

Unit Test for Doctor API

A. Automation testing

For automation test, there are 6 test cases in doctorAPI/tests/test_doctorView.py. First create the mock data in setUp function, then have test on

1. Test the doctor list can return all doctors
2. Test doctor detail can return 1 specified doctor when given id
3. Test the doctor list can filter district
4. Test the doctor list can filter language
5. Test the doctor list can filter category
6. Test the doctor list can filter price

All 6 cases passed.

```
(TestEnv) 23:14:32 MacBookPro ~/Dev/necktie/doctorapi $ python manage.py test
Creating test database for alias 'default'...
System check identified no issues (0 silenced).
.....
-----
Ran 6 tests in 0.060s

OK
Destroying test database for alias 'default'...
```

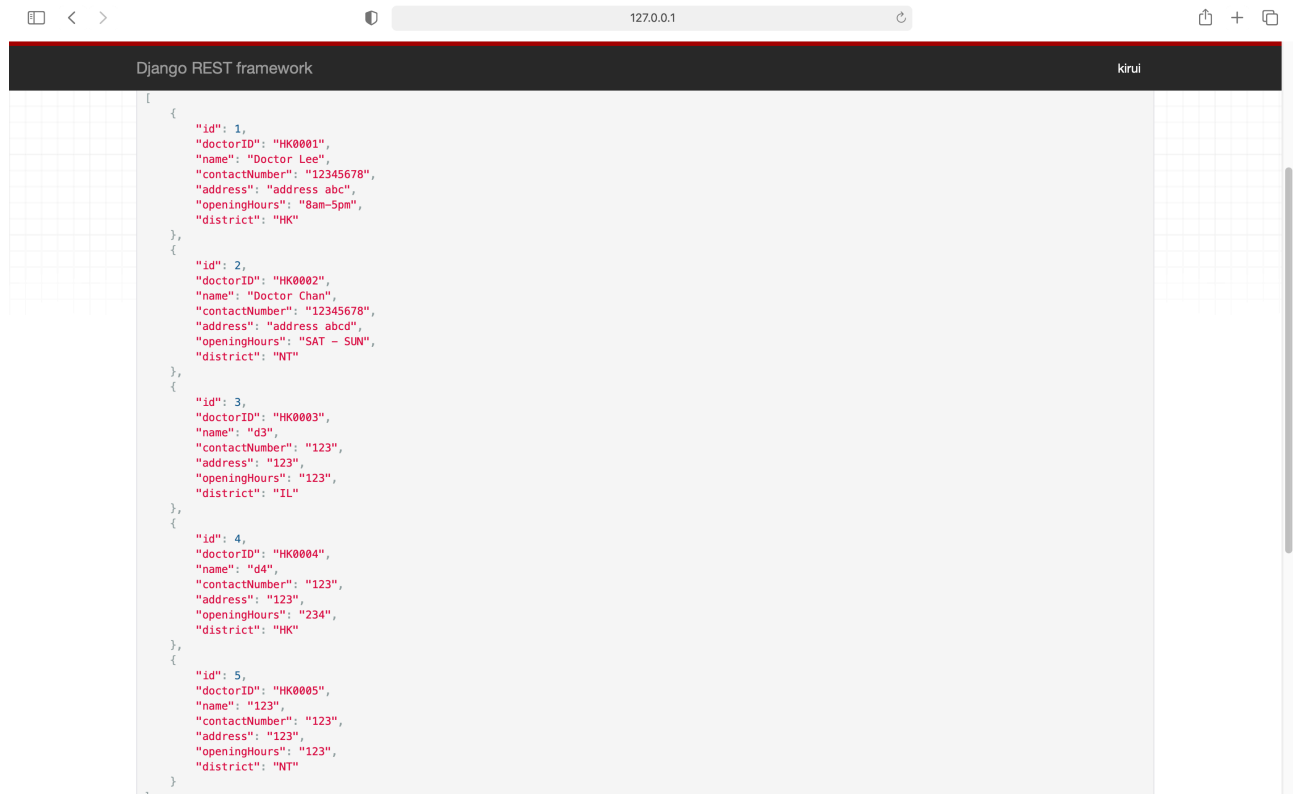
B. Manual testing

There are also some end to end manual testing made.

