



## Assignment Cover Letter

(Individual Work)

### Student Information:

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<b>Course Code</b>	: COMP6502	<b>Course Name</b>	: Introduction to Programming
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<b>Class</b>	: L1AC	<b>Name of Lecturer(s)</b>	: 1. Bagus Kerthyayana 2. Tri Asih Budiono
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<b>Major</b>	: CS
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<b>Title of Assignment</b> (if any)	: Car Simulation
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<b>Type of Assignment</b>	: Final Project
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### Submission Pattern

<b>Due Date</b>	: 8-11-2017	<b>Submission Date</b>	: 8-11-2017
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Signature of Student:

Muhammad Andi Yusuf

## "Car Simulation"

Name = Muhammad Andi Yusuf

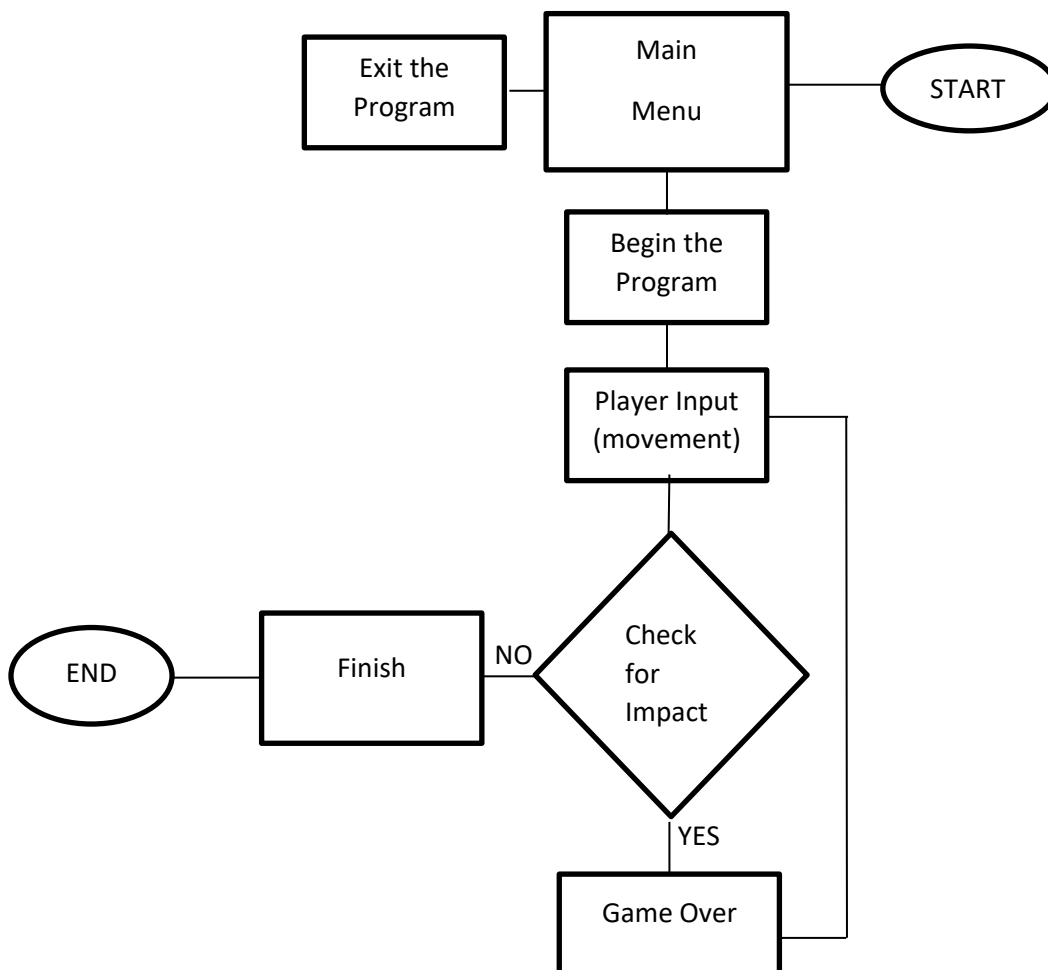
ID = 2101718476

### I. Description

Function this Program :

This program acts to entertain people who play this game. However, this game includes a scary sound if the car hit the wall. On other word, this car simulation is almost the same as scary maze, but without ghost screen. This game is for the people whom enjoys playing scary games.

