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Game programming assignment

Problem 1: car moves to the wall without any input

Code:

```
////////////////////////////////////////////////
// Game Programming All In One, Third Edition
// Chapter 5, MouseWheel Program
////////////////////////////////////////////////

#include <allegro.h>

#define WHITE makecol(255,255,255)
#define BLACK makecol(0,0,0)
#define AQUA makecol(0,200,255)

int main(void)
{
    int n, color, value,x=100,y;
    BITMAP *wall;
     BITMAP *car;


    //initialize program
```

```
allegro_init();

set_color_depth(16);

set_gfx_mode(GFX_AUTODETECT_WINDOWED, 640, 480, 0, 0);

install_keyboard();

install_mouse();

textout_ex(screen,font,"car crash Program (ESC to quit)",0,0,WHITE,0);



//load the control wall image

wall = load_bitmap("wall.bmp", NULL);


 //load the control car image

car = load_bitmap("Car.bmp", NULL);


int x1 = 49 , y1 = 199 , x2 = 165 , y2 =284;

value=200;

int xx = 50, yy = 200;

position_mouse_z(value);



while (!key[KEY_ESC])

{

   while(xx <450)
   {
       draw_sprite(screen,wall , 550, 150);
   draw_sprite(screen,car , xx, yy);
```

```c
        rest(200);


        // erase car image
        rectfill(screen,x1 ,y1 ,x2 , y2 , makecol(0,0,0));


        xx = xx+50 ;
        x1 = x1+50;
        x2 = x2+50;



        }



        textout_ex(screen, font, "crashshshshshsh", 250, 240, AQUA, -1);


    }


    allegro_exit();
    return 0;
}
END_OF_MAIN()
```

Problem 2: car moves with an input from keyboard

Code:

```
/////////////////////////////////////////////////
// Game Programming All In One, Third Edition
// Chapter 5, MouseWheel Program
/////////////////////////////////////////////////

#include <allegro.h>

#define WHITE makecol(255,255,255)
#define BLACK makecol(0,0,0)
#define AQUA makecol(0,200,255)

int main(void)
{

    BITMAP *wall;
    BITMAP *car;

    //initialize program
    allegro_init();
    set_color_depth(16);
    set_gfx_mode(GFX_AUTODETECT_WINDOWED, 640, 480, 0, 0);
    install_keyboard();
    install_mouse();
    textout_ex(screen,font,"car crash Program (ESC to quit)",0,0,WHITE,0);
```

```
//load the control wall image

wall = load_bitmap("wall.bmp", NULL);


 //load the control car image

car = load_bitmap("Car.bmp", NULL);


int x1 = 49 , y1 = 199 , x2 = 165 , y2 =284;


int xx = 50, yy = 200;




while (!key[KEY_ESC])
{
        draw_sprite(screen,wall , 550, 150);
   draw_sprite(screen,car , xx, yy);
   if(key[KEY_RIGHT])
   {

    if(xx <450)
    {


     rest(200);


     // erase car image
```

```c
            rectfill(screen,x1 ,y1 ,x2 , y2 , makecol(0,0,0));


        xx = xx+50 ;

        x1 = x1+50;

        x2 = x2+50;



        }
        else
        {


            textout_ex(screen, font, "crashshshshshsh", 250, 240, AQUA, -1);

        }



        }


    allegro_exit();

    return 0;
}
END_OF_MAIN()
```

Problem 3: mouse is the car

Code:

```
///////////////////////////////////////////////
// Game Programming All In One, Third Edition
// Chapter 5, PositionMouse Program
///////////////////////////////////////////////

#include <allegro.h>

#define WHITE makecol(255,255,255)

int mouseinside(int x1,int y1,int x2,int y2)
{
   if (mouse_x > x1 && mouse_x < x2 && mouse_y > y1 && mouse_y < y2)
      return 1;
   else
      return 0;
}

int main(void)
{
   int n;
   BITMAP *ship , *wall;

   //initialize program
   allegro_init();
   set_color_depth(16);
   set_gfx_mode(GFX_AUTODETECT_WINDOWED, 640, 480, 0, 0);
```

```c
install_keyboard();

install_mouse();

textout_ex(screen,font,"PositionMouse Program (ESC to quit)",0,0,WHITE,0);


//load the custom mouse pointer
 ship = load_bitmap("Car.bmp", NULL);

set_mouse_sprite(ship);

set_mouse_sprite_focus(ship->w/2,ship->h/2);

show_mouse(screen);


//load the control wall image
 wall = load_bitmap("wall.bmp", NULL);




int x1 = 49 , y1 = 199 , x2 = 165 , y2 =284;


int xx = 50, yy = 200;


while (!key[KEY_ESC])
{

    draw_sprite(screen,wall , 550, 150);
    //rectfill(screen, 550,150 , 640 , 370 , makecol(255,0,0));
    if (mouse_x >= 550 && mouse_y >=150 && mouse_y <= 370)
    {
      textout_ex(screen, font, "crashshshshshsh", 250, 240, makecol(255,0,0), -1);


    }
```

```c
    }
    //set_mouse_sprite(NULL);

    destroy_bitmap(ship);

    allegro_exit();

    return 0;
}
END_OF_MAIN()
```