1. Go to admin Django panel, create some dummy data on Doctor, Language, Service class, then visit <http://127.0.0.1:8000/doctor/> in browser.

doctor	district	language	service
Doctor 1	HK	CNT, ENG	PHY/300
Doctor 2	NT	MDR	
Doctor 3	IL	ENG, CNT	PHY/100
Doctor 4	HK	CNT, MDR, ENG	
Doctor 5	NT	CNT, MDR	DEN/600, PHY/100

Doctor list function can return all 5 doctors.



```
{
  "id": 1,
  "doctorID": "HK0001",
  "name": "Doctor Lee",
  "contactNumber": "12345678",
  "address": "address abc",
  "openingHours": "8am-5pm",
  "district": "HK"
},
{
  "id": 2,
  "doctorID": "HK0002",
  "name": "Doctor Chan",
  "contactNumber": "12345678",
  "address": "address abcd",
  "openingHours": "SAT - SUN",
  "district": "NT"
},
{
  "id": 3,
  "doctorID": "HK0003",
  "name": "d3",
  "contactNumber": "123",
  "address": "123",
  "openingHours": "123",
  "district": "IL"
},
{
  "id": 4,
  "doctorID": "HK0004",
  "name": "d4",
  "contactNumber": "123",
  "address": "123",
  "openingHours": "234",
  "district": "HK"
},
{
  "id": 5,
  "doctorID": "HK0005",
  "name": "123",
  "contactNumber": "123",
  "address": "123",
  "openingHours": "123",
  "district": "NT"
}
```

2. Get specified doctor id=3 can successfully return doctor 3.

GET /doctor/3/

HTTP 200 OK

Allow: GET, PUT, PATCH, DELETE, HEAD, OPTIONS

Content-Type: application/json

Vary: Accept

```
{
  "id": 3,
  "doctorID": "HK0003",
  "name": "d3",
  "contactNumber": "123",
  "address": "123",
  "openingHours": "123",
  "district": "IL"
}
```

3. Filter all Hong Kong Island doctors by specifying district = HK can return doctor 1, 4.

```
GET /doctor/?district=HK
```

```
HTTP 200 OK
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept
```

```
[
  {
    "id": 1,
    "doctorID": "HK0001",
    "name": "Doctor Lee",
    "contactNumber": "12345678",
    "address": "address abc",
    "openingHours": "8am-5pm",
    "district": "HK"
  },
  {
    "id": 4,
    "doctorID": "HK0004",
    "name": "d4",
    "contactNumber": "123",
    "address": "123",
    "openingHours": "234",
    "district": "HK"
  }
]
```

4. Filter all HK and mandarin doctors can return doctor 4.

```
GET /doctor/?district=HK&language=MDR
```

```
HTTP 200 OK
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept
```

```
[
  {
    "id": 4,
    "doctorID": "HK0004",
    "name": "d4",
    "contactNumber": "123",
    "address": "123",
    "openingHours": "234",
    "district": "HK"
  }
]
```

5. Filter all dental doctors can return doctor 5.

```
GET /doctor/?category=DEN

HTTP 200 OK
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

[
  {
    "id": 5,
    "doctorID": "HK0005",
    "name": "123",
    "contactNumber": "123",
    "address": "123",
    "openingHours": "123",
    "district": "NT"
  }
]
```

6. Filter all physio-therapy doctors within \$300 - \$600 can return doctor 1.

```
GET /doctor/?price_range=300,600&category=PHY

HTTP 200 OK
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

[
  {
    "id": 1,
    "doctorID": "HK0001",
    "name": "Doctor Lee",
    "contactNumber": "12345678",
    "address": "address abc",
    "openingHours": "8am-5pm",
    "district": "HK"
  }
]
```