Приклад. Розробити клас для гри «15»

<!DOCTYPE html>

<html lang="en" xmlns="http://www.w3.org/1999/xhtml">

<head>

<meta charset="utf-8" />

<title></title>

<script>

class Game\_15 {

constructor() {

this.gameField = this.createTable();

}

createTable()

{

var numbers = [];

for (var i = 1; i <= 15; i++) {

numbers.push(i);

}

numbers.push('-');

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

var table = [];

for (var i = 0; i < 4; i++) {

var row = [];

for (var j = 0; j < 4; j++) {

var index = Math.floor(Math.random() \* numbers.length);

row.push(numbers[index]);

numbers.splice(index, 1);

}

table.push(row);

}

return table;

}

render(targetElementId)

{

var table = document.createElement("table");

table.style.border = "solid 2px";

for (var i = 0; i < 4; i++) {

var tr = document.createElement("tr");

for (var j = 0; j < 4; j++) {

var td = document.createElement("td");

var input = document.createElement("input");

input.type = "button";

input.value = this.gameField[i][j];

input.style.width = "30px";

input.setAttribute("i", i);

input.setAttribute("j", j);

td.appendChild(input);

tr.appendChild(td);

}

table.appendChild(tr);

}

table.onclick = this.onClick.bind(this);

document.getElementById(targetElementId).appendChild(table);

}

onClick(e)

{

if (e.target.tagName == "INPUT")

{

var btn = e.target;

var i = +btn.getAttribute("i");

var j = +btn.getAttribute("j");

var emptyI = -1;

var emptyJ = -1;

do {

if (j > 0 && this.gameField[i][j - 1] == '-') {

emptyI = i;

emptyJ = j - 1;

break;

}

if (j < 3 && this.gameField[i][j + 1] == '-') {

emptyI = i;

emptyJ = j + 1;

break;

}

if (i > 0 && this.gameField[i - 1][j] == '-') {

emptyI = i - 1;

emptyJ = j;

break;

}

if (i < 3 && this.gameField[i + 1][j] == '-') {

emptyI = i + 1;

emptyJ = j;

break;

}

break;

} while (false);

if (emptyI != -1) {

var emptyButton = document.querySelector("[value='-']");

emptyButton.value = btn.value;

btn.value = '-';

this.gameField[emptyI][emptyJ] = this.gameField[i][j];

this.gameField[i][j] = '-';

if (this.isFinished()) {

alert("You won");

}

}

}

}

isFinished()

{

var counter = 0;

for (var i = 0; i < 4; i++) {

for (var j = 0; j < 4; j++) {

if (this.gameField[i][j] == ++counter) {

return (counter==16);

}

}

}

}

}

</script>

</head>

<body>

<div id="container"></div>

<script>

var game = new Game\_15();

game.render("container");

</script>

</body>

</html>