### II. Flow Chart



### III. Each Function

Class (Class.py):

Car1() and Car2():

- Car 1 and Car2 Class are the blue print of the car that player will play with during the game
- Def move function is the function that will move the care position so that the car looked like as if it is moving
- For  $x -= 3$ ,  $x += 3$ ,  $y -= 3$ ,  $y += 3$  about car move speed in the game and directions.
- The different between Car1 and Car2 is the stage. Its mean, Car1 for the stage one and Car2 for the stage 2.
- 

```
6 class Car1(Sprite):
7     def __init__(self, image_file, x,y):
8         Sprite.__init__(self)
9         self.image = pygame.image.load("Car down.png")
10        self.rect = self.image.get_rect()
11        self.x = x
12        self.y = y
13        self.rect.left = x
14        self.rect.top = y
15    def move(self, direction):
16        if direction:
17            if direction == K_UP:
18                self.y -= 3
19                self.image = pygame.image.load('Car up.png')
20                self.rect.left = self.x
21                self.rect.top = self.y
22            elif direction == K_DOWN:
23                self.y += 3
24                self.image=pygame.image.load('Car down.png')
25                self.rect.left = self.x
26                self.rect.top = self.y
27            if direction == K_LEFT:
28                self.x -= 3
29                self.image=pygame.image.load('Car left.png')
30                self.rect.left = self.x
31                self.rect.top = self.y
32            elif direction == K_RIGHT:
33                self.x += 3
34                self.image=pygame.image.load('Car right.png')
35                self.rect.left = self.x
36                self.rect.top = self.y
```

Textrect ():

- Text class are the class that will be used as the blue print to create the object on the screen
- In `self.image = self.font.render(text, False, (R,G,B))` → R,G,B are the color's code for the text. R is red, G is green, B is Blue.
- `self.rect.x = xpos` and `self.rect.y = ypos` are the position text in the screen game.
- `self.font = pygame.font.SysFont(fontstyle,fontsize)` for fontstyle and fontsize. The example is `self.font = pygame.font.SysFont("Times New Roman", 20)`

```
70
71 class textrect(Sprite):
72     def __init__(self, fontstyle, text, fontsize, xpos, ypos, R, B, G):
73         Sprite.__init__(self)
74         self.font = pygame.font.SysFont(fontstyle,fontsize)
75         self.image = self.font.render(text, False, (R,G,B))
76         self.rect = self.image.get_rect()
77         self.rect.x = xpos
78         self.rect.y = ypos
```

StreetBlocks() and Finish():

- These class function its same, but for different usage
- StreetBlocks() function usage for block the wall, if the car crash the wall it will be game over and you will start in the beginning.
- Finish() function the usage of finish function is to move the game whenever the game is completed

```
80 class Streetblocks(Sprite):
81     def __init__(self, image, x, y):
82         Sprite.__init__(self)
83         self.image = pygame.image.load(image)
84         self.rect = self.image.get_rect()
85         self.x = x
86         self.y = y
87         self.rect.left = self.x
88         self.rect.top = self.y
89
90 class Finish(Sprite):
91     def __init__(self, image, x, y):
92         Sprite.__init__(self)
93         self.image = pygame.image.load(image)
94         self.rect = self.image.get_rect()
95         self.x = x
96         self.y = y
97         self.rect.left = self.x
98         self.rect.top = self.y
99
```

Streetblocks > \_\_init\_\_()

Screen(Screen.py)

Screen1() and Screen2() :

