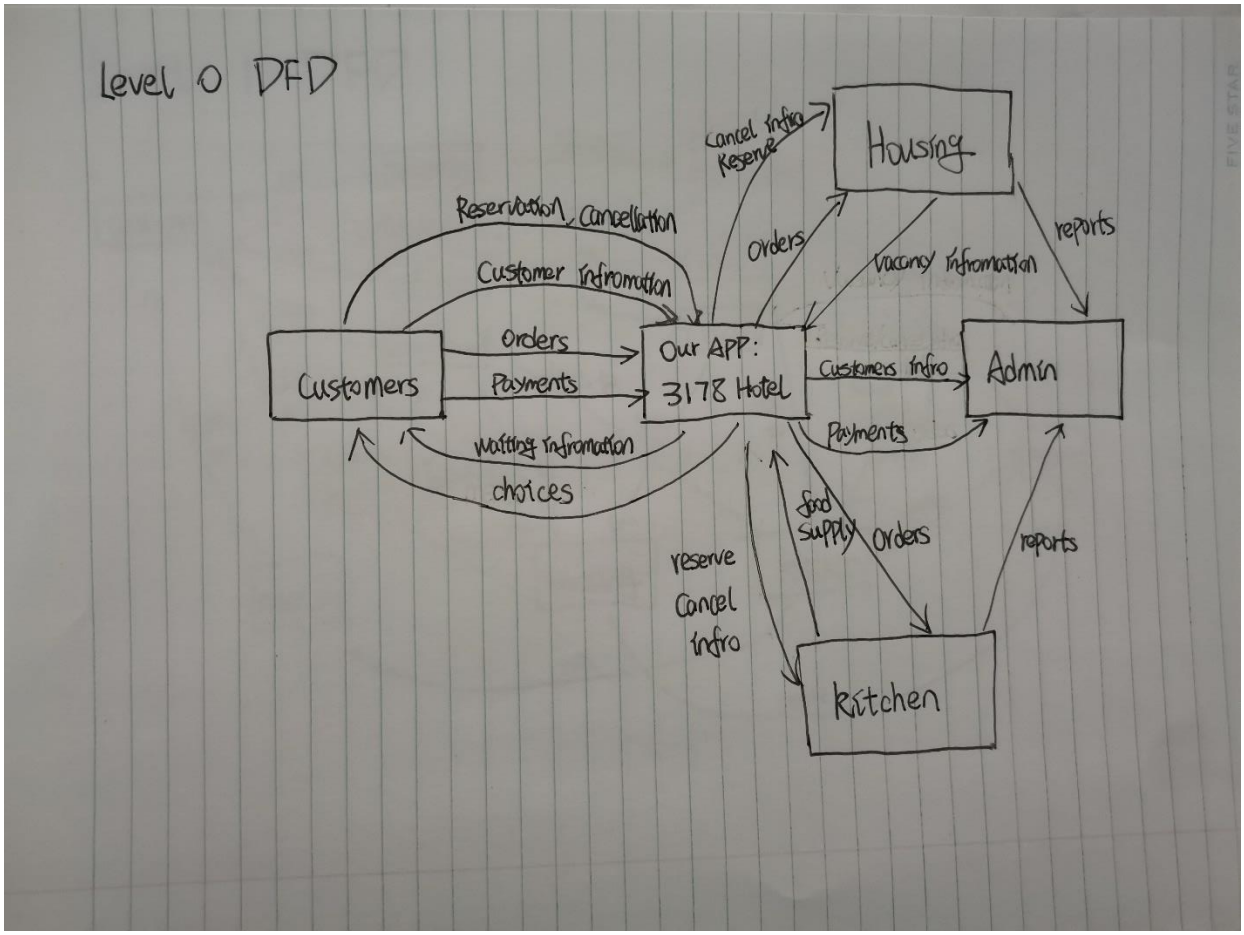
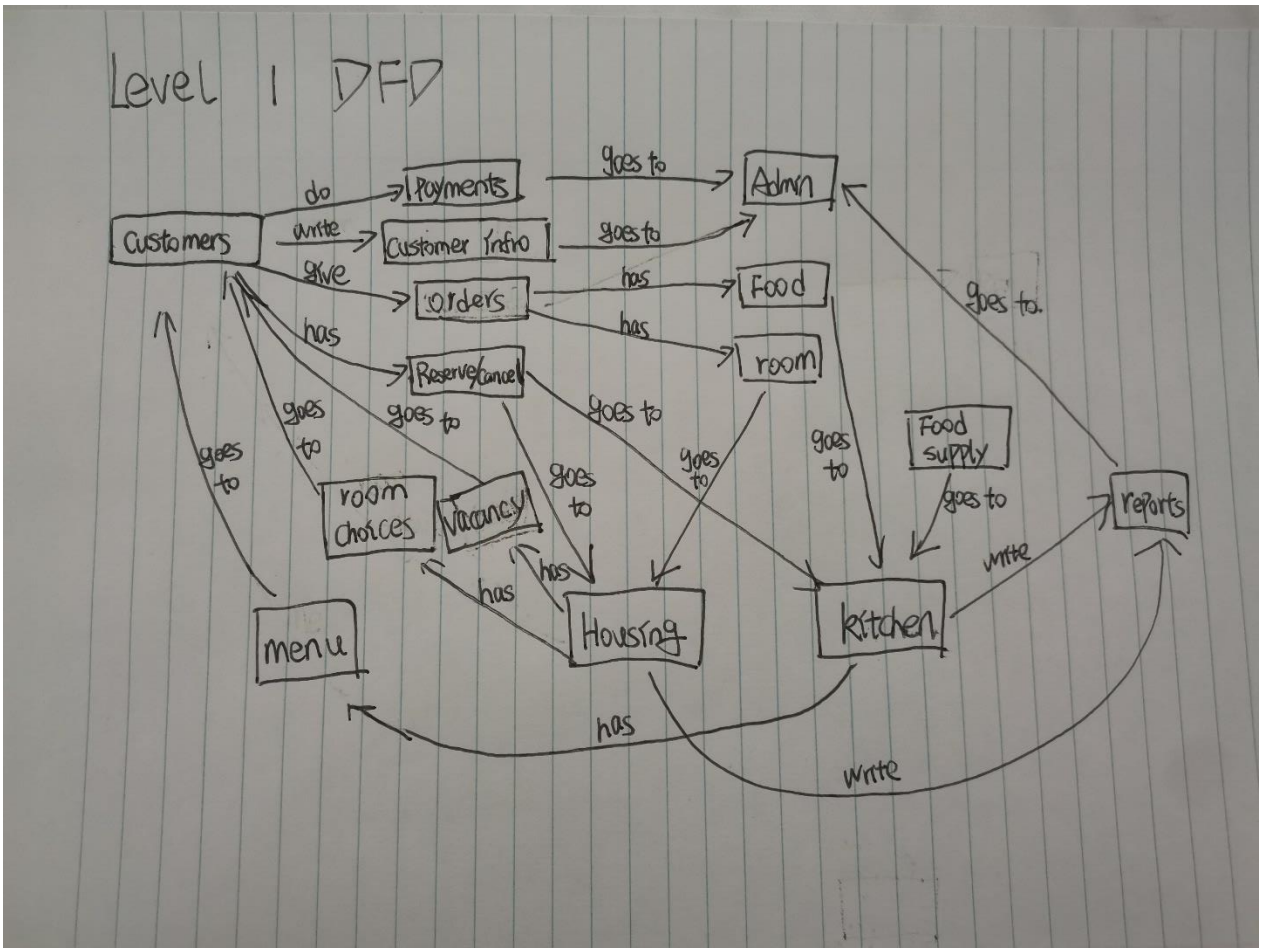
The README file is being edited on the GitHub.

