

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6 using System.Drawing;
7 using System.Windows.Forms;
8
9 namespace Car_Soccer
10 {
11     class Ball : Sprite
12     {
13         public Ball(PictureBox pictureBox)
14         {
15             _x = pictureBox.Width / 2;
16             _y = pictureBox.Height / 3;
17             _speed = 0;
18             _angle = 0;
19             _color = Color.Transparent;
20             _image = Image.FromFile("ball.png");
21         }
22         public Team IsInGoal(List<Goal> goals)
23         {
24             RectangleF rect = new RectangleF(_x - _size / 2, _y - _size / 2,
25             _size, _size);
26             foreach (Goal goal in goals)
27             {
28                 if (rect.Intersects(goal.Rect))
29                 {
30                     if (goal.Team == Team.Blue)
31                     {
32                         return Team.Red;
33                     }
34                     else if(goal.Team == Team.Red)
35                     {
36                         return Team.Blue;
37                     }
38                 }
39                 else
40                 {
41                     }
42                 }
43             }
44             return Team.None;
45         }
46         public void IsCollide(List<Player> players, List<Computer> computers)
47         {
48             RectangleF rect = new RectangleF(_x - _size / 2, _y - _size / 2,
49             _size, _size);
50             foreach(Car car in players)
51             {
52                 if (rect.Intersects(new RectangleF(car.X - car.Size / 2,
53                 car.Y - car.Size / 2, car.Size, car.Size)))
54                 {
55                     _angle = car.Angle;
56                     _speed = (car.Speed * 1.5) + 5;
57                 }
58             }
59         }
60     }
61 }
```

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54     }
55 }
56 foreach(Car car in computers)
57 {
58     if (rect.Intersects(new RectangleF(car.X - car.Size / 2, car.Y - car.Size / 2, car.Size, car.Size)))
59     {
60         _angle = car.Angle;
61         _speed = (car.Speed * 1.5) + 5;
62     }
63 }
64 }
65 }
66 public override void Accelerate()
67 {
68     if (_speed - 0.1 >= 0)
69     {
70         _speed -= 0.1;
71     }
72     else
73     {
74         _speed = 0;
75     }
76 }
77 public override void Draw(Graphics paper)
78 {
79     paper.DrawImage(_image, _x - _size / 2, _y - _size / 2, _size, _size);
80     base.Draw(paper);
81 }
82 }
83 }
84 }
```