Project 144

DP EDUCATION **Coding School**

144
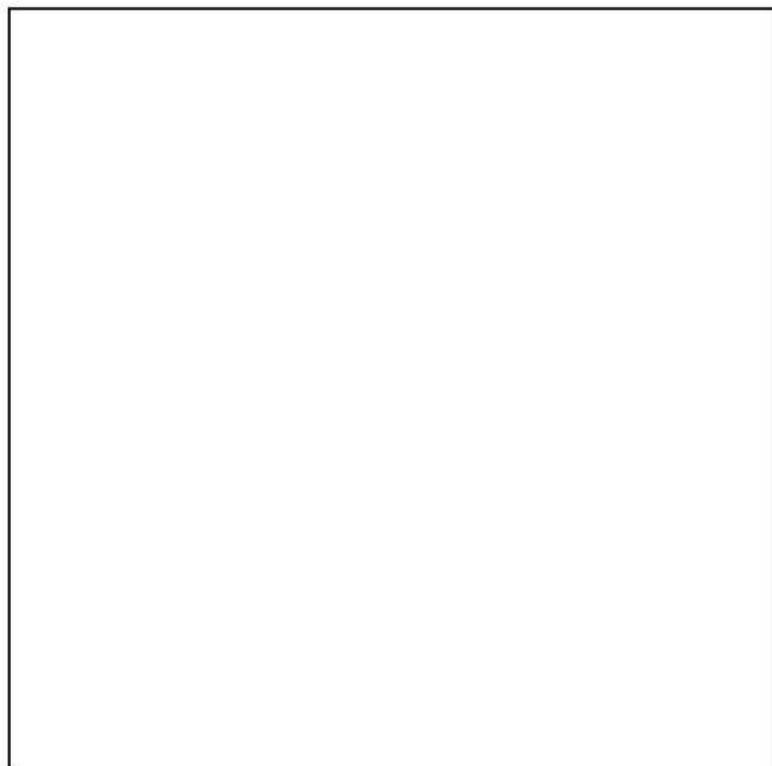
❖ Download the respective sprite to the computer using the link below.
https://drive.google.com/drive/folders/1W5iliM9BKhw9OwvuPYbLYHpJvTVnq_P3?usp=drive_link

❖ Click on upload a backdrop and select the road backdrop
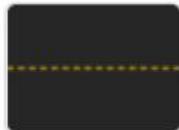
❖ Click on upload a sprite and select the car sprite. Set its X, Y position and size as below.

Sprite	Car	↔ x	125	↕ y	121
Show	⦿ ⦸	Size	50	Direction	90

❖ Click on upload a sprite and select the Fuel sprite. Set its X, Y position and size as below.

Sprite	Fuel	↔ x	0	↕ y	0
Show	⦿ ⦸	Size	15	Direction	90

❖ Click on upload a sprite and select the Coin sprite. Set its X, Y position and size as below.

Sprite	Coin	↔ x	0	↕ y	40
Show	⦿ ⦸	Size	10	Direction	90

❖ Click on upload a sprite and select Game over sprite. Set its X, Y position and size as below.

| Sprite | Game over | ↔ x | -27 | ↕ y | 37 |
| Show | 👁 ⦸ | Size | 50 | Direction | 90 |

❖ Now let's prepare the code and create the game.

❖ Car   Let's prepare the code for the sprite.

❖ When you click on the left arrow key, the X position should decrease by 10. Also prepare a variable as X position. The relevant X position should be assigned to that variable.

```
when  left arrow ▼  key pressed
change x by  -10
set   X position ▼  to  x position
```

❖ When you click on the right arrow key, the X position should increase by 10. Also prepare a variable as X position. The relevant X position should be assigned to that variable.

```
when  right arrow ▼  key pressed
change x by  10
set   X position ▼  to  x position
```

❖ When you click on the Up arrow key, the Y position should increase by 10. Also prepare a variable as Y position. The relevant Y position should be assigned to that variable.

```
when  up arrow ▼  key pressed
change y by  10
set   Y position ▼  to  y position
```

❖ When you click on the Down arrow key, the Y position should decrease by 10. Also prepare a variable as Y position. The relevant Y position should be assigned to that variable.

```
when  down arrow ▼  key pressed
change y by  -10
set   Y position ▼  to  y position
```

❖ Prepare the code so that the following events occur when the green flag is clicked.