GitHub URL: https://github.com/COSC310-Assignment-2/Assignment-2-.git



In level 0 DFD, we can see customers have the power of inputting orders, paying orders, giving app their information, having the right to take the reservation and cancellation, and receiving the waiting information and choices from kitchen and housing. On our app, it has the functions of gathering all the data that customers input, separating them by the functions and giving the data to housing, administration, kitchen. Besides sending the data, our app has the receiving functions from all those three related stake holders. One important thing is that administration has the highest power of getting reports from kitchen and housing, and administration doesn't need to output anything.

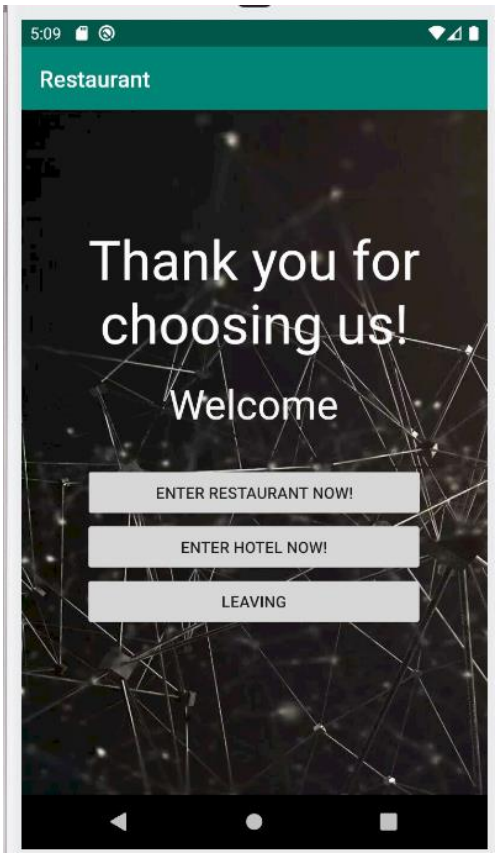


In level 1 DFD, we can clearly see all the functions are listed and how they worked from the arrows. This graph is adding on the level 0 graph, so it is a bigger graph to see each individual function and how they acted as the sending and receiving functions.

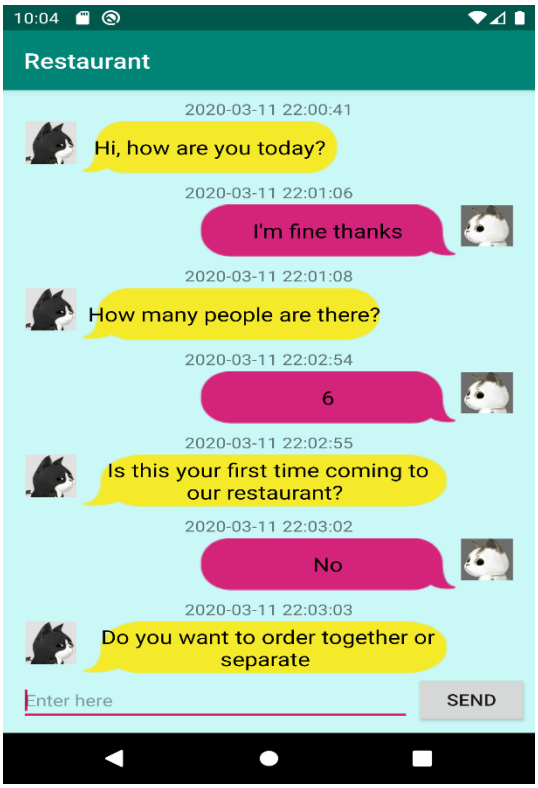
Since we are not familiar with GitHub (all of us is first time using this), we don't know that each individual can upload their file on the GitHub, we are sending the file to one person and he is uploading it in the end, so we are saying that everyone has approximately equal work, and you can go ahead to check on that one person's final version of our project which he is uploading in the GitHub, and we will show some comments in the project to state who did what.

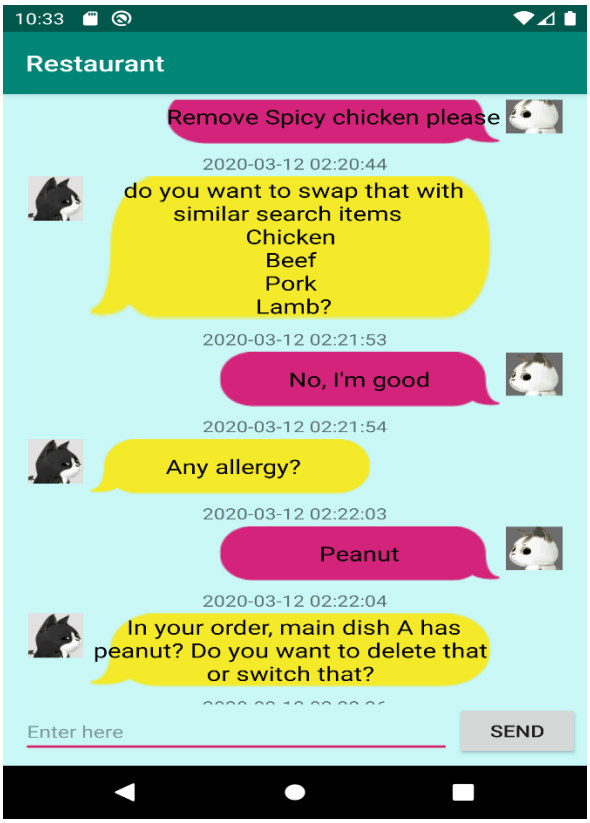
```
    String content = content1.getText().toString();
    porterStemmer = new PorterStemmer();
    String stem = porterStemmer.stem(content);
    rep=new msg(stem,  type: 1, da.format(new Date()));


    Adap.addItem(rep);
    chatlist.scrollToPosition(Adap.getItemCount()-1);
    content1.setText("");
    new Handler().postDelayed(new Runnable(){
        public void run() {
            chat(rep,Adap);
            chatlist.scrollToPosition(Adap.getItemCount()-1);//execute the task
        }
    },  delayMillis: 500);
}
```

```
try {



    inputStream = getAssets ( ).open ( fileName: "en-ner-person.bin");
    Log.e( tag: "name", msg: "1");
    TokenNameFinderModel tokenModel =
            new TokenNameFinderModel(inputStream);
    Log.e( tag: "name", msg: "2");
    nameFinderME = new NameFinderME(tokenModel);
    Log.e( tag: "name", msg: "3");
    Span nameSpans[] = nameFinderME.find(respon);
    Log.e( tag: "name",nameSpans.toString());
    myname=nameSpans[0].toString();
    Log.e( tag: "nname",nameSpans.toString());
} catch (IOException e) {
    e.printStackTrace();
}
adap.addItem(new msg( content: "Ok "+myname+"! How many people are there?" ,  type: 0, da.format(new Date())));
```

