

# Comp9322 Assignment 2

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## - Building a dental clinic system using a chatbot and dockerized services

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## Introduction

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This report included the usage instruction of the dental chatbot service. The chatbot will help you to book a appointment with your selected dentist for tomorrow

**For chatbot implementation, i used ML-based chatbot with wit, the account and password for logging in wit is:**

Account: [9322chatbotmeishi@gmail.com](mailto:9322chatbotmeishi@gmail.com)

Password: 9322chatbot

### Chatbot frontend template references

<https://codepen.io/lilgreenland/pen/pyVvqB>

**For database implementation, i have already initialized a database for each service under their folder**

## Start Chatbot Service

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Open **dentalchatbot** and run the following command code inside the folder

```
python3 -m pip install -r requirements.txt
python3 chatbot.py
```

You now can chat with bot for basic greeting eg. Hi / How are you

## Start Dental Service

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Open **dentalservice** and run the following command code inside the folder

```
# build the dentalservice image
docker build -t dentalservice .
# run dentalservice image
docker run -p 8888:8888 dentalservice
```

You now can ask chatbot information about dentists

# Start Timeslot Service

Open **timeslotservice** and run the following command code inside the folder

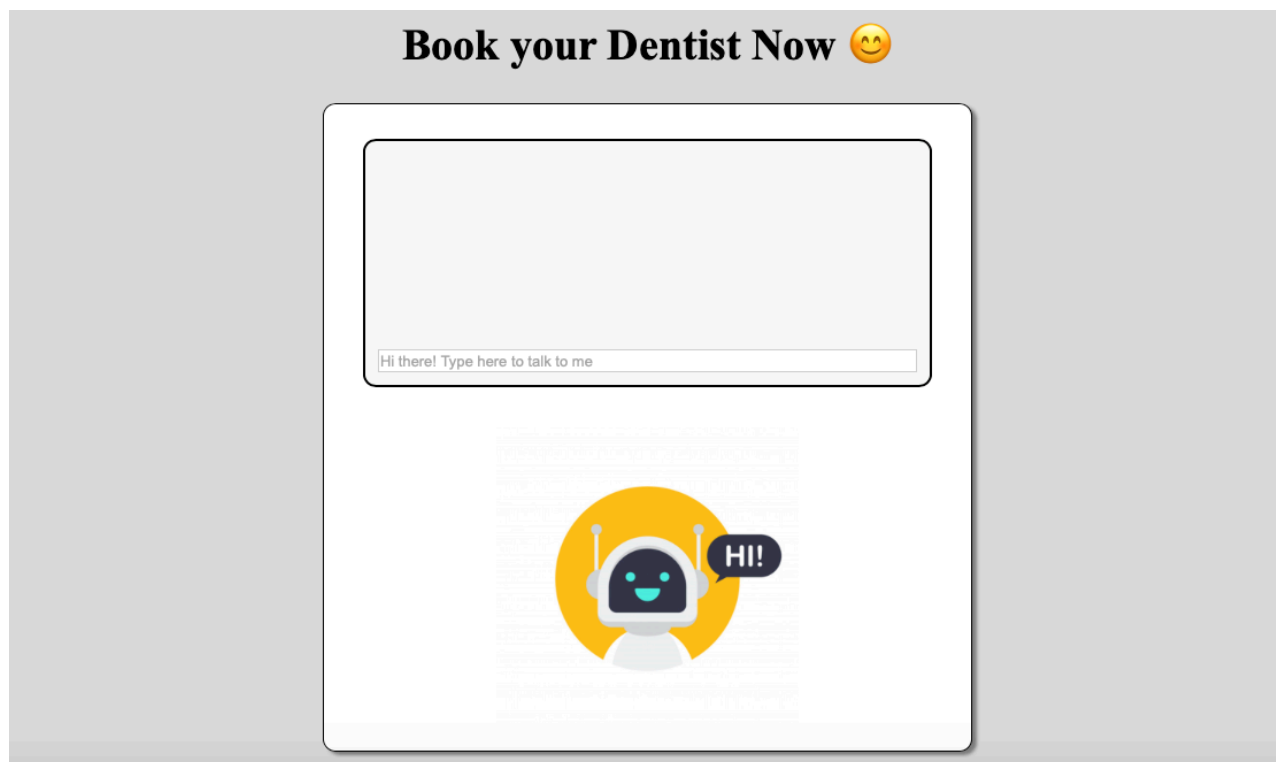
```
# build the timeslotservice image
docker build -t timeslotservice .
# run timeslotservice docker image
docker run -p 5555:5555 timeslotservice
```

