek1,chek2,position);

score[0]=2+'0';

score[1]='\0';

outtextxy(900,650,score);

count=count+1;

printf("%d\n", count);

if(yy>=max)

{

yy=0,y=0;

//count+=1;

//count=count%100;

}

delay(1);

}

return 0;

}

**Limitations:**

This project has a few drawbacks. These draw backs

are as follows :

1. There no level that can be direct played.
2. We have use there keys but it less the game’s fun as its become easy though we tried to give the enemy car more speed.
3. There no menu bar .
4. The graphical environment of this project is not

attractive enough.

Conclution :

In spite of limitations this game may be enjoyable to the player. The game runs under the graphical driverBGI . We hope that in future,

we will be able to extend this game. make the graphical environment

look better. It was our first step to make any game or software. The coding was enjoyable for us.

**References:**

This project is done according to our teacher’s idea. We are grateful to our friends who helped us in our project. And to be honest the main reference was turbo C help file. We think that this is enough to establish the graphical environment. Some books for library functions and syntax:

1. Programming in ANSI C- E Balagurusamy.