

SmartPark System

第12組

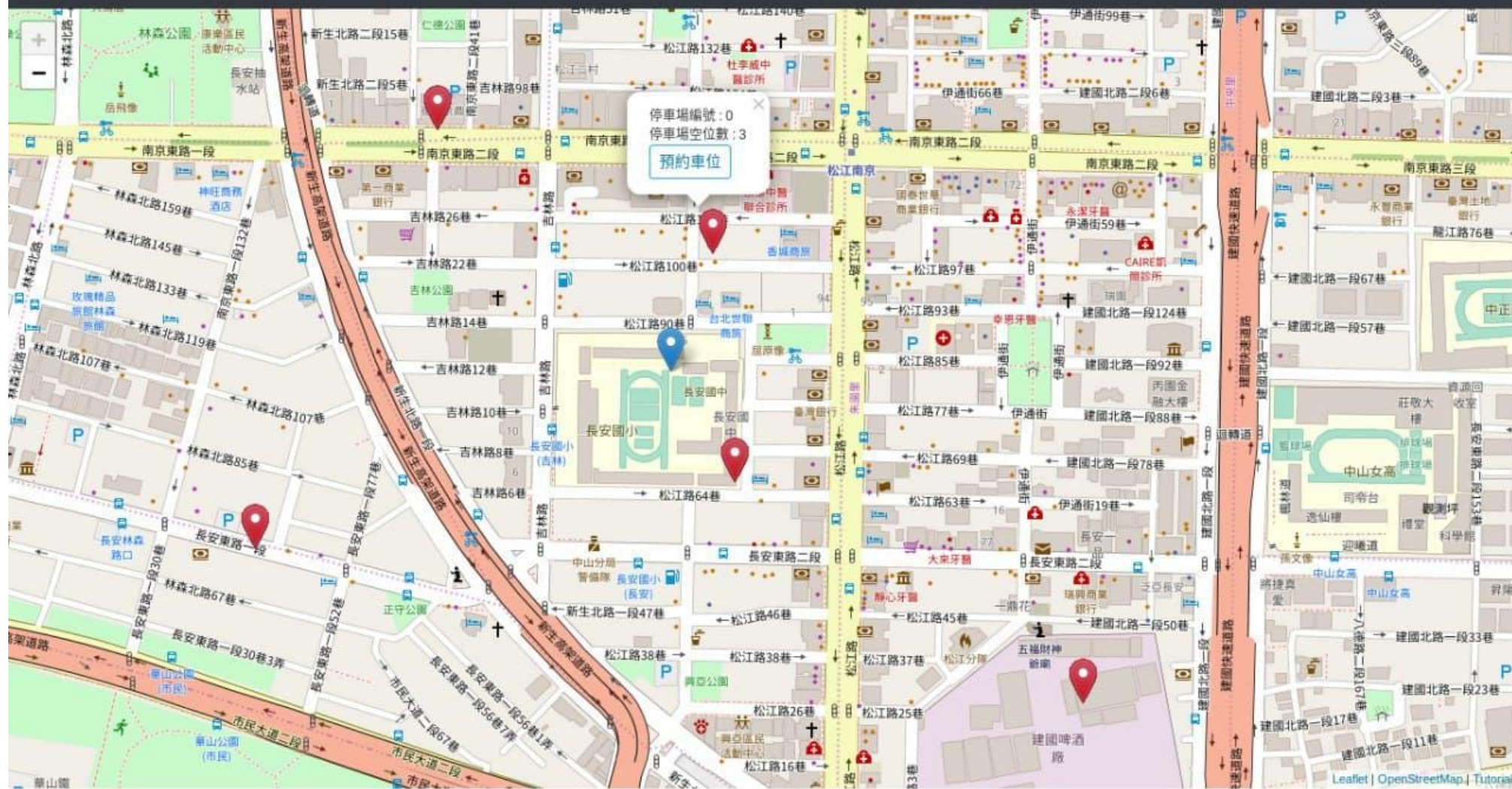
林明達 文宗 蔡維遠 萬尚宏

還在擔心找不到停車位？



Let me give you

SmartPark



- 資料豐富，多家停車場車位整合
- 手機在手，立即線上檢視附近所有車位
- 地圖介面，一目了然
- 預約功能，無所向隅
- 智慧生活，自動付款與車牌辨識省下繳費時間