You now can ask chatbot information about dentist timeslot

## How to use

Open your browser and go to "<http://127.0.0.1:8000/>", you will see a page contains a chatbot. Type anything to start, the chatbot will ask for your name, you can ask the bot '**what is my name**' if you forget the username you set.

You will stay in the same session as long as you stay in the same page to test the multi-user function, please open a new page.



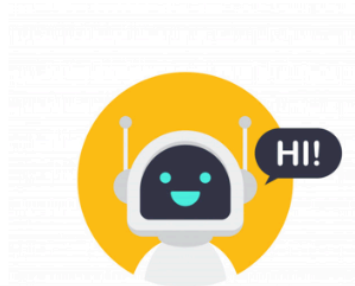
# Book your Dentist Now 😊

**You:** hi

**Chatbot:** Please enter your name to start the conversation

**You:** meishi

**Chatbot:** Hello meishi, welcome to use Dental Booking Chatbot Service!  
You can talk with me or make appointment with dentist for **Tomorrow**.  
To get the list of all available dentists, please type **"List all available dentists"** etc.  
To check the timetable of a specific dentists, please type **"Check xx timetable"** etc. To  
make an appointment directly, please type **"Book me with xx at xx:00"** etc.



## 1. Basic greeting

# Book your Dentist Now 😊

**Chatbot:** Please enter your name to start the conversation

**You:** meishi

**Chatbot:** Hello meishi, welcome to use Dental Booking Chatbot Service!

You can talk with me or make appointment with dentist for **Tomorrow**.

To get the list of all available dentists, please type "**List all available dentists**" etc.

To check the timetable of a specific dentists, please type "**Check xx timetable**" etc. To

make an appointment directly, please type "**Book me with xx at xx:00**" etc.

**You:** hi

**Chatbot:** Hello, how are you :)

**You:** how are you

**Chatbot:** I'm good! Thank you



2. Get the list of all available doctor

# Book your Dentist Now 😊

**Chatbot:** Hello meishi, welcome to use Dental Booking Chatbot Service!  
You can talk with me or make appointment with dentist for **Tomorrow**.  
To get the list of all available dentists, please type **"List all available dentists"** etc.  
To check the timetable of a specific dentists, please type **"Check xx timetable"** etc. To make an appointment directly, please type **"Book me with xx at xx:00"** etc.

**You:** hi

**Chatbot:** Hello, how are you :)

**You:** how are you

**Chatbot:** I'm good! Thank you

**You:** List all available dentists

**Chatbot:** All the dentists in our clinic are listed below:

Dentist name	Location	Specialization
dr.sharon	Burwood	Oral Surgery
dr.henry	Randwick	Paediatric Dentistry
dr.suzy	Eastwood	Oral Surgery

To know more information about the Doctor, please type: *Information about dr.sharon*



Chatbot will return all the dentists working in the clinic

## 3. Get dentist information

# Book your Dentist Now 😊

**Chatbot:** Hello, how are you :)

**You:** how are you

**Chatbot:** I'm good! Thank you

**You:** List all available dentists

**Chatbot:** All the dentists in our clinic are listed below:

Dentist name	Location	Specialization
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dr.sharon	Burwood	Oral Surgery
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dr.henry	Randwick	Paediatric Dentistry
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dr.suzy	Eastwood	Oral Surgery
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To know more information about the Doctor, please type: *Information about dr.sharon*

**You:** Information about dr.sharon

**Chatbot:**

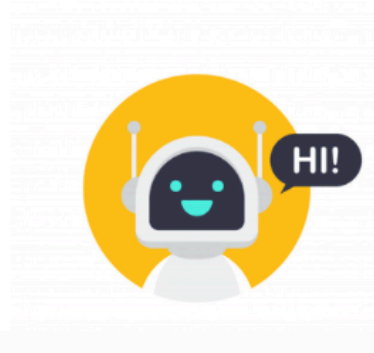
**Dentist name** dr.sharon

**Location** Burwood

**Specialization** Oral Surgery

**Phone number** 0451028117

To know the available timeslot of dr.sharon, please type: *'Get timetable of dr.sharon'* etc.