- The different between Screen1() and Screen2() are the street, position, and streetblocks.
- *fpsClock=pygame.time.Clock()* for the FPS work. If you put FPS = 60 the car will work smoothly and if you put FPS = 30 the car will not smoothly.
- Streetblock for blocked the wall in the street image. Every line wall, I used streetblock and set the position for parallel line with wall street.
- *screen=pygame.display.set\_mode((450,450))* for game resolution.
- *seconds=(pygame.time.get\_ticks() - start\_tick)/1000* for timer in the game. I used “/1000” because the time limit use millisecond.
- *for event in pygame.event.get():* for condition in the game.

```
4 def screen1():
5     FPS=60
6     fpsClock=pygame.time.Clock()
7     screen=pygame.display.set_mode((450,450))
8     pygame.display.set_caption('Car Simulation')
9     background=pygame.image.load('street 3.png')
10    streetblock1 = Streetblocks("wall 1.png", 13,0)
11    streetblock2 = Streetblocks("wall 1.png", 13,80)
12    streetblock3 = Streetblocks("wall 1.png", 13,200)
13    streetblock4 = Streetblocks("wall 2.png", 13,422)
14    streetblock5 = Streetblocks("wall 2.png", 200,422)
15    streetblock6 = Streetblocks("wall 1.png", 420,0)
16    streetblock7 = Streetblocks("wall 1.png", 420,200)
17    streetblock8 = Streetblocks("wall 2.png", 98,0)
18    streetblock9 = Streetblocks("wall 1.png", 88,10)
19    streetblock10 = Streetblocks("wall 1.png", 88,97)
20    streetblock11 = Streetblocks("wall 1.png", 112,10)
21    streetblock12 = Streetblocks("wall 1.png", 112,97)
22    streetblock13 = Streetblocks("wall 1.png", 180,100)
23    streetblock14 = Streetblocks("wall 1.png", 180,160)
24    streetblock15 = Streetblocks("wall 1.png", 237, 95)
25    streetblock16 = Streetblocks("wall 1.png", 237, 180)
26    streetblock17 = Streetblocks("wall 1.png", 305, 30)
27    streetblock18 = Streetblocks("wall 1.png", 305, 96)
28    streetblock19 = Streetblocks("wall 1.png", 351, 10)
29    streetblock20 = Streetblocks("wall 1.png", 351, 96)
30    finish1 = Finish("wall 6.png",350,10)
31    quit1= Finish("wall 6.png",20,15)
32    sprite= Carl("car down.png",50,30)
33    direction=None
34    streetblocks = Group(streetblock1,streetblock2,streetblock3,
```

screen2() > while running > for event in py... > if eventtype ==...

```

143 pygame.display.update()
144 for event in pygame.event.get():
145     if event.type == QUIT:
146         pygame.quit()
147         sys.exit()
148     if event.type == KEYDOWN:
149         direction = event.key
150     if event.type == KEYUP:
151         if (event.key == direction):
152             direction = None
153 if (sprite.rect.colliderect(streetblock1) == False and sprite.rect.colliderect(streetblock2) == False and
154     sprite.rect.colliderect(streetblock3) == False and sprite.rect.colliderect(streetblock4) == False and
155     sprite.rect.colliderect(streetblock5) == False and sprite.rect.colliderect(streetblock6) == False and
156     sprite.rect.colliderect(streetblock7) == False and sprite.rect.colliderect(streetblock8) == False and
157     sprite.rect.colliderect(streetblock9) == False and sprite.rect.colliderect(streetblock10) == False and
158     sprite.rect.colliderect(streetblock11) == False and sprite.rect.colliderect(streetblock12) == False and
159     sprite.rect.colliderect(streetblock13) == False and sprite.rect.colliderect(streetblock14) == False and
160     sprite.rect.colliderect(streetblock15) == False and sprite.rect.colliderect(streetblock16) == False and
161     sprite.rect.colliderect(streetblock17) == False and sprite.rect.colliderect(streetblock18) == False and
162     sprite.rect.colliderect(streetblock19) == False and sprite.rect.colliderect(streetblock20) == False and
163     sprite.rect.colliderect(streetblock21) == False and sprite.rect.colliderect(streetblock22) == False and
164     sprite.rect.colliderect(streetblock23) == False and sprite.rect.colliderect(streetblock24) == False):
165     sprite.move(direction)
166 if sprite.rect.colliderect(finish1):
167     running = False
168     finish()
169 if sprite.rect.colliderect(back):
170     running = menu(screen1(), screen2())
171 if spritecollide(sprite, streetblocks, dokill=False):
172     end()
173 fpsClock.tick(FPS)
174
screen2() > while running > if (sprite.rect...

