| 序號 | Method | URL   | Header   | Body                           | Res  | 說明  |
|----|--------|---|--|--------------------------------|--|---|
| 1  | GET    | BaseURL/login   | Content-Type: application/json   | -                              | //登入頁面   |   |
| 2  | GET    | BaseURL/static/dist/home  | Content-Type:<br>application/json<br>Cookie:<br>{token:TOKEN}                | -                              | //主頁面  |   |
| 3  | GET    | BaseURL/static/dist/Fishdata<br>s/                                  | Content-Type:<br>application/json<br>Cookie:<br>{token:TOKEN}                | -                              | //魚資料頁面  |   |
| 4  | POST   | BaseURL/api/v1/account/logi<br>n                                    | Content-Type:<br>application/json  | username: 'a'<br>password: 'p' | 附件 5<br>//登入成功<br>403//登入失<br>敗                              | 登入請求 Level 越小權 限越大 Section 表示 管理區域              |
| 5  | GET    | BaseURL/api/v1/fish/table/? section=SECTION&fishesID=F ISHESID      | Content-Type:<br>application/json<br>Authorization:<br>`Bearer<br>\${TOKEN}` | -                              | (附件 1)//取<br>得成功<br>403 //取得失<br>敗                           | 取得 fish table FISHESID 舉例 24,25 SECTION 舉例: 001 |
| 6  | GET    | BaseURL/api/v1/fish/data/?s<br>ection=SECTION&fishesID=FI<br>SHESID | Content-Type:<br>application/json<br>Authorization:<br>`Bearer<br>\${TOKEN}` | -                              | {     "23": {     "version": 3,     "time": 6,     "bc": 45, | 取得最新資料<br>料<br>FISHESID 舉<br>例<br>23,24         |

|   |     |  |  |   | "err": 7,  "active": 1,  },  "24": {  "version": 3,  "time": 7,  "bc": 48,  "err": 7,  "active": 1  }  | SECTION 舉例: 001 level 需要 50   |
|---|-----|--|--|---|--|---|
|   |     |  |  |   | 403 //取得失<br>敗   |   |
| 7 | GET | BaseURL/api/v1/fish/history<br>_data/?section=SECTION&fis<br>hesID=FISHESID&versions=VE<br>RSION | Content-Type:<br>application/json<br>Authorization:<br>`Bearer<br>\${TOKEN}` | - | {     "25": {     "version": 1,     "time": 6,     "bc": 45,     "err": 7,     "active": 1       },     "26": {     "version": 2,     "time": 7,     "bc": 48,     "err": 7,     "active": 1     } | 取得舊版<br>料<br>FISHESID 舉<br>例<br>23,24<br>SECTION 舉<br>例:<br>001<br>VERSION 舉<br>例:1,2<br>level<br>需要 50 |