我們過去24小時的成果

- 線上查詢停車場即時資訊
- 即時使用者定位
- 線上預約車位
- 紀錄我的車位

我的車位

License Number

NCUxNTUST2019

Parking Place

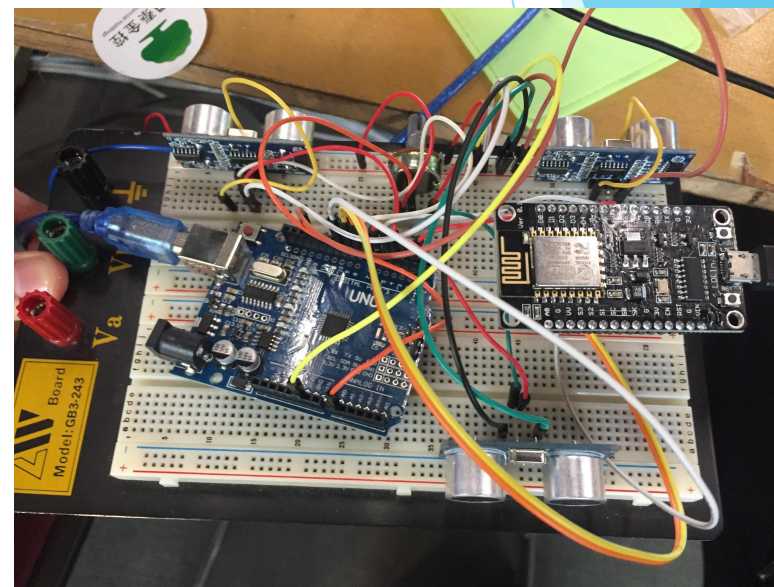
Parking ID : 2

Space ID : 2

Close

硬體端

- HC-SR04*3 (超聲波感測器)
- Arduino UNO*1
- ESP8266*1
- 10k可變電阻*1



(車位)→多個感測器→訊號管理電路→網路發送
裝置→(伺服器端)

