Assignment 3: Building a Chatbot using Microservices as Back-end

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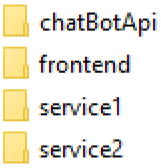
For this assignment, I combined two techniques(flow-based, machine learning-based) together to implement dentist reservation chatbot.

Deployment:

1) Directory:



chatBotApi
frontend
service1
service2

2) For service1(dentists resource):

```
cd service1
docker build -t service1 .
docker run -p 5001:5000 -t service1
```

2) For service2(timeslots resource):

```
cd ..
cd service2
docker build -t service2 .
docker run -p 5002:5000 -t service2
```

3) For chatbot Api

```
cd ..
cd chatBotApi
cd chatbotApi
pip install -r requirements.txt
cd chatbotApi
python3 __init__.py
```

4) For frontend:

```
cd ../../../frontend
open index.html in browser
(CROS has been fixed in backend part)
```

Functionalities:

Note: the button in frontend page only works once, please copy text in button and paste it in input field, then click icon or press Enter to send message.

1) greeting:

Input Hello or similar word(**based on Wit.ai**)

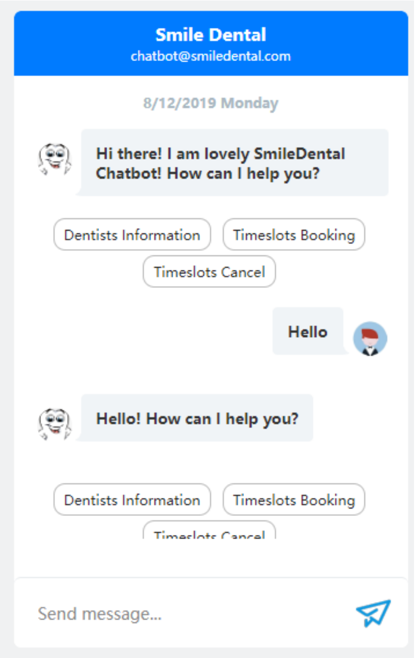
2) list all the available doctors:

Input Dentists Information

3) information about one doctor

Input Dr. Alex

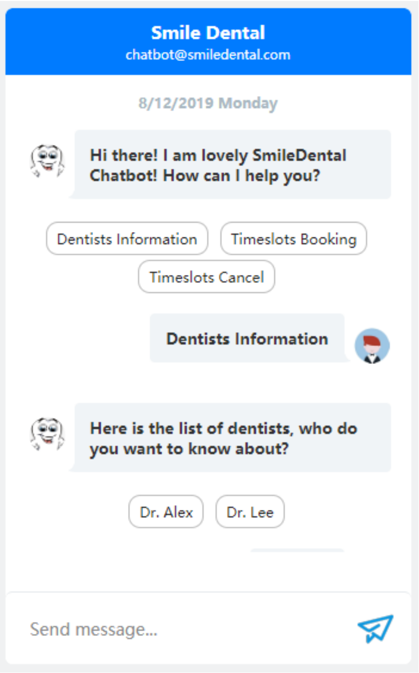
4) Already reserved （chatbot reply all available time except reserved time）



Hi there! I am lovely SmileDental Chatbot! How can I help you?

Hello

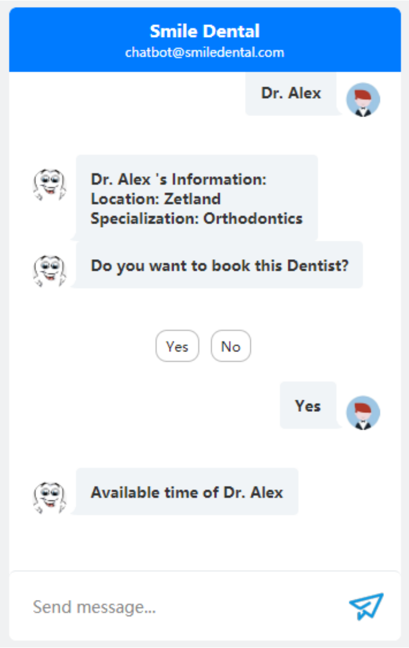
Hello! How can I help you?



Hi there! I am lovely SmileDental Chatbot! How can I help you?

Dentists Information

Here is the list of dentists, who do you want to know about?