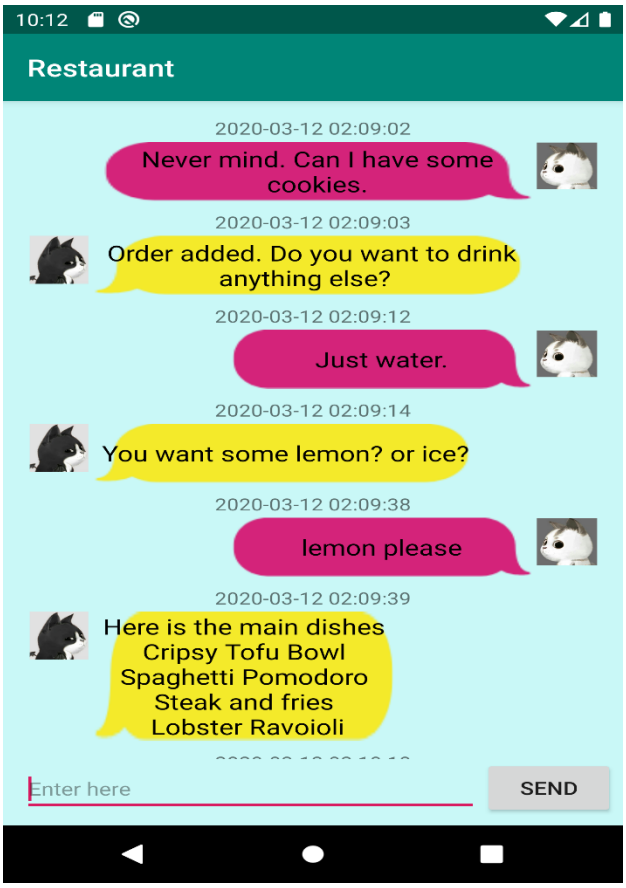


Restaurant first testing:

