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## Assignment1

The game objective is to create two objects the ball and the basket, the score counter increment every time the ball hits the basket, and the only way to loss is if the player is unable to see the ball on its decent

```
PlayState.hx Main.hx
source > PlayState.hx > PlayState > update
1 package;
2
3 import flxlib.FlxObject;
4 import flxlib.FlxSprite;
5 import flxlib.FlxState;
6 import flxlib.group.FlxGroup;
7 import flxlib.util.FlxColor;
8 import flxlib.FlxBasic;
9 import flxlib.FlxG;
10 import flxlib.text.FlxText;
11 import flxlib.util.FlxAxes;
12
13 class PlayState extends FlxState
14 {
15     var basket : FlxSprite;
16     var ball : FlxSprite;
17
18     public var _score: Int = 0; // number of coins we've collected
19
20     var _txtTitle: FlxText; // the title text
21     var _txtMessage: FlxText;
22     var _txtScore: FlxText;
23     var walls: FlxGroup;
24     var leftWall: FlxSprite;
25     var rightWall: FlxSprite;
26 }
```

Above is the list of variables used in my code and the imports, with some of the basic Flixel imports

```
18
19 basket = new FlxSprite(250, 450);
20 basket.makeGraphic(40, 6, FlxColor.MAGENTA);
21 basket.immovable = true;
22
23 ball = new FlxSprite(200, 100);
24 ball.makeGraphic(10, 6, FlxColor.MAGENTA);
25
26 walls = new FlxGroup();
27
28 leftWall = new FlxSprite(0, 0);
29 leftWall.makeGraphic(10, 540, FlxColor.GRAY);
30 leftWall.immovable = true;
31 walls.add(leftWall);
32
33 rightWall = new FlxSprite(550, 0);
34 rightWall.makeGraphic(10, 550, FlxColor.GRAY);
35 rightWall.immovable = true;
36 walls.add(rightWall);
37
38 topWall = new FlxSprite(0, 0);
39 topWall.makeGraphic(550, 10, FlxColor.GRAY);
40 topWall.immovable = true;
41 walls.add(topWall);
42
43 bottomWall = new FlxSprite(0, 467);
44 bottomWall.makeGraphic(550, 10, FlxColor.TRANSPARENT);
45 bottomWall.immovable = true;
46 walls.add(bottomWall);
47
48 ball.elasticity = 1;
49 ball.maxVelocity.set(200, 200);
50 ball.velocity.y = 500;
51 ball.velocity.x = 500;
52
53 _txtMessage = new FlxText(550, 40, 0, "press r to reset", 7);
54 add(_txtMessage);
55 }
```

The create() function in my code consist of the variable definitions and parameters of my variables

Range of variable

Basket, ball, [left,right,top,bottom]wall, the most unique wall is the bottom wall as I set it to transparent,

It is still used as the base for the game over transition scene which stops the ball from moving once the basket is unable to reach the ball before it reaches the bottom wall

```
        if (FlxG.collide(basket,ball))
        {
            // _score+=1;
            add(txtscore);
        }
        FlxG.collide(ball,topWall);
        FlxG.collide(ball,rightWall);
        FlxG.collide(ball,leftWall);
        if(FlxG.collide(ball,bottomWall))
        {
            FlxG.camera.fade(FlxColor.RED,120,true);
            _txtTitle = new FlxText(570,60,0,"Game over, loser",22);
            _txtTitle.alignment = CENTER;
            _txtTitle.screenCenter(FlxAxes.X);
            add(_txtTitle);
            ball.velocity.y = 0;
        }
    }
}
```

Our basket moves on the x axis based on the keyboard input and it is in the update() part of the code

```
_txtMessage = new FlxText(550,40,0,"press r to reset",7);
add(_txtMessage);

_txtMessage = new FlxText(560,50,0,"score",7);
add(_txtMessage);

txtscore= new FlxText(570,70,30,Std.string(_score+1),11);

add(basket);
add(ball);
add(walls);

}

override public function update(elapsed:Float):Void
{
    super.update(elapsed);
    basket.velocity.x = 0;
    if (FlxG.keys.pressed.LEFT && basket.x > 10)
    {
        basket.velocity.x = -500;
    }
    else if (FlxG.keys.pressed.RIGHT && basket.x < 500)
    {
        basket.velocity.x = 480;
    }

    if (FlxG.keys.justReleased.ESCAPE)
    {
        FlxG.resetState();
    }
}
```