Приклад. Клас «Таракан»

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<meta http-equiv="X-UA-Compatible" content="ie=edge">

<title>Document</title>

<script>

class Tarakan {

constructor(maxX, maxY, size) {

this.maxX = maxX

this.maxY = maxY

this.size = size

this.left = this.getRandomValue(1, maxX)

this.top = this.getRandomValue(1, maxY)

this.speed = 200 + this.getRandomValue(0, 800)

}

getRandomValue(min, max) {

return min + Math.floor(Math.random() \* (max - min + 1))

}

correctValuePosition(value, maxValue) {

if (value < 0)

return maxValue + value

if (value > maxValue)

return value - maxValue

return value

}

move() {

this.left += this.getRandomValue(-20, 20)

this.left = this.correctValuePosition(this.left, this.maxX)

this.top += this.getRandomValue(-20, 20)

this.top = this.correctValuePosition(this.top, this.maxY)

this.creature.style.left = this.left + "px";

this.creature.style.top = this.top + "px";

}

onClick() {

clearInterval(this.timer)

this.creature.style.backgroundColor = "red"

}

render(containerId) {

this.creature = document.createElement("button")

this.creature.innerText = "@"

this.creature.style.position = "absolute"

this.creature.style.width = this.size + "px"

this.creature.style.height = this.size + "px"

this.creature.style.left = this.left + "px"

this.creature.style.top = this.top + "px"

this.creature.onclick = this.onClick.bind(this)

document.getElementById(containerId).appendChild(this.creature)

this.timer = setInterval(this.move.bind(this), this.speed)

}

}

//---------------

// class Game{

// constructor(tarakansCount)

// }

let tarakans = [];

window.onload = function () {

for (let i = 0; i < 10; i++) {

let tarakan = new Tarakan(300, 300, 30);

tarakan.render("gameField")

tarakans.push(tarakan)

}

}

</script>

</head>

<body>

<div id="gameField">

</div>

</body>

</html>

Приклад 2. Приклад інкапсуляції. Клас «Day» : містить закрите поле для збереження номера дня (від 1 до 7)

<!DOCTYPE html>

<html lang="en">

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<title>Document</title>

<script>

class Day {

constructor(weekDay = 1) {

//---- Описуємо контрльовану властивість

Object.defineProperty(this, "WeekDay", {

get: function () {

return weekDay

},

set: function (value) {

if (value < 1 || value > 7)

throw new Error("Out of range")

weekDay = value

}

})

//----- Контроль переданого значення

this.WeekDay = weekDay

}

toString() {

let daysTitles = ['Mon', 'Tue', 'Wen', 'Thu', 'Fri', 'Sat', 'Sun']

return `Day = ${daysTitles[ this.WeekDay-1]}`

}

}

//---------------------

let wd = new Day(2)

document.write(wd)

wd.WeekDay = 85

document.write("<br>")

document.write(wd)

</script>

</head>

<body>

</body>

</html>