

ДОДАТОК А

Лістинг програми

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const BLOCK_SIZE = 25;
const MAP_SIZE = 26;

const FREE_SPACE = 0;
const POINT_ROBOT = '$';

// Ініціалізуємо порожню карту
let map = new Array(MAP_SIZE);
for (let i = 0; i < MAP_SIZE; i++) {
    map[i] = new Array(MAP_SIZE);
    for (let j = 0; j < MAP_SIZE; j++) {
        map[i][j] = FREE_SPACE;
    }
}

function game_click(x, y) {
    let clickPosition = checkZeroPosition(x, y, map);
    switch (game) {
        case POINT_ROBOT:
            if (false === clickPosition) {
                window.toastr.error('Тут неможливо розмістити робота-кур'єра, спробуйте знову');
            } else {
                game = POINT_FINISH;
                setRobotPosition(clickPosition[0], clickPosition[1]);
                renderGame(document.getElementById('game'), map);
                window.toastr.info('Куди робот-кур'єр повинен доставити посилку?');
            }
            break;

        // Розміщуємо "робота" в певну точку, наприклад, центр
        let startX = Math.floor(MAP_SIZE / 2);
        let startY = Math.floor(MAP_SIZE / 2);
        map[startY][startX] = POINT_ROBOT;
        temNotUndefined(map_arr, i+1, j)) {
            if (map_arr[i+1][j] === 253) { x.splice(0, x.length); y.splice(0, y.length);
                xx = i+1; yy = j;
                for (let ii = 0; ii !== Nk; ii++) { map_right = 999;
                    if (map_arr[xx+1][yy] !== undefined) { map_right = map_arr[xx + 1][yy];
                        }
                    map_left = 999;
                    if (map_arr[xx-1][yy] !== undefined) { map_left = map_arr[xx - 1][yy];
                        }
                    map_up = 999;
                    if (map_arr[xx][yy+1] !== undefined) { map_up = map_arr[xx][yy + 1];
                        }
                    map_down = 999;
                    if (map_arr[xx][yy-1] !== undefined) { map_down = map_arr[xx][yy - 1];

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}
volnaxy = getMinXY(map_right, xx + 1, yy, map_left, xx - 1, yy,
map_up, xx, yy + 1, map_down, xx, yy - 1);
xx1=volnaxy[0]; yy1=volnaxy[1];
volnaxy.splice(0, volnaxy.length); x.push(xx1);
y.push(yy1);
if(map_arr[xx1][yy1]===0 { Ni = 999;
break;
}

way_full[0][0] = robot_x; way_full[0][1]=robot_y;
for(vari=0;i<way[0].length;i++) { way_full[i + 1][0] = way[0][i];
way_full[i+1][1]=way[1][i];
}
way_full[way[0].length + 1][0] = cargo_x; way_full[way[0].length +
1][1] = cargo_y; for(vari=0;i<point_way[0].length;i++) {
way_full[i+way[0].length+2][0]=point_way[0][i];
way_full[i+way[0].length+2][1]=point_way[1][i];
}

if(way_full[gi][0]>way_full[gi+1][0]) {
renderWay(map_canvas, 'dirt', way_full[gi + 1][0] * BLOCK_SIZE,
way_full[gi][1] * BLOCK_SIZE, BLOCK_SIZE, BLOCK_SIZE);// Clear
block
renderWay(map_canvas, 'robot',way_full[gi][0] * BLOCK_SIZE - index
+ 1,way_full[gi][1]*BLOCK_SIZE+1,BLOCK_SIZE-2,BLOCK_SIZE-2);//
Clearblock
}
if(way_full[gi][0]<way_full[gi+1][0]) {
renderWay(map_canvas, 'dirt', way_full[gi + 1][0] * BLOCK_SIZE,
way_full[gi][1] * BLOCK_SIZE, BLOCK_SIZE, BLOCK_SIZE);// Clear
block
renderWay(map_canvas,'robot',way_full[gi][0] * BLOCK_SIZE + index
+1,way_full[gi][1]*BLOCK_SIZE+1,BLOCK_SIZE-2, BLOCK_SIZE-2);//
Clearblock
}

if(way_full[gi][1]<way_full[gi+1][1]) {
renderWay(map_canvas, 'dirt', way_full[gi][0] * BLOCK_SIZE,
way_full[gi + 1][1] * BLOCK_SIZE, BLOCK_SIZE, BLOCK_SIZE);// Clear
block
renderWay(map_canvas, 'robot', way_full[gi][0] * BLOCK_SIZE + 1,
way_full[gi][1]*BLOCK_SIZE+index+1,BLOCK_SIZE-2,BLOCK_SIZE-
2);//Clearblock
}
if(way_full[gi][1]>way_full[gi+1][1]){
renderWay(map_canvas, 'dirt', way_full[gi][0] * BLOCK_SIZE,
way_full[gi + 1][1] * BLOCK_SIZE, BLOCK_SIZE, BLOCK_SIZE);// Clear
block
renderWay(map_canvas,'robot',way_full[gi][0]*BLOCK_SIZE+1,
way_full[gi][1]*BLOCK_SIZE-index+1,BLOCK_SIZE-2,BLOCK_SIZE-
2);//Clearblock
}

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if(index>BLOCK_SIZE){//Nextblock index = 0;
gi++;
}
setTimeout(wayGo,10);
}else{
renderWay(map_canvas,'dirt',point_x*BLOCK_SIZE, point_y*
BLOCK_SIZE, BLOCK_SIZE, BLOCK_SIZE);
renderWay(map_canvas,'cargo',point_x*
BLOCK_SIZE, point_y*
BLOCK_SIZE, BLOCK_SIZE, BLOCK_SIZE);
window.toastr.success('Чудово! Завдання виконане!');
}
}}
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ДОДАТОК Б
Демонстраційний матеріал