```

## Main(Main.py):

end(), finish(), main():

- end() function is use to check streetblock. If the car collide with the wall, the game will be over and you need to restart the game again.

```

5
6 def end():
7     GO = textrect("Times New Roman", "GAME OVER", 20, 170, 200, 255, 255, 255)
8     RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 255, 255, 255)
9     quit = textrect("Times New Roman", "Quit", 20, 200, 260, 255, 255, 255)
10    pygame.mixer.music.load("Death.wav")
11    pygame.mixer.music.play()
12    screen = pygame.display.set_mode((450, 450))
13    while True:
14        screen.fill((0, 0, 0))
15        everything = Group(GO, RE, quit)
16        everything.draw(screen)
17        if seconds >= 0:
18            font = pygame.font.SysFont("Times New Roman", 24)
19            timesurface = font.render("Timer: " + str(seconds), False, (255, 255, 255))
20            screen.blit(timesurface, (163, 160))
21        display.update()
22        e = event.wait()
23        if RE.rect.collidepoint(mouse.get_pos()):
24            RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 0, 0, 255)
25            if e.type == MOUSEBUTTONDOWN:
26                screen1()
27        else:
28            RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 255, 255, 255)
29        if quit.rect.collidepoint(mouse.get_pos()):
30            quit = textrect("Times New Roman", "QUIT", 20, 200, 260, 255, 0, 0)
31            if e.type == MOUSEBUTTONDOWN:
32                pygame.quit()
33                break
34        else:
35            quit = textrect("Times New Roman", "QUIT", 20, 200, 260, 255, 255, 255)
36
menu()

```

- finish() function is use the end every stage. If the car collide the finish line, it will next another stage or the end of the game.

```

36
37 def finish():
38     CO = textrect("Times New Roman","CONGRATULATION",20,140,200,255,255,255)
39     RE = textrect("Times New Roman","RESTART",20,180,240,255,255,255)
40     quit = textrect("Times New Roman", "Quit", 20, 200, 260, 255, 255, 255)
41     pygame.mixer.music.load("Ta Da.wav")
42     pygame.mixer.music.play()
43     screen = pygame.display.set_mode((450,450))
44     while True:
45         screen.fill((0,0,0))
46         everything = Group(CO,RE,quit)
47         everything.draw(screen)
48         if seconds >= 0:
49             font = pygame.font.SysFont("Times New Roman", 24)
50             timesurface=font.render("Timer:" +str(seconds), False, (255,255,255))
51             screen.blit(timesurface, (163,160))
52         display.update()
53         e = event.wait()
54         if RE.rect.collidepoint(mouse.get_pos()):
55             RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 0, 0, 255)
56             if e.type == MOUSEBUTTONDOWN:
57                 screen1()
58         else:
59             RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 255, 255,255)
60         if quit.rect.collidepoint(mouse.get_pos()):
61             quit = textrect("Times New Roman", "QUIT",20,200,260,255,0,0)
62             if e.type == MOUSEBUTTONDOWN:
63                 pygame.quit()
64                 break
65         else:
66             quit = textrect("Times New Roman", "QUIT",20,200,260,255,255,255)
67
68 menu()

```

- main() function is first screen before game start. If Play button is press, it will start the game and if Quit button is press, it will quit the game.

```

67
68 def menu():
69     pygame.init()
70     screen=pygame.display.set_mode((450,450))
71     pygame.display.set_caption('Car Simulation')
72     title = pygame.image.load("Title.png")
73     screen.fill((0, 0, 0))
74     play = textrect("Times New Roman", "Play", 30, 200, 200, 255, 255, 255)
75     quit = textrect("Times New Roman", "Quit", 30, 200, 250, 255, 255, 255)
76     while True:
77         screen.fill((0, 0, 0))
78         screen.blit(title, (155,100))
79         text = Group(play,quit)
80         text.draw(screen)
81         e = event.wait()
82         if play.rect.collidepoint(mouse.get_pos()):
83             play = textrect("Times New Roman", "Play", 30, 200, 200, 0, 0, 255)
84             if e.type == MOUSEBUTTONDOWN:
85                 screen1()
86                 screen2()
87                 finish()
88         else:
89             play = textrect("Times New Roman", "Play", 30, 200, 200, 255, 255,255)
90
91         if quit.rect.collidepoint(mouse.get_pos()):
92             quit = textrect("Times New Roman", "Quit",30,200,250,255,0,0)
93             if e.type == MOUSEBUTTONDOWN:
94                 pygame.quit()
95                 break
96         else:
97             quit = textrect("Times New Roman", "Quit",30,200,250,255,255,255)
98
99 menu()