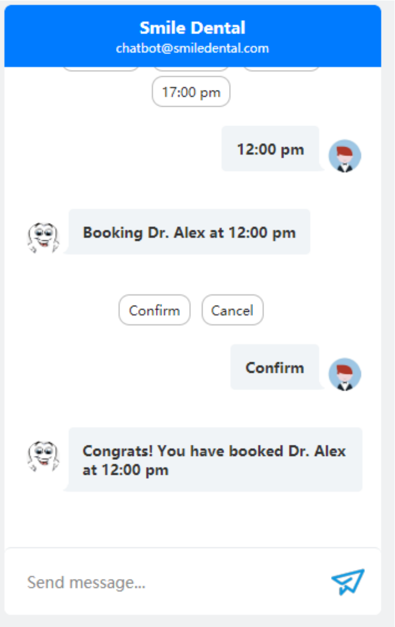
Dr. Alex

Dr. Alex 's Information:
Location: Zetland
Specialization: Orthodontics

Do you want to book this Dentist?

Yes

Available time of Dr. Alex



12:00 pm

Booking Dr. Alex at 12:00 pm

Confirm

Congrats! You have booked Dr. Alex at 12:00 pm

5） available timeslots

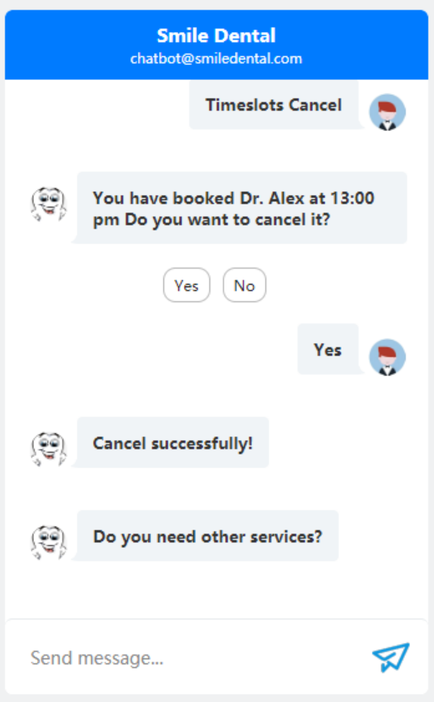
Like previous one

6） summarize booking Information

When input 12:00 pm. Chatbot will reply summarized infomation

7) Cancel the booking

8) Swagger document



Smile Dental
chatbot@smiledental.com

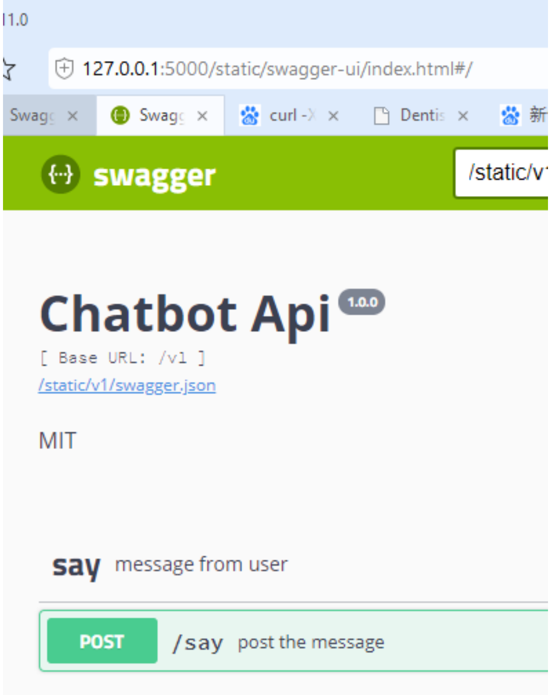
Timeslots Cancel

You have booked Dr. Alex at 13:00 pm Do you want to cancel it?

Yes

Cancel successfully!

Do you need other services?



Chatbot Api 1.0.0

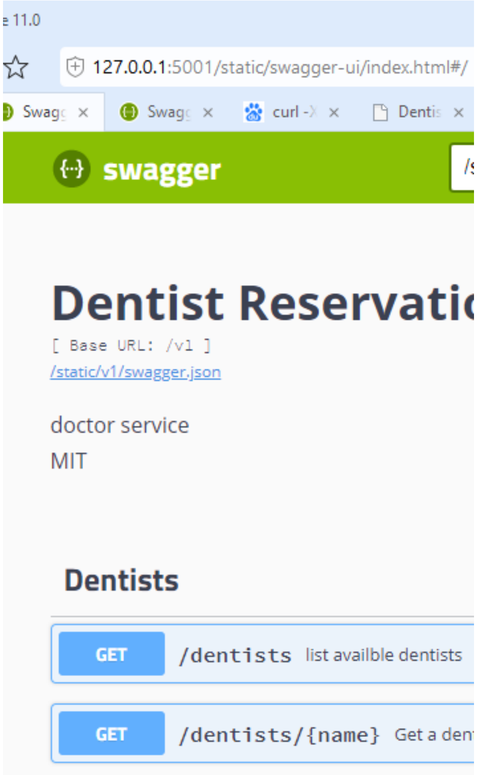
[Base URL: /v1]

