README

This is the document for instruction of the API.

Design introduction

I use the **Python flask web framework** to build a web application that can:

1. CRUD doctor information (two address locations are available for each doctor and this is for the internal use)

2. Show all the available appointments of all doctors at all locations

3. Make and cancel the appointment with the doctor.

4. If you make the appointment with a doctor at a certain time at the certain location, the doctor will be unavailable for that certain time and location.

5. Log-in function for the internal users to input doctor information is not available at this time, since it requires preset databases. So right now, anyone can edit the doctor information.

To run the API

1. Have Python2.7, pip, Flask-MySQL installed.

3. Install Flask-MySQL:

>> pip install flask-mysql

http://flask-mysql.readthedocs.io/en/latest/#installation

4. Database preparation:

a. Config database: I use the 'localhost' with user name 'root' and password '123456'. If your database setup is different, you need to change the database config under manage.py (line 13).

b. To connect to MySQL server:

>> mysql -u root -p

c. Execute the config file to set up the database tables:

mysql> SOURCE [PATH of DIRECTORY]/config.sql

5. run the manage.py to run the server:

>> python manage.py runserver

6. Running on localhost http://127.0.0.1:5000/

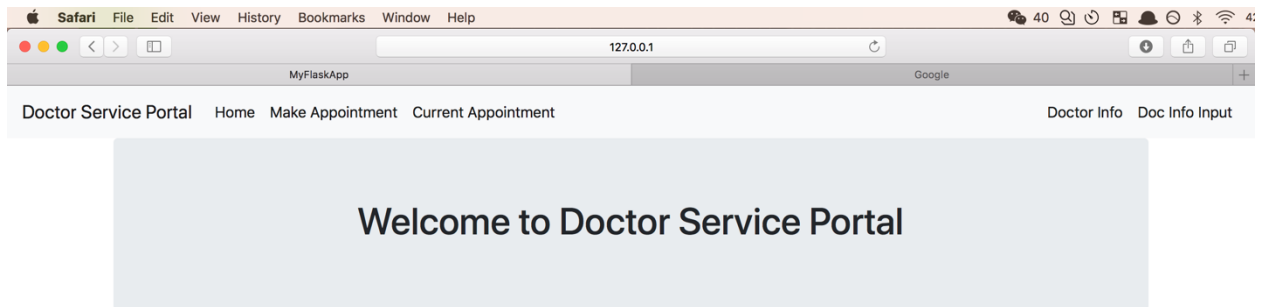**Note:**

1. You need to input the doctor information first (under "doc info input" section). Then you will be able to see the available appointments and make modifications.

 # Screenshots of the design #

1. Home page.

2. Doctor information input & modification.

Doctor Information

Doctor name	Doctor ID	Address1	Address2	
Mary Lee	198298	2887 Sunset Blvd.	IU Health, 687	Delete
John Smith	218398	798 Urgent Care	1009 IU Health	Delete

3. Make available appointment

Available Appointment

Docter Name	Docter ID	Time	Location	
Mary Lee	198298	MON morning	2887 Sunset Blvd.	Make Appointment
Mary Lee	198298	MON morning	IU Health, 687	Make Appointment
Mary Lee	198298	MON afternoon	2887 Sunset Blvd.	Make Appointment
Mary Lee	198298	MON afternoon	IU Health, 687	Make Appointment
Mary Lee	198298	TUE morning	2887 Sunset Blvd.	Make Appointment
Mary Lee	198298	TUE morning	IU Health, 687	Make Appointment
Mary Lee	198298	TUE afternoon	2887 Sunset Blvd.	Make Appointment
Mary Lee	198298	TUE afternoon	IU Health, 687	Make Appointment
Mary Lee	198298	WED morning	2887 Sunset Blvd.	Make Appointment
Mary Lee	198298	WED morning	IU Health, 687	Make Appointment
Mary Lee	198298	WED afternoon	2887 Sunset Blvd.	Make Appointment