```

#### IV. Source Code

```
V. import pygame, sys, time
    from pygame.locals import *
    from pygame.sprite import *
    from pygame import *
    pygame.init()
    class Car1(Sprite):
        def __init__(self, image_file, x,y):
            Sprite.__init__(self)
            self.image = pygame.image.load("Car down.png")
            self.rect = self.image.get_rect()
            self.x = x
            self.y = y
            self.rect.left = x
            self.rect.top = y
        def move(self, direction):
            if direction:
                if direction == K_UP:
                    self.y -= 3
                    self.image = pygame.image.load('Car up.png')
                    self.rect.left = self.x
                    self.rect.top = self.y
                elif direction == K_DOWN:
                    self.y += 3
                    self.image=pygame.image.load('Car down.png')
                    self.rect.left = self.x
                    self.rect.top = self.y
                if direction == K_LEFT:
                    self.x -= 3
                    self.image=pygame.image.load('Car left.png')
                    self.rect.left = self.x
                    self.rect.top = self.y
                elif direction == K_RIGHT:
                    self.x += 3
                    self.image=pygame.image.load('Car right.png')
                    self.rect.left = self.x
                    self.rect.top = self.y

    class Car2(Sprite):
        def __init__(self, image_file, x,y):
            Sprite.__init__(self)
            self.image = pygame.image.load("Car up.png")
            self.rect = self.image.get_rect()
            self.x = x
            self.y = y
            self.rect.left = x
            self.rect.top = y
        def move(self, direction):
            if direction:
                if direction == K_UP:
                    self.y -= 3
                    self.image = pygame.image.load('Car up.png')
                    self.rect.left = self.x
                    self.rect.top = self.y
                elif direction == K_DOWN:
                    self.y += 3
                    self.image=pygame.image.load('Car down.png')
                    self.rect.left = self.x
                    self.rect.top = self.y
                if direction == K_LEFT:
                    self.x -= 3
```

```

        self.image=pygame.image.load('Car left.png')
        self.rect.left = self.x
        self.rect.top = self.y
    elif direction == K_RIGHT:
        self.x += 3
        self.image=pygame.image.load('Car right.png')
        self.rect.left = self.x
        self.rect.top = self.y

class textrect(Sprite):
    def __init__(self, fontstyle, text, fontsize, xpos, ypos, R, B, G):
        Sprite.__init__(self)
        self.font = pygame.font.SysFont(fontstyle,fontsize)
        self.image = self.font.render(text, False, (R,G,B))
        self.rect = self.image.get_rect()
        self.rect.x = xpos
        self.rect.y = ypos

class Streetblocks(Sprite):
    def __init__(self,image,x,y):
        Sprite.__init__(self)
        self.image = pygame.image.load(image)
        self.rect = self.image.get_rect()
        self.x = x
        self.y = y
        self.rect.left = self.x
        self.rect.top = self.y

class Finish(Sprite):
    def __init__(self,image,x,y):
        Sprite.__init__(self)
        self.image = pygame.image.load(image)
        self.rect = self.image.get_rect()
        self.x = x
        self.y = y
        self.rect.left = self.x
        self.rect.top = self.y

def screen1():
    FPS=60
    fpsClock=pygame.time.Clock()
    screen=pygame.display.set_mode((450,450))
    pygame.display.set_caption('Car Simulation')
    background=pygame.image.load('street 3.png')
    streetblock1 = Streetblocks("wall 1.png", 13,0)
    streetblock2 = Streetblocks("wall 1.png", 13,80)
    streetblock3 = Streetblocks("wall 1.png", 13,200)
    streetblock4 = Streetblocks("wall 2.png", 13,422)
    streetblock5 = Streetblocks("wall 2.png", 200,422)
    streetblock6 = Streetblocks("wall 1.png", 420,0)
    streetblock7 = Streetblocks("wall 1.png", 420,200)
    streetblock8 = Streetblocks("wall 2.png", 98,0)
    streetblock9 = Streetblocks("wall 1.png", 88,10)
    streetblock10 = Streetblocks("wall 1.png", 88,97)
    streetblock11 = Streetblocks("wall 1.png", 112,10)
    streetblock12 = Streetblocks("wall 1.png", 112,97)
    streetblock13 = Streetblocks("wall 1.png", 180,100)
    streetblock14 = Streetblocks("wall 1.png", 180,160)
    streetblock15 = Streetblocks("wall 1.png", 237, 95)
    streetblock16 = Streetblocks("wall 1.png", 237, 180)
    streetblock17 = Streetblocks("wall 1.png", 305, 30)
    streetblock18 = Streetblocks("wall 1.png", 305, 96)
    streetblock19 = Streetblocks("wall 1.png", 351, 10)