4. Get available time slots for each dentist

## Book your Dentist Now 😊

**Chatbot:** I'm good! Thank you

**You:** List all available dentists

**Chatbot:** All the dentists in our clinic are listed below:

Dentist name	Location	Specialization
dr.sharon	Burwood	Oral Surgery
dr.henry	Randwick	Paediatric Dentistry
dr.suzy	Eastwood	Oral Surgery

To know more information about the Doctor, please type: *Information about dr.sharon*

**You:** Information about dr.sharon

**Chatbot:**

**Dentist name** dr.sharon

**Location** Burwood

**Specialization** Oral Surgery

**Phone number** 0451028117

To know the available timeslot of dr.sharon, please type: *'Get timetable of dr.sharon'* etc.

**You:** Get timetable of dr.sharon

**Chatbot:** The available timeslot of dr.sharon is shown below:

9:00

10:00

11:00

12:00

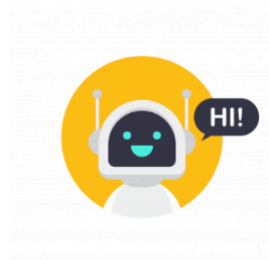
13:00

14:00

15:00

16:00

To make an appointment with dr.sharon, please type: *'book 9:00'* etc.



The last available timeslot is 16:00 since the appointment will last for 1 hour.

5. Reserve timeslot and ask for confirmation

## Book your Dentist Now 😊

**Chatbot:**

**Dentist name** dr.sharon

**Location** Burwood

**Specialization** Oral Surgery

**Phone number** 0451028117

To know the available timeslot of dr.sharon, please type: 'Get timetable of dr.sharon' etc.

**You:** Get timetable of dr.sharon

**Chatbot:** The available timeslot of dr.sharon is shown below:

9:00

10:00

11:00

12:00

13:00

14:00

15:00

16:00

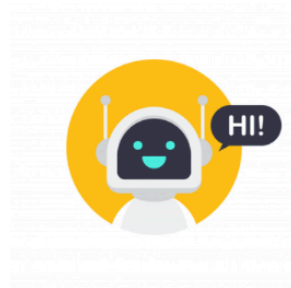
To make an appointment with dr.sharon, please type: 'book 9:00' etc.

**You:** book 9:00

**Chatbot:** Please confirm your booking for appointment for dr.sharon at 9:00 for tomorrow, type: 'yes', if you change your mind please type: 'no'

**You:** yes

**Chatbot:** Thank you meishi, your appointment with dr.sharon on 17/11/2020 at 9:00 has been confirmed. Your booking id is: 1, to cancel this appointment, type *cancel booking 1*



### 6. Cancel appointment

## Book your Dentist Now 😊

**Chatbot:** Please confirm your booking for appointment for dr.sharon at 9:00 for tomorrow, type: 'yes', if you change your mind please type: 'no'

**You:** yes

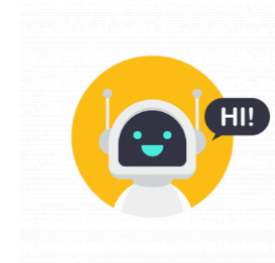
**Chatbot:** Thank you meishi, your appointment with dr.sharon on 17/11/2020 at 9:00 has been confirmed. Your booking id is: 1, to cancel this appointment, type *cancel booking 1*

**You:** cancel booking 1

**Chatbot:** Please confirm your cancel for appointment with booking id 1, type: 'yes', if you change your mind please type: 'no'

**You:** yes

**Chatbot:** Thank you meishi, your appointment with dr.sharon on 17/11/2020 at 9:00 has been canceled.



In the scenario, i assume that only the user who made the booking will know the booking id.