- The car sprite should be show.
- Hide the two variables named as X position and Y position.
- If the X position is greater than -195, the value of the X position should be 170 and the value of the Y position should be the value assigned in the Y position variable..
- When the car sprite touches Fuel, the value of the Fuel variable should become 100 and a message as Fuel should be broadcast.
- If the value of the Fuel variable is equal to 0, the car sprite should be hidden.
- When the car sprite touches the coin, the value of the score variable should increase by 1 and a message should be broadcast as Score.

```
when 🏳 clicked
show
hide variable  X position ▾
hide variable  Y position ▾
forever
    if        x position  =  -195   then
        go to x: 175  y: Y position
    if        touching  Fuel ▾ ?   then
        set  Fuel ▾  to  100
        broadcast  Fuel ▾
    if        Fuel  =  0   then
        hide
    if        touching  Coin ▾ ?   then
        change  Score ▾  by  1
        broadcast  Score ▾
```
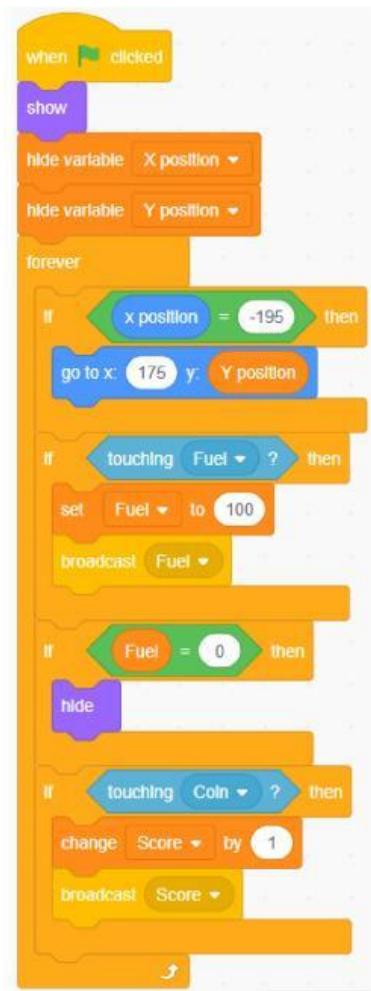
❖ [Fuel sprite icon] Let's prepare code for Sprite

Fuel

❖ Let's prepare the code to make the following events happen when the green flag is clicked.

- Give the value of the Fuel variable as 100.
- Hide Fuel sprite

- Prepare the code to decrement the value of the Fuel variable by 10 every two seconds.

```
when 🏳 clicked
set Fuel ▾ to 100
hide
forever
    wait 2 seconds
    change Fuel ▾ by -10
```

❖ Let's prepare the code to make the following events happen when the colored flag is clicked.
- Clone should be created in 5 to 5 seconds.

```
when 🏳 clicked
forever
    wait 5 seconds
    create clone of myself ▾
```

❖ When a clone starts, the clone should be show and its X position should be any value between 150 and 200 less than the value of the X position variable and Y position should be between -130 and 130. The clone should be deleted every 2.5 seconds continuously.

```
when I start as a clone
show
go to x: X position - pick random 150 to 200   y: pick random -130 to 130
forever
    wait 2.5 seconds
    delete this clone
```

❖ When a message is broadcast as fuel, the clone should be deleted.

❖ Let's prepare the code for the sprite.
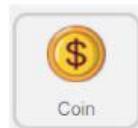
❖ Let's prepare the code to make the following events happen when the green flag is clicked.

- Give the value of Score variable as 0.

- Hide the Coin sprite.

- Clone should be created in 2 seconds.

❖ When a clone starts, that clone should be show and its X position should be any value between 50 and 150 less than the value of X position variable and Y position should be between -130 and 130. The clone should be deleted continuously for two seconds.

```
when I start as a clone
show
go to x:  X position  -  pick random  50  to  150   y:  pick random  -130  to  130
forever
    wait  2  seconds
    delete this clone
```

❖ When a message is broadcast as Score, the clone should be deleted.

```
when I receive  Score ▾
delete this clone
```
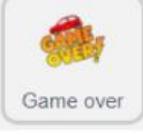
❖   Prepare code for Sprite

Game over

❖ Prepare the code so that the following events occur when the green flag is clicked.

    • Game over sprite should be hide.
    • When the value of the Fuel variable is 0, the Game over sprite should be shown and all events should stop. The related codes are as follows.
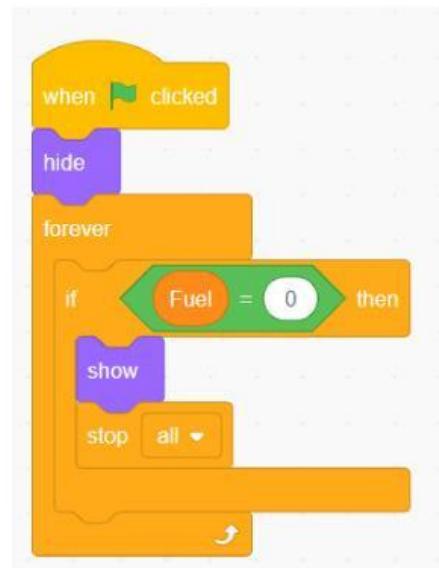
❖ Click on the Fuel variable and click on the slider.
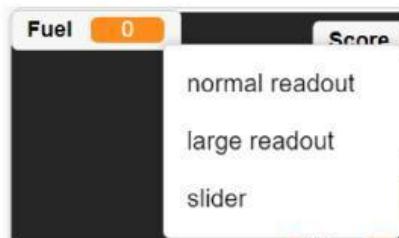
❖ When you click on the Slider, it will appear as follows.