```



```

streetblock20 = Streetblocks("wall 1.png", 351, 96)
finish1 = Finish("wall 6.png",350,10)
quit1= Finish("wall 6.png",20,15)
sprite= Carl("car down.png",50,30)
direction=None
streetblocks = Group(streetblock1,streetblock2,streetblock3,
                      streetblock4,streetblock5,streetblock6,
                      streetblock7,streetblock8,streetblock9,
                      streetblock10,streetblock11,streetblock12,
                      streetblock13,streetblock14,streetblock15,
                      streetblock16,streetblock17,streetblock18,
                      streetblock19,streetblock20)

everything = Group(sprite)
global start_tick, seconds
start_tick=pygame.time.get_ticks()
running = True
while running:
    seconds=(pygame.time.get_ticks() - start_tick)/1000
    streetblocks.draw(screen)
    screen.fill((0,0,0))
    screen.blit(background,(0,0))
    if seconds >= 0:
        font = pygame.font.SysFont("Times New Roman", 24)
        timesurface=font.render("Timer:" +str(seconds), False, (0,255,0))
        screen.blit(timesurface, (170,0))
    everything.draw(screen)
    pygame.display.update()

    for event in pygame.event.get():
        if event.type == QUIT:
            pygame.quit()
            sys.exit()
        if event.type == KEYDOWN:
            direction = event.key
        if event.type == KEYUP:
            if (event.key == direction):
                direction = None

        if (sprite.rect.colliderect(streetblock1) == False and
sprite.rect.colliderect(streetblock2) == False
        and sprite.rect.colliderect(streetblock3) == False and
sprite.rect.colliderect(streetblock4) == False
        and sprite.rect.colliderect(streetblock5) == False and
sprite.rect.colliderect(streetblock6) == False
        and sprite.rect.colliderect(streetblock7) == False and
sprite.rect.colliderect(streetblock8) == False
        and sprite.rect.colliderect(streetblock9) == False and
sprite.rect.colliderect(streetblock10) == False
        and sprite.rect.colliderect(streetblock11) == False and
sprite.rect.colliderect(streetblock12) == False
        and sprite.rect.colliderect(streetblock13) == False and
sprite.rect.colliderect(streetblock14) == False
        and sprite.rect.colliderect(streetblock15) == False and
sprite.rect.colliderect(streetblock16) == False
        and sprite.rect.colliderect(streetblock17) == False and
sprite.rect.colliderect(streetblock18) == False
        and sprite.rect.colliderect(streetblock19) == False and
sprite.rect.colliderect(streetblock20) == False):
            sprite.move(direction)
        if sprite.rect.colliderect(finish1):
            running = False
            screen2()
        if sprite.rect.colliderect(quit1):
            running = menu()