### 7. Other

*Book with a dentist directly - 'Book me with dr.xx at xx:00'*



# Book your Dentist Now 😊

**Chatbot:** Thank you meishi, your appointment with dr.sharon for 11/18/2020 at 14:00 has been canceled.

**You:** check dr.sharon timeslot

**Chatbot:** The available timeslot of dr.sharon is shown below:

9:00  
10:00  
11:00  
12:00  
13:00  
14:00  
15:00  
16:00

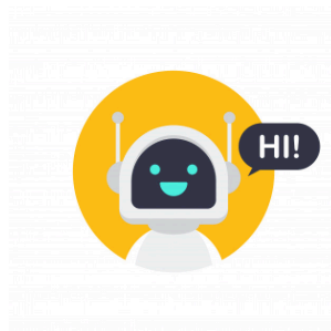
To make an appointment with dr.sharon, please type: 'book 9:00' etc.

**You:** book me with dr.sharon at 15:00

**Chatbot:** Please confirm your booking for appointment for dr.sharon at 15:00 for tomorrow, type: 'yes', if you change your mind please type: 'no'

**You:** yes

**Chatbot:** Thank you meishi, your appointment with dr.sharon for 11/18/2020 at 15:00 has been confirmed. Your booking id is: **2** , to cancel this appointment, type *cancel booking 2*



*if try to book a dentist/timeslot that is not exist*

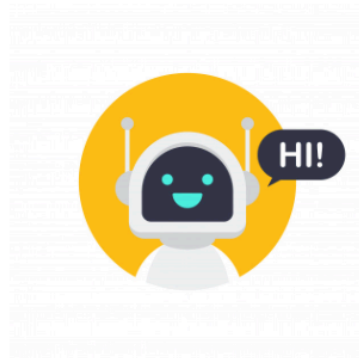
## Book your Dentist Now 😊

**You:** book me with dr.sharon at 23:00

**Chatbot:** Please confirm your booking for appointment for dr.sharon at 23:00 for tomorrow, type: 'yes', if you change your mind please type: 'no'

**You:** yes

**Chatbot:** The timeslot you want to book is not exist, please select another timeslot



*if try to cancel a booking with a booking id that is not exist*

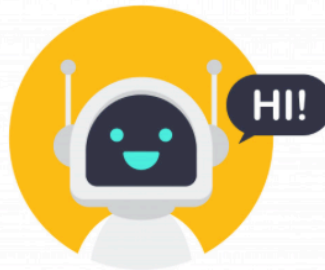
# Book your Dentist Now 😊

**You:** cancel booking 100

**Chatbot:** Please confirm your cancel for appointment with booking id 100, type: 'yes', if you change your mind please type: 'no'

**You:** yes

**Chatbot:** The appointment you want to cancel is not exist, please enter another booking id



*For content that can't be understood by chatbot*

# Book your Dentist Now 😊

**You:** hджfhk

**Chatbot:** Sorry, i don't understand:(



## End Service

Say anyword include *bye* or *goodbye* will end the current session, after this, you need to tell the bot your name again to use the service again.

# Book your Dentist Now 😊

**Chatbot:** Please confirm your booking for appointment for dr.sharon at 10:00 for tomorrow, type: 'yes', if you change your mind please type: 'no'

**You:** yes

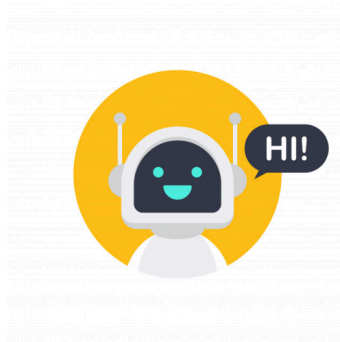
**Chatbot:** Thank you meishi, your appointment with **dr.sharon** for 11/19/2020 at 10:00 has been confirmed. Your booking id is: 1 , to cancel this appointment, type *cancel booking 1*

**You:** bye

**Chatbot:** Thank you for talking with bot, your session is end now, have a nice day:D

**You:** hi

**Chatbot:** Please enter your name to start the conversation



Thank you! :)