

Deployment and Usage Instructions

1. Setup a docker network and create two volumes for persistent data:

- Docker network create Assignment2
- Docker volume create app1-volume
- Docker volume create app2-volume

```
cavinashchelliah@Cavinashs-MacBook-Pro-2 ~ % docker network create Assignment2
0b0146ef4a76329bbfe6257ff93420c044249556ee3c2be697ed1fb2ab2ab5a1
cavinashchelliah@Cavinashs-MacBook-Pro-2 ~ % docker volume create app1-volume
app1-volume
cavinashchelliah@Cavinashs-MacBook-Pro-2 ~ % docker volume create app2-volume
app2-volume
```

2. Navigate into the dentist service:

- cd DentistService/app/demo/
- docker build -t app1 .
- docker run -v app1-volume:/app --net Assignment2 --name app1 -p 5002:5002 app1

```
cavinashchelliah@Cavinashs-MacBook-Pro-2 Assignment % cd DentistService/app/demo/
cavinashchelliah@Cavinashs-MacBook-Pro-2 demo % docker build -t app1 .
[+] Building 8.1s (11/11) FINISHED
=> [internal] load build definition from Dockerfile                                0.0s
=> => transferring dockerfile: 812B                                              0.0s
=> [internal] load .dockerignore                                                 0.0s
=> => transferring context: 2B                                                  0.0s
=> [internal] load metadata for docker.io/library/alpine:latest                 2.5s
=> [1/6] FROM docker.io/library/alpine:latest@sha256:c0e9560cda118f9ec63ddefb4a173a2b2a0347082d7dff7dc14272e7841a5b5a 0.0s
=> [internal] load build context                                                0.3s
=> => transferring context: 19.53MB                                             0.3s
=> CACHED [2/6] RUN apk add --no-cache py-pip                                  0.0s
=> CACHED [3/6] RUN pip3 install --upgrade pip                                0.0s
=> CACHED [4/6] WORKDIR ./demo/                                                0.0s
=> [5/6] COPY . .                                                             0.1s
=> [6/6] RUN pip3 --no-cache-dir install -r requirements.txt                  5.0s
=> exporting to image                                                         0.2s
=> => exporting layers                                                         0.2s
=> => writing image sha256:7c4049cb7eb85c1b560b9326510c85fd40ef9ab1d57780ba6a98c959017ef18b 0.0s
=> => naming to docker.io/library/app1                                         0.0s
cavinashchelliah@Cavinashs-MacBook-Pro-2 demo % docker run -v app1-volume:/app --net Assignment2 --name app1 -p 5002:5002 app1
* Serving Flask app "__init__" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Running on http://0.0.0.0:5002/ (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 496-617-549
```

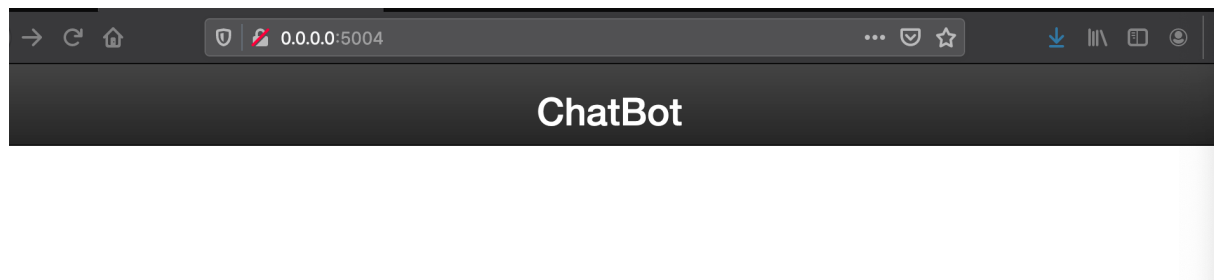
3. Open a new terminal window and navigate to the timeslot service.
 - `cd TimeslotService/app/demo/`
 - `docker build -t app2 .`
 - `docker run -v app2-volume:/app --net Assignment2 --name app2 -p 5001:5001 app2`

```
cavinashchelliah@Cavinashs-MacBook-Pro-2 TimeslotService % cd app/demo/
[cavinashchelliah@Cavinashs-MacBook-Pro-2 demo % docker build -t app2 .
[[+] Building 7.9s (11/11) FINISHED
=> [internal] load build definition from Dockerfile                                0.0s
=> => transferring dockerfile: 815B                                              0.0s
=> [internal] load .dockerignore                                                 0.0s
=> => transferring context: 2B                                                  0.0s
=> [internal] load metadata for docker.io/library/alpine:latest                 2.6s
=> [1/6] FROM docker.io/library/alpine:latest@sha256:c0e9560cda118f9ec63        0.0s
=> [internal] load build context                                                0.0s
=> => transferring context: 48.38kB                                             0.0s
=> CACHED [2/6] RUN apk add --no-cache py-pip                                  0.0s
=> CACHED [3/6] RUN pip3 install --upgrade pip                                  0.0s
=> CACHED [4/6] WORKDIR /app/demo/                                              0.0s
=> [5/6] COPY . .                                                              0.1s
=> [6/6] RUN pip3 --no-cache-dir install -r requirements.txt                   4.9s
=> exporting to image                                                         0.2s
=> => exporting layers                                                         0.2s
=> => writing image sha256:e02e8f31883e9ed4e14943b84e234a4f597adbbf3683e      0.0s
=> => naming to docker.io/library/app2                                         0.0s
cavinashchelliah@Cavinashs-MacBook-Pro-2 demo % docker run -v app2-volume:/app --net Assignment2 --name app2 -p 5001:5001 app2
* Serving Flask app "__init__" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Running on http://0.0.0.0:5001/ (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 337-031-706
```