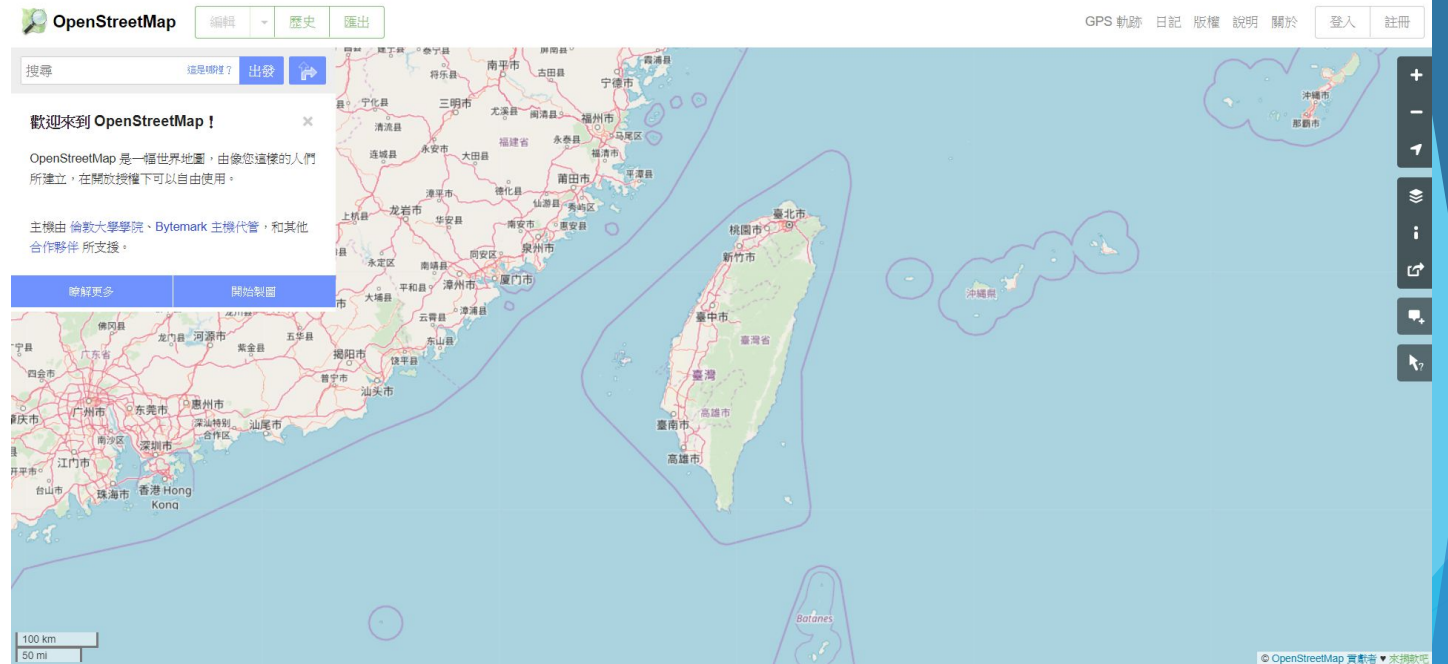
伺服端

- Node.js
- MVC架構
- Socket.io
- Service API

```
34.943Z {"message":"success"}
analog data:
[ ]
[ 2 ]
{ pid: 2, status: false, floor: '1', price: 0 }
停車場狀態:
send: [ { pid: 2, status: false, floor: '1', price: 0 } ]
update status 200 2019-03-31T03:38:39.048Z {"message":"success"}
analog data:
[ ]
[ 0, 1, 2 ]
{ pid: 0, status: false, floor: 'B1', price: 0 }
{ pid: 1, status: true, floor: 'B1', price: 0 }
{ pid: 2, status: true, floor: '1', price: 0 }
[ ]
模擬使用者接收資料 2019-03-31T03:38:41.695Z
{ id: 12,
  position: [ 25.004658884540724, 121.55410177934884 ],
  time: 1554003521695,
  status: true,
  space:
    [ { pid: 0, status: false, floor: 'B1', price: 0 },
      { pid: 1, status: true, floor: 'B1', price: 0 },
      { pid: 2, status: true, floor: '1', price: 0 } ],
  length: 3 }
模擬使用者接收資料 2019-03-31T03:38:42.662Z
{ id: 20,
  position: [ 25.05325445601229, 121.52806925887984 ],
  time: 1554003522662,
  status: true,
  space:
    [ { pid: 0, status: false, floor: 'B1', price: 0 },
      { pid: 1, status: true, floor: 'B1', price: 0 },
      { pid: 2, status: true, floor: '1', price: 0 } ],
  length: 3 }
[ ]
{ pid: 0, status: false, floor: 'B1', price: 0 }
停車場狀態:
send: [ { pid: 0, status: false, floor: 'B1', price: 0 } ]
update status 200 2019-03-31T03:38:39.758Z {"message":"success"}
analog data:
[ ]
[ ]
or: 'B1', price: 0 },
{ pid: 1, status: true, floor: 'B1', price: 0 },
{ pid: 2, status: true, floor: '1', price: 0 } ]
update status 200 2019-03-31T03:38:41.828Z {"message":"success"}
analog data:
[ ]
[ ]
停車場狀態:
send: [ { pid: 0, status: false, floor: 'B1', price: 0 },
{ pid: 1, status: true, floor: 'B1', price: 0 },
{ pid: 2, status: true, floor: '1', price: 0 } ]
update status 200 2019-03-31T03:38:43.666Z {"message":"success"}
analog data:
[ ]
[ ]
停車場狀態:
send: [ { pid: 0, status: false, floor: 'B1', price: 0 },
{ pid: 1, status: true, floor: 'B1', price: 0 },
{ pid: 2, status: true, floor: '1', price: 0 } ]
update status 200 2019-03-31T03:38:44.793Z {"message":"success"}
analog data:
[ ]
[ ]
停車場狀態(未改變):
send: [ ]
update status 2019-03-31T03:38:40.801Z
analog data:
[ ]
[ ]
停車場狀態:
send: [ { pid: 0, status: false, floor: 'B1', price: 0 },
{ pid: 1, status: true, floor: 'B1', price: 0 },
{ pid: 2, status: true, floor: '1', price: 0 } ]
update status 200 2019-03-31T03:38:37.065Z {"message":"success"}
analog data:
[ ]
[ ]
停車場狀態(未改變):
send: [ ]
update status 2019-03-31T03:38:36.233Z
analog data:
[ ]
[ ]
{ pid: 1, status: true, floor: 'B1', price: 0 }
{ pid: 2, status: true, floor: '1', price: 0 }
停車場狀態:
send: [ { pid: 0, status: false, floor: 'B1', price: 0 },
{ pid: 1, status: true, floor: 'B1', price: 0 },
{ pid: 2, status: true, floor: '1', price: 0 } ]
update status 200 2019-03-31T03:38:42.793Z {"message":"success"}
analog data:
[ ]
[ ]
```

網頁端

- EJS
- Leaflet
- Bootstrap
- OpenStreetMap



協作工具

- HackMD
- GitHub
- Google Drive

The screenshot shows the GitHub interface for the repository 'makentu2019-ncu / server-dev'. At the top, there are buttons for 'Unwatch', 'Star' (2), and 'Fork' (0). Below this is a navigation bar with 'Code', 'Issues' (0), 'Pull requests' (0), 'Projects' (0), 'Wiki', and 'Insights'. The repository description states 'No description, website, or topics provided.' Below the description, a progress bar shows '19 commits', '1 branch', '0 releases', and '2 contributors'. A 'Branch: master' dropdown and a 'New pull request' button are visible. To the right are buttons for 'Create new file', 'Upload files', 'Find File', and a green 'Clone or download' button. The commit history table shows the following entries:

Commit Hash	Commit Message	Time Ago
a24230928	Merge branch 'master' of https://github.com/makentu2019-ncu/server-dev	Latest commit 8debe4f an hour ago
	bin update project name	16 hours ago
	modules fixed bug and change test device name	an hour ago
	public add favicon and delete package-lock	9 hours ago
	routes 將got info加上position	9 hours ago
	views fixed bug and change test device name	an hour ago
	app.js 新增session管理使用者停車狀態	14 hours ago
	package.json 新增session管理使用者停車狀態	14 hours ago
	structure.md first template	a day ago

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the image, creating a modern, layered effect. The rest of the background is a solid, very light blue.

DEMO

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the image, creating a modern, architectural feel. The left side of the image is a solid, very light blue.

F&Q

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the frame, creating a modern, layered effect.

THE END

記得投給第12組喔