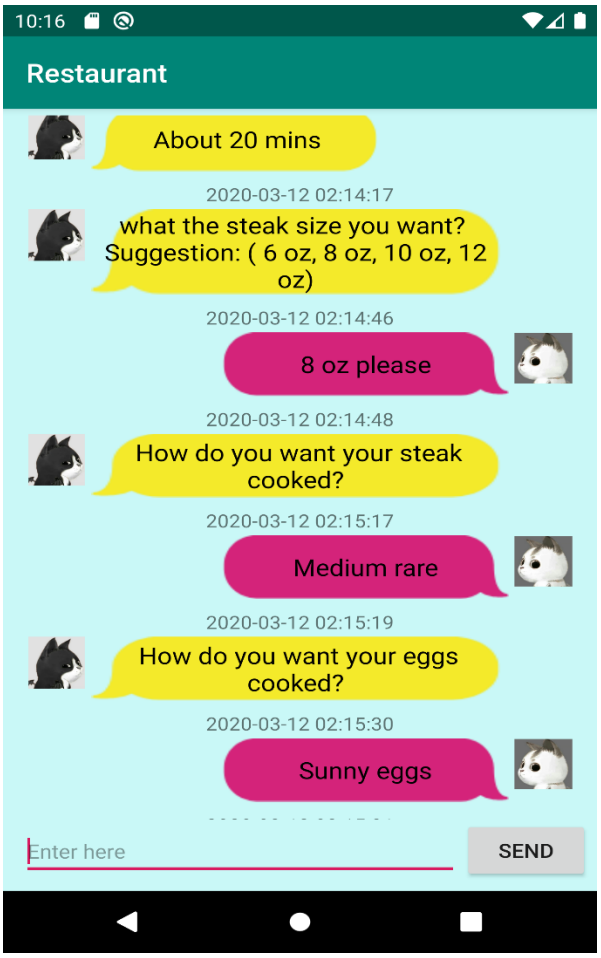


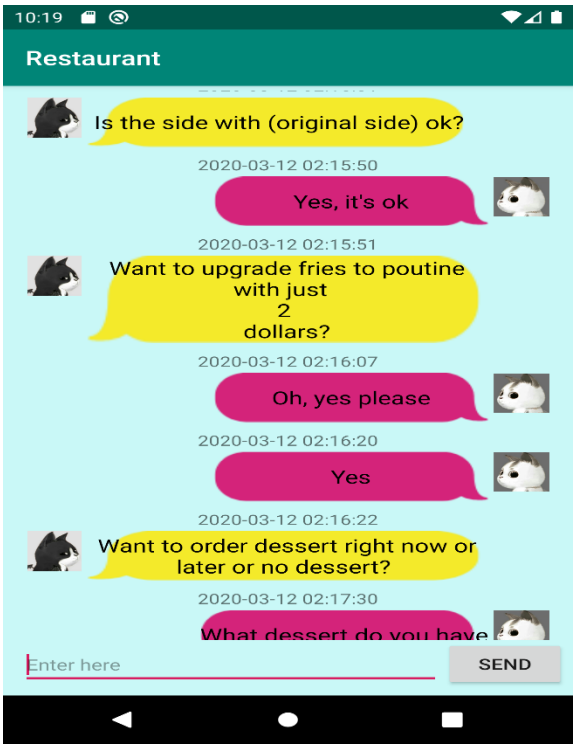

10:33
Restaurant
Remove Spicy chicken please
2020-03-12 02:20:44
do you want to swap that with similar search items
Chicken
Beef
Pork
Lamb?
2020-03-12 02:21:53
No, I'm good
2020-03-12 02:21:54
Any allergy?
2020-03-12 02:22:03
Peanut
2020-03-12 02:22:04
In your order, main dish A has peanut? Do you want to delete that or switch that?
Enter here
SEND

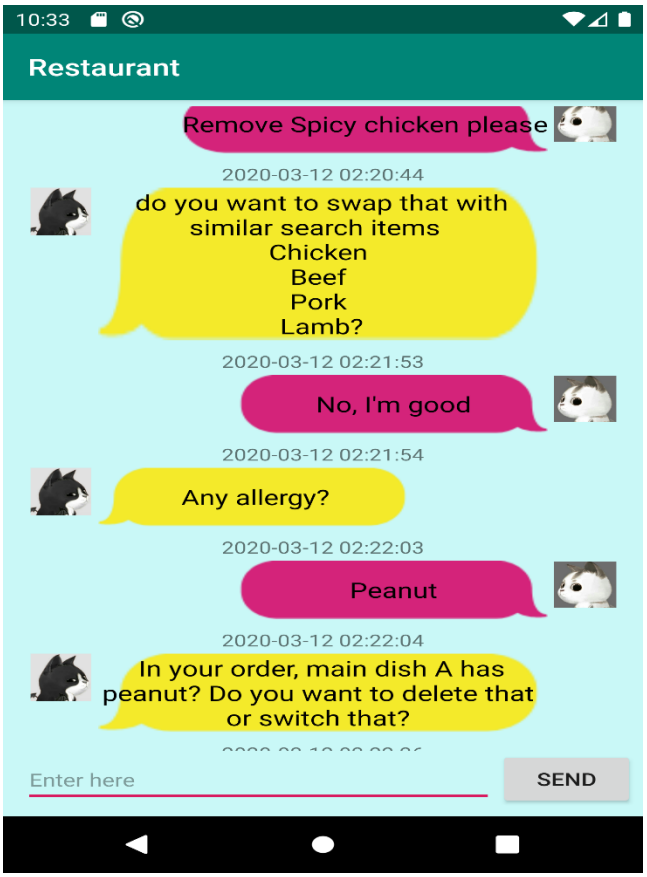

10:04
Restaurant
Together please
2020-03-11 22:03:20
I am going to suggest our chef special for today.
They are:
Wine: Blue Mountain
appetizer: spicy chicken
main: Chicken Parmesan
Dessert: chocolate mousse
2020-03-11 22:03:47
I would like to take Spicy chicken
2020-03-11 22:03:48
Do you want to order anything else specific?
2020-03-11 22:04:07
I also want a soup
2020-03-11 22:04:09
Sorry, it is out of order. Suggesting
Enter here
SEND

