

INSTRUCTIONS:

Goal of the Project:

In Class 85, you learned to handle the arrow key events and how to move an object on a canvas.

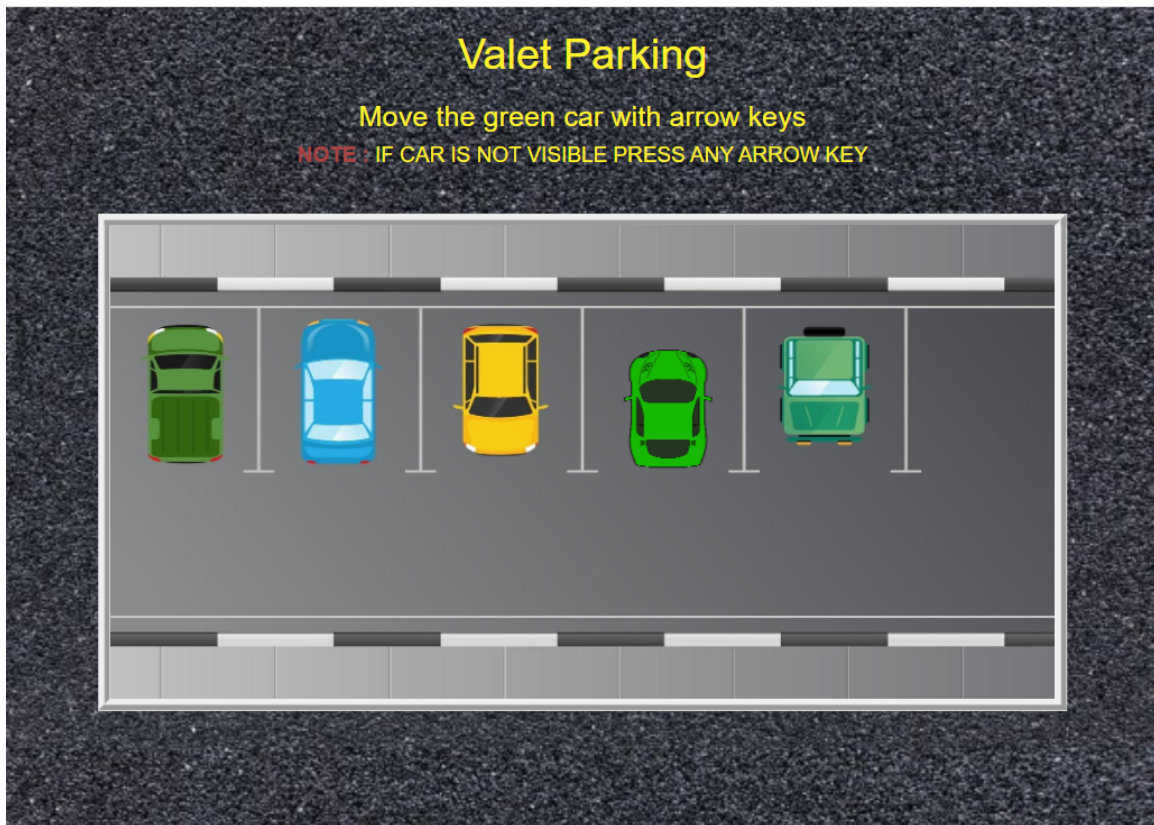
In this project, you are going to apply what you have learned in Class 85 to create a Valet Parking canvas.

Story:

Annie is just seven years old and is interested in cars. Annie's brother has promised to create a Valet Parking game for her. Can you help Annie's brother achieve his goal with the help of the arrow keys?

Click [here](#) to see the output video.

ASCII Value	Category
37	Left Arrow
38	Up Arrow
39	Right Arrow
40	Down Arrow



***This is just for your reference. We expect you to apply your own creativity to the project.**

Getting Started:

1. Click on the [Project Template](#).
2. **Unzip** the downloaded zipped **Project Template** folder.
3. Rename the unzipped folder as **Project 85**.
4. **Import** this folder into **VS Code**.
5. Start making changes.

Specific Tasks to Complete the Project:

1. Create a canvas element in the **index.html** file.

```
<canvas id="myCanvas" width="800" height="400"> </canvas>
```

2. Create a reference for canvas in the **main.js** file.

```
canvas = document.getElementById('myCanvas');  
ctx = canvas.getContext("2d");
```

4. Give a specific height and width to the car image.

```
greencar_width = 75;  
greencar_height = 100;
```

5. Set initial position for a car image.

```
greencar_x = 5;  
greencar_y = 225;
```

6. Use the '**add()**' function to upload car, and background images on the canvas.

```
function add() {  
    background_imgTag = new Image();  
    background_imgTag.onload = uploadBackground;  
    background_imgTag.src = background_image;  
  
    greencar_imgTag = new Image();  
    greencar_imgTag.onload = uploadgreencar;  
    greencar_imgTag.src = greencar_image;  
}
```

7. Define the 'uploadBackground' and 'uploadgreencar' functions.

```
function uploadBackground() {  
    ctx.drawImage(background_imgTag, 0, 0, canvas.width, canvas.height);  
}  
  
function uploadgreencar() {  
    ctx.drawImage(greencar_imgTag, greencar_x, greencar_y, greencar_width, greencar_height);  
}
```

8. Define the 'up', 'down', 'right', and 'left' functions to move the car inside the canvas.

```
function up()  
{  
    if(greencar_y >=0)  
    {  
        greencar_y = greencar_y - 10;  
        console.log("When up arrow is pressed, x = " + greencar_x + " | y = " + greencar_y);  
        uploadBackground();  
        uploadgreencar();  
    }  
}
```

Submitting the Project:

1. **SAVE** all the changes made to the project.
2. Click "**Go-Live**", to check if it is working.
3. To host your code as a website, follow the instructions given in [this document](#).
4. Once you have hosted the website, copy the **GitHub** link and submit it on the **Student Dashboard > Projects** panel against the correct Class Number.

Hints:

1. Add an event listener for keydown.

```
window.addEventListener("keydown", my_keydown);
```

2. Log the output on the console using **console.log()**.
3. The **my_keydown(e)** function shown below with the **if-else** condition, will help to check the ASCII values.

```
function my_keydown(e)
{
    keyPressed = e.keyCode;
    console.log(keyPressed);
    if(keyPressed == '38')
    {
        up();
        console.log("up");
    }
}
```

REMEMBER... Try your best, that's more important than being correct.

After submitting your project, the teacher will give you feedback on your project work.

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