```

```

        if spritecollide(sprite,streetblocks,dokill=False):
            end()
        fpsClock.tick(FPS)

def screen2():
    FPS=60
    fpsClock=pygame.time.Clock()
    screen=pygame.display.set_mode((450,450))
    pygame.display.set_caption('Car Simulation')
    background=pygame.image.load('another street.png')
    streetblock1 = Streetblocks("wall 1.png", 0,28)
    streetblock2 = Streetblocks("wall 1.png", 0,200)
    streetblock3 = Streetblocks("wall 1.png", 420,180)
    streetblock4 = Streetblocks("wall 1.png", 420,20)
    streetblock5 = Streetblocks("wall 7.png", 85,357)
    streetblock6 = Streetblocks("wall 7.png", 165,357)
    streetblock7 = Streetblocks("wall 2.png", 15,435)
    streetblock8 = Streetblocks("wall 2.png", 90,435)
    streetblock9 = Streetblocks("wall 2.png", 252,182)
    streetblock10 = Streetblocks("wall 1.png", 252,113)
    streetblock11 = Streetblocks("wall 2.png", -75,239)
    streetblock12 = Streetblocks("wall 2.png", -75,215)
    streetblock13 = Streetblocks("wall 7.png", 70,130)
    streetblock14 = Streetblocks("wall 7.png", 150,130)
    streetblock15 = Streetblocks("wall 7.png", 150,120)
    streetblock16 = Streetblocks("wall 7.png", 70,120)
    streetblock17 = Streetblocks("wall 7.png", 85,330)
    streetblock18 = Streetblocks("wall 7.png", 165,330)
    streetblock19 = Streetblocks("wall 1.png", 350,275)
    streetblock20 = Streetblocks("wall 1.png", 325,275)
    streetblock21 = Streetblocks("wall 2.png", 0,25)
    streetblock22 = Streetblocks("wall 2.png", 80,25)
    streetblock23 = Streetblocks("wall 1.png", 350,-142)
    streetblock24 = Streetblocks("wall 1.png", 320,-142)
    finish1 = Finish("wall 6.png",360,6)
    back = Finish("wall 6.png",380,420)
    sprite= Car2("car up.png",390,380)
    direction=None
    streetblocks = Group(streetblock1,streetblock2,streetblock3,
                        streetblock4,streetblock5,streetblock6,
                        streetblock7,streetblock8,streetblock9,
                        streetblock10,streetblock11,streetblock12,
                        streetblock13,streetblock14,streetblock15,
                        streetblock16,streetblock17,streetblock18,
                        streetblock19,streetblock20,streetblock21,
                        streetblock22,streetblock23,streetblock24)

    everything = Group(sprite)
    running = True
    global seconds
    while running:
        seconds=(pygame.time.get_ticks() - start_tick)/1000
        streetblocks.draw(screen)
        screen.fill((0,0,0))
        screen.blit(background,(0,0))
        if seconds >= 0:
            font = pygame.font.SysFont("Times New Roman", 24)
            timesurface=font.render("Timer:" +str(seconds), False, (0,255,0))
            screen.blit(timesurface,(170,0))
        everything.draw(screen)
        pygame.display.update()
        for event in pygame.event.get():
            if event.type == QUIT:
                pygame.quit()

```

```

        sys.exit()
    if event.type == KEYDOWN:
        direction = event.key
    if event.type == KEYUP:
        if (event.key == direction):
            direction = None
        if (sprite.rect.colliderect(streetblock1) == False and
            sprite.rect.colliderect(streetblock2) == False and
            sprite.rect.colliderect(streetblock3) == False and
            sprite.rect.colliderect(streetblock4) == False and
            sprite.rect.colliderect(streetblock5) == False and
            sprite.rect.colliderect(streetblock6) == False and
            sprite.rect.colliderect(streetblock7) == False and
            sprite.rect.colliderect(streetblock8) == False and
            sprite.rect.colliderect(streetblock9) == False and
            sprite.rect.colliderect(streetblock10) == False and
            sprite.rect.colliderect(streetblock11) == False and
            sprite.rect.colliderect(streetblock12) == False and
            sprite.rect.colliderect(streetblock13) == False and
            sprite.rect.colliderect(streetblock14) == False and
            sprite.rect.colliderect(streetblock15) == False and
            sprite.rect.colliderect(streetblock16) == False and
            sprite.rect.colliderect(streetblock17) == False and
            sprite.rect.colliderect(streetblock18) == False and
            sprite.rect.colliderect(streetblock19) == False and
            sprite.rect.colliderect(streetblock20) == False and
            sprite.rect.colliderect(streetblock21) == False and
            sprite.rect.colliderect(streetblock22) == False and
            sprite.rect.colliderect(streetblock23) == False and
            sprite.rect.colliderect(streetblock24) == False):
            sprite.move(direction)
        if sprite.rect.colliderect(finish1):
            running = False
            finish()
        if sprite.rect.colliderect(back):
            running = menu()
        if spritecollide(sprite, streetblocks, dokill=False):
            end()
    fpsClock.tick(FPS)

def end():
    GO = textrect("Times New Roman", "GAME OVER", 20, 170, 200, 255, 255, 255)
    RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 255, 255, 255)
    quit = textrect("Times New Roman", "Quit", 20, 200, 260, 255, 255, 255)
    pygame.mixer.music.load("Death.wav")
    pygame.mixer.music.play()
    screen = pygame.display.set_mode((450, 450))
    while True:
        screen.fill((0, 0, 0))
        everything = Group(GO, RE, quit)
        everything.draw(screen)
        if seconds >= 0:
            font = pygame.font.SysFont("Times New Roman", 24)
            timesurface = font.render("Timer: " + str(seconds),
False, (255, 255, 255))
            screen.blit(timesurface, (163, 160))
        display.update()
        e = event.wait()
        if RE.rect.collidepoint(mouse.get_pos()):
            RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 0, 0,
255)

            if e.type == MOUSEBUTTONDOWN:
                screen1()