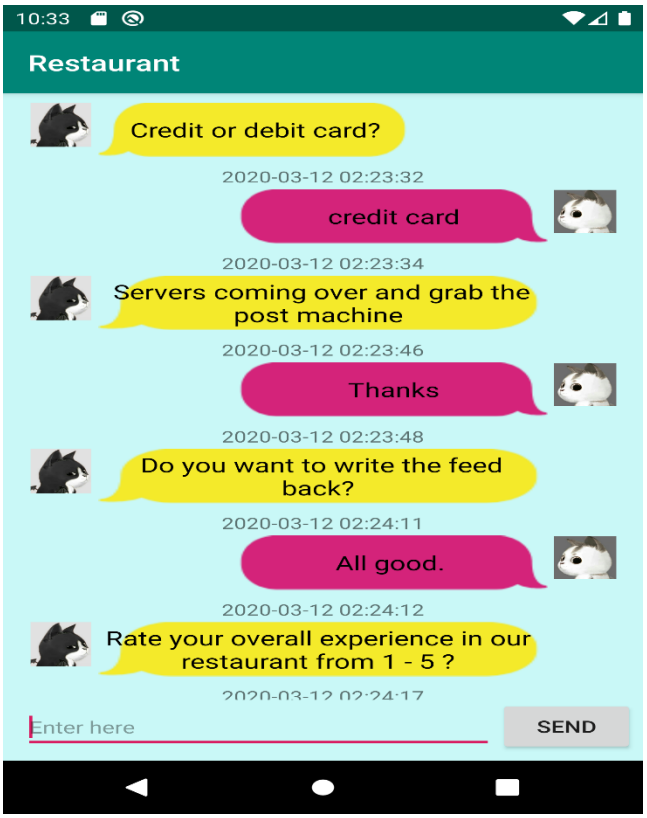

10:12
Restaurant
2020-03-12 02:09:02
Never mind. Can I have some cookies.
2020-03-12 02:09:03
Order added. Do you want to drink anything else?
2020-03-12 02:09:12
Just water.
2020-03-12 02:09:14
You want some lemon? or ice?
2020-03-12 02:09:38
lemon please
2020-03-12 02:09:39
Here is the main dishes
Cripsy Tofu Bowl
Spaghetti Pomodoro
Steak and fries
Lobster Ravioli
Enter here
SEND

