

# HTML5 Game Framework 使用說明

## Tutorial 4: 利用陣列建立遊戲地圖

1. 參考練習 1 加入兩張圖片



green.png



blue.png

2. 新增一個 js 檔，命名為 **GameMap.js**，並建立地圖陣列

```

class GameMap {

    constructor() {
        this.MW = 70;
        this.MH = 40;
        this.position = {
            x: 200,
            y: 500
        }

        this.map = [
            [1, 2, 1, 2],
            [2, 1, 2, 1],
            [0, 1, 0, 1],
            [2, 0, 2, 0],
            [1, 2, 1, 2]
        ];
    }

    load() {
        this.greenPic = new Framework.Sprite(define.imagePath + 'green.png');
        this.bluePic = new Framework.Sprite(define.imagePath + 'blue.png');
    };

    draw() {
        for (let i = 0; i < 5; i++) {
            for (let j = 0; j < 5; j++) {
                let picPosition = {
                    x: this.position.x + (this.MW * j) + this.MW / 2,
                    y: this.position.y + (this.MH * i) + this.MH / 2;
                };
                switch (this.map[i][j]) {
                    case 0:
                        break;
                    case 1:
                        this.greenPic.position = picPosition;
                        this.greenPic.draw(ctx);
                        break;
                    case 2:
                        this.bluePic.position = picPosition;
                        this.bluePic.draw(ctx);
                }
            }
        }
    }

    update() {
        this.position = {
            x: this.position.x + 1,
            y: this.position.y
        };
        this.rotation += 1;
        this.pic.position = this.position;
        this.pic.rotation = this.rotation;
    }

    draw(ctx) {
        this.pic.draw(ctx);
    }

}

```

### 3. 在 loadGame.js 中加入 GameMap.js

```
//陣列和載入JS檔的順序相同，lookFor為在要載入的檔案中，  
//有用到的全域變數，importJS這個function，會在找到lookFor的變數後  
//才會繼續loading下一個檔案，如果沒有需要lookFor，則以空字串代表  
var listScript =  
[  
  { src: 'game_sample/js/define.js', lookFor: 'define' },  
  { src: 'game_sample/js/myMenu.js', lookFor: 'MyMenu' },  
  { src: 'game_sample/js/character.js', lookFor: 'Character' },  
  { src: 'game_sample/js/Practice.js', lookFor: 'Practice' },  
  { src: 'game_sample/js/GameMap.js', lookFor: 'GameMap' },  
  { src: 'game_sample/js/myGameLevel1.js', lookFor: 'MyGame' },  
  { src: 'game_sample/js/mainGame.js' }  
]
```

### 4. 在 myGameLevel1.js 的 load function 內建立物件

```
this.gameMap = new GameMap();  
this.gameMap.load();  
this.rootScene.attach(this.gameMap);
```

### 5. 執行結果