4. Open a new terminal window and navigate to the ChatBotService:
 - `cd ChatBotService/app/demo/`
 - `python3 __init__.py`

```
cavinashchelliah@Cavinashs-MacBook-Pro-2 Assignment % cd ChatBotService/app/demo/
cavinashchelliah@Cavinashs-MacBook-Pro-2 demo % python3 __init__.py
Init restful.Resource
* Serving Flask app "__init__" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Running on http://0.0.0.0:5003/ (Press CTRL+C to quit)
* Restarting with stat
Init restful.Resource
* Debugger is active!
* Debugger PIN: 189-209-119
```

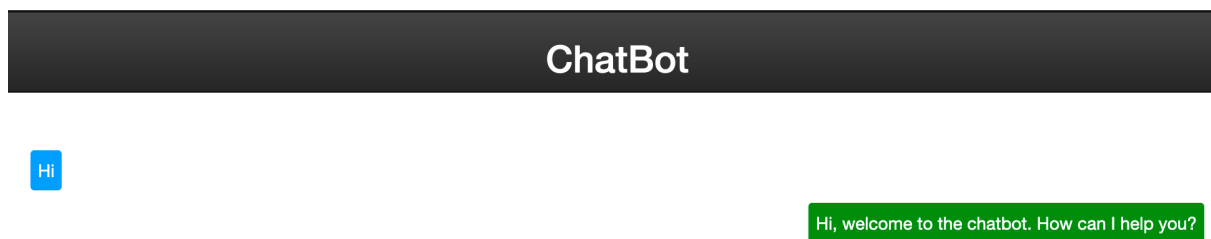
5. Open a browser window to 0.0.0.0:5005



Usage Examples

The chatbot will be empty until you type something.

Greetings:



Available Dentists:



Available times for Dr:



Book appointment with confirmation:

Book and appointment for Alex with Dr.John at 1pm

Yes

Do you want to confirm your booking for Alex at 13:00 with Dr.John?
(Yes/No)

Your appointment has been booked at 13:00 with Dr.John.Is there anything else we can help you with?

Can see that the booking at 13:00/1pm is now filled.

Available times for Dr.John

anything else we can help you with?

Dr.John has the following availabilities:
09:00
10:00
11:00
12:00
14:00
15:00
16:00

Cancel appointment:

Cancel appointment for Alex with Dr.John at 1pm

Yes

Are you sure you want to delete your appointment? (Yes/No)

Your appointment has now been successfully cancelled. Is there anything else we can help you with?

All times are now available

Available times for Dr.John

Dr.John has the following availabilities:
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00

Details of a particular doctor:

Details for Dr.Sally

Dr.Sally runs a practice in Kensington and specialises in Oral Surgery.
Can I help you with anything else?

Offering available times when timeslot is full:

Book appointment for Steve with Dr.John at 9am

Yes

Do you want to confirm your booking for Steve at 09:00 with Dr.John?
(Yes/No)

Your selected timeslot is unavailable.
Dr.John has the following availabilities:
10:00
11:00
12:00
13:00
14:00
15:00
16:00

Book appointment for Steve at 2pm with Dr.John

Yes

Do you want to confirm your booking for Steve at 14:00 with Dr.John?
(Yes/No)

Your appointment has been booked at 14:00 with Dr.John.Is there
anything else we can help you with?

Notes:

All YAML files are contained within each service