```

```

        else:
            RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 255,
255,255)
            if quit.rect.collidepoint(mouse.get_pos()):
                quit = textrect("Times New Roman", "QUIT", 20, 200, 260, 255, 0, 0)
                if e.type == MOUSEBUTTONDOWN:
                    pygame.quit()
                    break
            else:
                quit = textrect("Times New Roman",
"QUIT", 20, 200, 260, 255, 255, 255)

def finish():
    CO = textrect("Times New Roman", "CONGRATULATION", 20, 140, 200, 255, 255, 255)
    RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 255, 255, 255)
    quit = textrect("Times New Roman", "Quit", 20, 200, 260, 255, 255, 255)
    pygame.mixer.music.load("Ta Da.wav")
    pygame.mixer.music.play()
    screen = pygame.display.set_mode((450, 450))
    while True:
        screen.fill((0, 0, 0))
        everything = Group(CO, RE, quit)
        everything.draw(screen)
        if seconds >= 0:
            font = pygame.font.SysFont("Times New Roman", 24)
            timesurface = font.render("Timer:" + str(seconds),
False, (255, 255, 255))
            screen.blit(timesurface, (163, 160))
            display.update()
            e = event.wait()
            if RE.rect.collidepoint(mouse.get_pos()):
                RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 0, 0,
255)
                if e.type == MOUSEBUTTONDOWN:
                    screen1()
            else:
                RE = textrect("Times New Roman", "RESTART", 20, 180, 240, 255,
255, 255)
                if quit.rect.collidepoint(mouse.get_pos()):
                    quit = textrect("Times New Roman", "QUIT", 20, 200, 260, 255, 0, 0)
                    if e.type == MOUSEBUTTONDOWN:
                        pygame.quit()
                        break
                else:
                    quit = textrect("Times New Roman",
"QUIT", 20, 200, 260, 255, 255, 255)

def menu():
    pygame.init()
    screen = pygame.display.set_mode((450, 450))
    pygame.display.set_caption('Car Simulation')
    title = pygame.image.load("Title.png")
    screen.fill((0, 0, 0))
    play = textrect("Times New Roman", "Play", 30, 200, 200, 255, 255, 255)
    quit = textrect("Times New Roman", "Quit", 30, 200, 250, 255, 255, 255)
    while True:
        screen.fill((0, 0, 0))
        screen.blit(title, (155, 100))
        text = Group(play, quit)
        text.draw(screen)
        e = event.wait()
        if play.rect.collidepoint(mouse.get_pos()):
            play = textrect("Times New Roman", "Play", 30, 200, 200, 0, 0,

```

```

255)
        if e.type == MOUSEBUTTONDOWN:
            screen1()
            screen2()
            finish()
        else:
            play = textrect("Times New Roman", "Play", 30, 200, 200, 255,
255,255)

            if quit.rect.collidepoint(mouse.get_pos()):
                quit = textrect("Times New Roman", "Quit", 30, 200, 250, 255, 0, 0)
                if e.type == MOUSEBUTTONDOWN:
                    pygame.quit()
                    break
            else:
                quit = textrect("Times New Roman",
"Quit", 30, 200, 250, 255, 255, 255)

            pygame.display.update()
menu()

```