|    |      |   |                                |                  | }               |           |
|----|------|---|--------------------------------|------------------|-----------------|-----------|
|    |      |   |                                |                  | 403 //取得失       |           |
|    |      |   |                                |                  | 敗               |           |
|    |      |   |                                | username:'a'     | 200 //成功註       | 註冊請求      |
|    |      |   |                                |                  | 冊               |           |
| 8  | POST | BaseURL/api/v1/account/sig                    | Content-Type:                  | mail: 'm'        | 402 //÷+ III. 4 |           |
|    |      | n_up  | application/json               | password: 'p'    | 403 //註冊失<br>敗  |           |
|    |      |   |                                | section:'001'    | **              |           |
|    |      |   |                                | , ,              | 200 //已發送       | 重設密碼請     |
|    |      | BaseURL/api/v1/account/res                    | Content-Type:                  | username :'a'    | 驗證碼             | 求         |
| 9  | POST | et_password                                   | application/json               | mail: 'm'        | 403 //重設失       |           |
|    |      | _'  | ,,                             | password: 'p     | 與 與 與           |           |
|    |      |   |                                |                  |                 |           |
|    |      |   |                                |                  | 200 //重設成       | 輸入驗證碼     |
| 10 | POST | BaseURL/api/v1/account /reset_password _check | Content-Type: application/json | code: 'c'        | 功               | 時的請求      |
|    |      |   |                                |                  | 403 //重設失       |           |
|    |      |   |                                |                  | 敗               |           |
|    |      |   | Content-Type:                  |                  | 200 //登出成       |           |
|    |      | BaseURL/api/v1/account/log                    | application/json               |                  | 功               |           |
| 11 | POST | out   | Authorization:                 | -                | 403 //登出失       |           |
|    |      |   | `Bearer                        |                  | 敗               |           |
|    |      |   | \${TOKEN}`                     |                  |                 |           |
|    |      |   | Content-Type:                  |                  | 200 //註銷成       |           |
|    |      | BaseURL/api/v1/account                        | application/json               |                  | 功               |           |
| 12 | POST | /delete_user/                                 | Authorization:                 | -                | 403 //註銷失       |           |
|    |      | ,   | `Bearer                        |                  | 敗               |           |
|    |      |   | \${TOKEN}`                     |                  |                 |           |
|    |      |   |                                | 'fishData': {    | 200 //新增成       | 新增 fish 資 |
|    |      |   | Content-Type:                  | '23': {'bc': 20, | 功               | 料         |
|    |      | BaseURL/api/v1/fish/data/?s                   | application/json               | 'err': 2,        | 403 //新增失       | level     |
| 13 | POST | ection=SECTION                                | Authorization:                 |                  | 敗               | 需要 40     |
|    |      | CCLIOII-JECTION                               | `Bearer                        | 'active':0},     |                 |           |
|    |      |   | \${TOKEN}`                     | 24': {'bc': 20,  |                 |           |
|    |      |   |                                | 'err': 2,        |                 |           |
|    |      | L   | <u> </u>                       | l                | <u> </u>        | L         |

|    |      |  |  | 'active':0}                  |  |                                |
|----|------|--|--|------------------------------|--|--------------------------------|
|    |      |  |  | }                            |  |                                |
|    | POST | BaseURL/api/v1/fish/control<br>/?section=SECTION | Content-Type:<br>application/json<br>Authorization:<br>`Bearer<br>\${TOKEN}` | (附件 2)                       | 200 /控制成功 403 //控制失 敗  | 控制 fish<br>level<br>需要 60      |
| 14 | GET  | BaseURL/api/v1/account/list<br>/?section=SECTION | Content-Type:<br>application/json<br>Authorization:<br>`Bearer<br>\${TOKEN}` | -                            | [{     "userID": 1,     "username":         "123",     "email":     "ppp1244qqq     @gmail.com",     "passcode":     "1f1e62cf",     "registrationTime":     16889013089         39,     "level": 20,     "section":"ntut"         }]     403//取得失     敗 | 取得帳號資<br>料清單<br>level<br>需要 20 |
| 15 | POST | BaseURL/api/v1/account/rev<br>ise/level          | Content-Type:<br>application/json<br>Authorization:<br>`Bearer<br>\${TOKEN}` | { userID:"ab" newLevel:20, } | 200 //更改成功 403 //更改失 敗   | 更改帳號等<br>級<br>level<br>需要 20   |

|    |      |                            | Content-Type:                     | {            | 200 //更改成       | 更改帳號區 |
|----|------|----------------------------|-----------------------------------|--------------|-----------------|-------|
|    |      |                            | application/json                  | userID:"ab"  | 功               | 域     |
| 16 | POST | BaseURL/api/v1/account/rev | Authorization:                    | newSection:0 | 403 //更改失       | level |
|    |      | ise/section                | `Bearer                           | 01           | 敗               | 需要 10 |
|    |      |                            | \${TOKEN}`                        | }            |                 |       |
|    |      |                            |                                   |              | {               |       |
|    |      |                            |                                   |              | "userID": 6,    |       |
|    |      |                            |                                   |              | "username":     |       |
|    |      |                            |                                   |              | "123",          |       |
|    |      |                            |                                   |              | "email":        |       |
|    |      |                            |                                   |              | "ppp1244qqq     |       |
|    |      |                            |                                   |              | @gmail.com",    |       |
|    |      |                            |                                   |              | "registrationTi |       |
|    |      |                            |                                   |              | me":            |       |
|    |      |                            |                                   |              | 16896940582     |       |
|    |      |                            | Content-Type:                     |              | 84,             |       |
| 17 | GET  | BaseURL/api/v1/account     | application/json                  | -            | "level": 10,    |       |
|    |      |                            | Authorization: `Bearer \${TOKEN}` |              | "section":      |       |
|    |      |                            |                                   |              | "001",          |       |
|    |      |                            |                                   |              | "fishesID": {   |       |
|    |      |                            |                                   |              | "001": {        |       |
|    |      |                            |                                   |              | "23": 1,        |       |
|    |      |                            |                                   |              | "24": 2         |       |
|    |      |                            |                                   |              | },              |       |
|    |      |                            |                                   |              | "002": {        |       |
|    |      |                            |                                   |              | "25": 0,        |       |
|    |      |                            |                                   |              | "26": 1         |       |
|    |      |                            |                                   |              | }}}             |       |