4. Current appointment
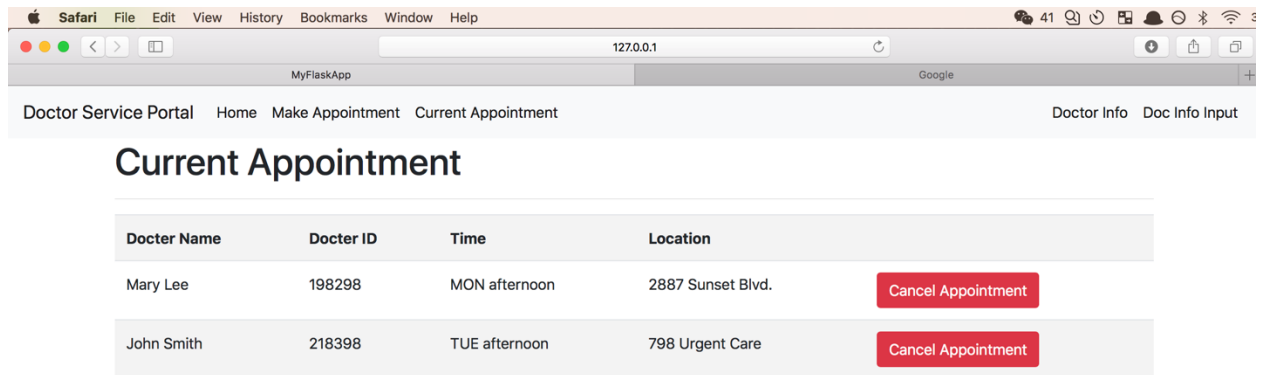
5. Database Screenshot:

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| doctorinfo         |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.01 sec)

mysql> DESCRIBE docinfo;
+----------+--------------+------+-----+---------+----------------+
| Field    | Type         | Null | Key | Default | Extra          |
+----------+--------------+------+-----+---------+----------------+
| id       | int(11)      | NO   | PRI | NULL    | auto_increment |
| name     | varchar(100) | YES  |     | NULL    |                |
| address  | varchar(100) | YES  |     | NULL    |                |
| address2 | varchar(100) | YES  |     | NULL    |                |
| docid    | int(11)      | YES  |     | NULL    |                |
+----------+--------------+------+-----+---------+----------------+
5 rows in set (0.01 sec)

mysql> DESCRIBE unavapp;
+----------+--------------+------+-----+---------+----------------+
| Field    | Type         | Null | Key | Default | Extra          |
+----------+--------------+------+-----+---------+----------------+
| id       | int(11)      | NO   | PRI | NULL    | auto_increment |
| name     | varchar(100) | YES  |     | NULL    |                |
| docid    | int(11)      | YES  |     | NULL    |                |
| date     | varchar(100) | YES  |     | NULL    |                |
| dateid   | int(11)      | YES  |     | NULL    |                |
| address  | varchar(100) | YES  |     | NULL    |                |
| address2 | varchar(100) | YES  |     | NULL    |                |
+----------+--------------+------+-----+---------+----------------+
7 rows in set (0.01 sec)

mysql> DESCRIBE boapp;
+----------+--------------+------+-----+---------+----------------+
| Field    | Type         | Null | Key | Default | Extra          |
+----------+--------------+------+-----+---------+----------------+
| id       | int(11)      | NO   | PRI | NULL    | auto_increment |
| name     | varchar(100) | YES  |     | NULL    |                |
| docid    | int(11)      | YES  |     | NULL    |                |
| date     | varchar(100) | YES  |     | NULL    |                |
| dateid   | int(11)      | YES  |     | NULL    |                |
| address  | varchar(100) | YES  |     | NULL    |                |
| address2 | varchar(100) | YES  |     | NULL    |                |
+----------+--------------+------+-----+---------+----------------+
7 rows in set (0.00 sec)

mysql>
```

For the answer of the additional questions, please see ANSWERS.md in the folder.