/static/v1/swagger.json

MIT

say message from user

POST /say post the message



Dentist Reservatic

[Base URL: /v1]

/static/v1/swagger.json

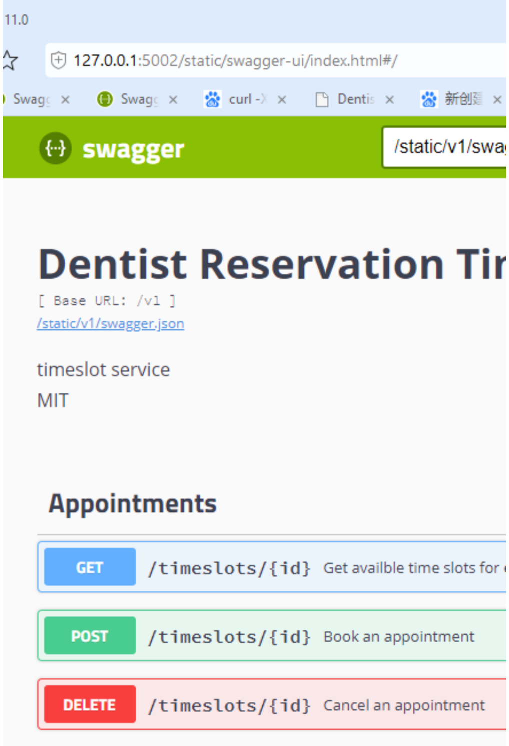
doctor service

MIT

Dentists

GET /dentists list availble dentists

GET /dentists/{name} Get a den



Dentist Reservation Ti

[Base URL: /v1]

/static/v1/swagger.json

timeslot service

MIT

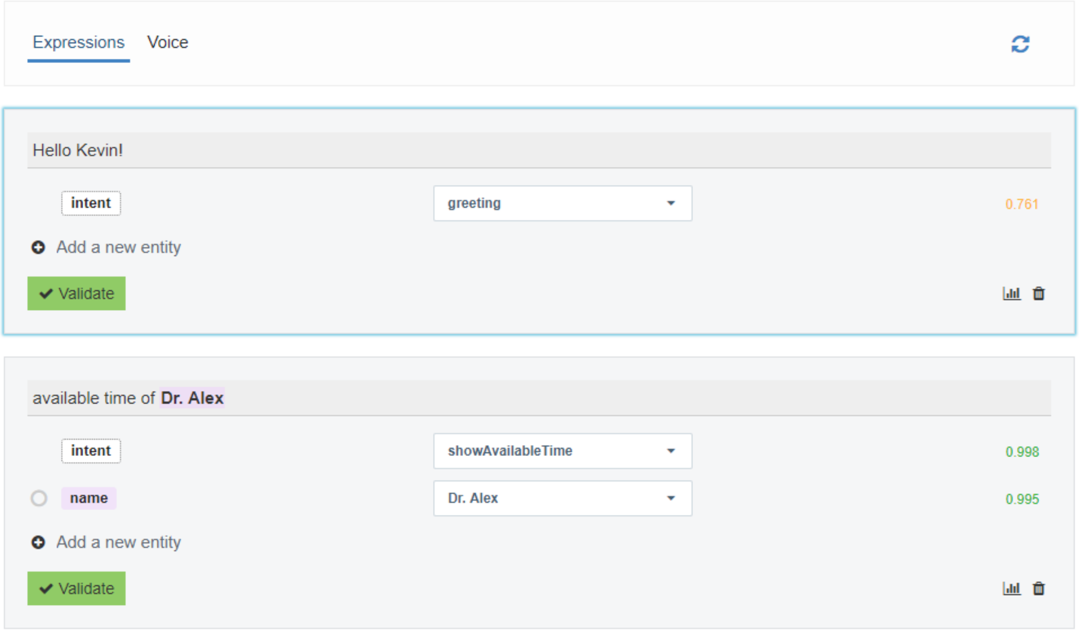
Appointments

GET /timeslots/{id} Get availble time slots for

POST /timeslots/{id} Book an appointment

DELETE /timeslots/{id} Cancel an appointment

9）Wit.ai screenshot



Hello Kevin!

intent	greeting	0.761

available time of Dr. Alex

intent	showAvailableTime	0.998
○ name	Dr. Alex	0.995