| 18 | GET  | BaseURL/api/v1/video/?secti<br>on=SECTION&<br>video_uid=VIDEO_UID | Content-Type:<br>application/json<br>Authorization:<br>`Bearer<br>\${TOKEN} | -    | //影片                           | SECTION 舉例: 002 VIDEO_UID 舉例: 2 |
|----|------|---|---|------|--------------------------------|---------------------------------|
| 19 | POST | BaseURL/api/v1/video/uploa<br>d/?video_uid=VIDEO_UID              | Content-Type:<br>multipart/form-<br>data                                    | //影片 | 200//上傳成<br>功<br>403//上傳失<br>敗 | VIDEO_UID<br>舉例:<br>2           |

```
"24": [
   "version": 1,
   "time": 6,
   "bc": 45,
   "err": 7,
   "active": 1
 },
   "version": 2,
   "time": 6,
   "bc": 45,
   "err": 7,
   "active": 1
 }
],
"25": [
   "version": 1,
   "time": 7,
   "bc": 48,
   "err": 7,
   "active": 1
 },
   "version": 2,
   "time": 7,
   "bc": 48,
   "err": 7,
   "active": 1
```

```
附件 2:
```

```
{
  "fishControl":{
    "led":{
      "23":{
         "led1": {"r":11,"g":21,"b":22,"a":40},
        "led2": {"r":20,"g":21,"b":22,"a":40}
      },
      "24":{
        "led1": {"r":21,"g":21,"b":22,"a":40},
        "led2": {"r":22,"g":21,"b":22,"a":40}
      }
    },
    "motion":{
      "id": "23",
      "motion": 2
    },
    "mode":{
      "id": "23,24",
      "mode": 0
    }
  }
}
```

附件 3:參數定義表

| section |    | active |     |
|---------|----|--------|-----|
| 數值      | 定義 | 數值     | 定義  |
| 001     | 全區 | 0      | 關機中 |
| 002     | 北科 | 1      | 開機中 |
| 003     | 海科 | 2      | 維修中 |
| 004     | 先鋒 |        |     |

附件 4:權限表

|       | 全區            | 分區    |               |  |
|-------|---------------|-------|---------------|--|
| Level | 權限            | Level | 權限            |  |
| 10    | 修改帳號區域        | 20    | 修改帳號等級        |  |
| 20    | 修改帳號等級        | 40    | 寫入魚資料         |  |
| 30    | 更新魚版本,遠端測試    | 50    | 讀取魚資料         |  |
| 40    | 寫入魚資料         | 60    | 控制魚(LED、動作等等) |  |
| 50    | 讀取魚資料         | 70    | 魚有哪些,水池影片     |  |
| 60    | 控制魚(LED、動作等等) |       |               |  |
| 70    | 魚有哪些,水池影片     |       |               |  |

## 說明:

- 1. 同組 Level 數值較小的權限包括 Level 數值較大的權限
- 2. 控制魚的機制會暫時綁定給單一帳號(以免控制指令衝突)

```
/ {
   "userID": 1,
   "username": "123",
  "email": "ppp1244qqq@gmail.com",
  "registrationTime": 1690455466495,
   "level": 10,
   "section": "001",
   "fishesID": {
     "002": {
       "3013": 1
    }
   },
   "videoTime": {
     "002": {
       "1": {
         "time": 162626962033,
         "err": 1
       },
       "2": {
         "time": 162626962033,
         "err": 1
      }
    }
   },
   "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.ey
J1c2VybmFtZSI6IjEyMyIsImlhdCI6MTY5MDQ2MDQwMywiZXhwI
joxNjkwNDY5NDAzfQ.nE91IT0zdHSyFRh_eqdDZHFWnXaMN?
 -nUARRkvOE"
```