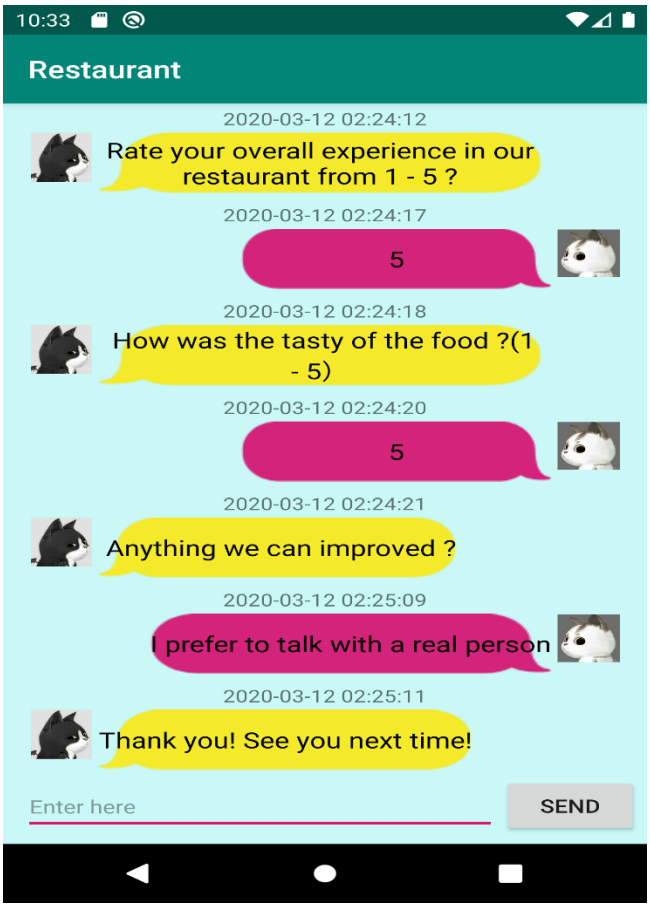

10:16
Restaurant
2020-03-12 02:12:19
Spaghetti Pomodoro
2020-03-12 02:12:21
Alright, your dishes will be ready soon.
2020-03-12 02:13:47
What is tofu made by?
2020-03-12 02:13:48
It's made by balabala
2020-03-12 02:14:00
Is that organic?
2020-03-12 02:14:02
Yes, it is
2020-03-12 02:14:16
How long it gonna takes
Enter here
SEND


10:16
Restaurant
About 20 mins
2020-03-12 02:14:17
what the steak size you want? Suggestion: (6 oz, 8 oz, 10 oz, 12 oz)
2020-03-12 02:14:46
8 oz please
2020-03-12 02:14:48
How do you want your steak cooked?
2020-03-12 02:15:17
Medium rare
2020-03-12 02:15:19
How do you want your eggs cooked?
2020-03-12 02:15:30
Sunny eggs
Enter here
SEND

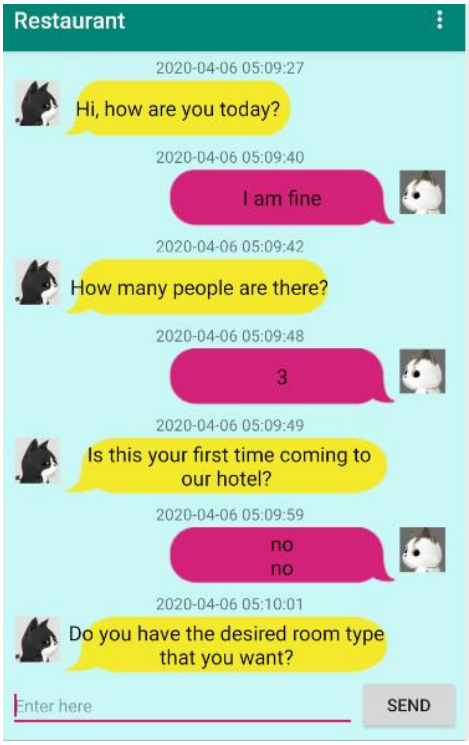

10:19
Restaurant
Is the side with (original side) ok?
2020-03-12 02:15:50
Yes, it's ok
2020-03-12 02:15:51
Want to upgrade fries to poutine with just 2 dollars?
2020-03-12 02:16:07
Oh, yes please
2020-03-12 02:16:20
Yes
2020-03-12 02:16:22
Want to order dessert right now or later or no dessert?
2020-03-12 02:17:30
Enter here
SEND

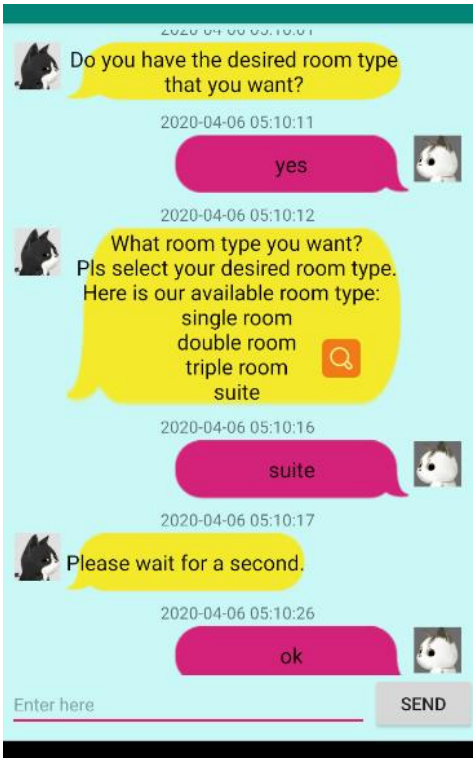

10:33
Restaurant
Remove Spicy chicken please
2020-03-12 02:20:44
do you want to swap that with similar search items
Chicken
Beef
Pork
Lamb?
2020-03-12 02:21:53
No, I'm good
2020-03-12 02:21:54
Any allergy?
2020-03-12 02:22:03
Peanut
2020-03-12 02:22:04
In your order, main dish A has peanut? Do you want to delete that or switch that?
Enter here
SEND

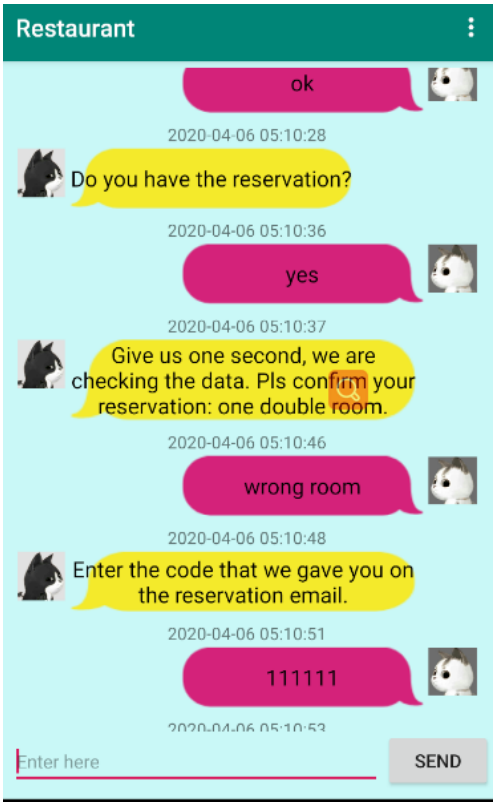

10:33
Restaurant
Credit or debit card?
2020-03-12 02:23:32
credit card
2020-03-12 02:23:34
Servers coming over and grab the post machine
2020-03-12 02:23:46
Thanks
2020-03-12 02:23:48
Do you want to write the feed back?
2020-03-12 02:24:11
All good.
2020-03-12 02:24:12
Rate your overall experience in our restaurant from 1 - 5 ?
Enter here
SEND

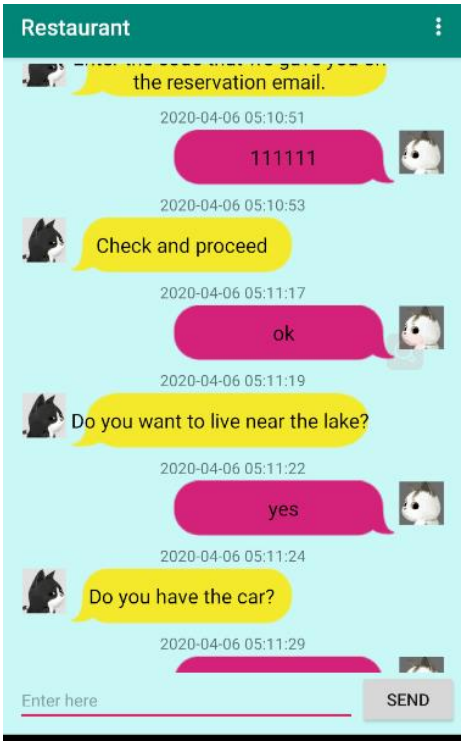


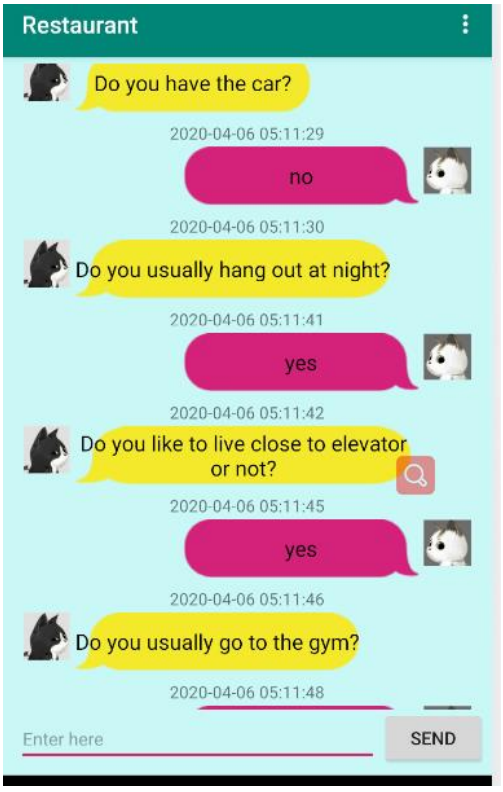
Next is the hotel testing

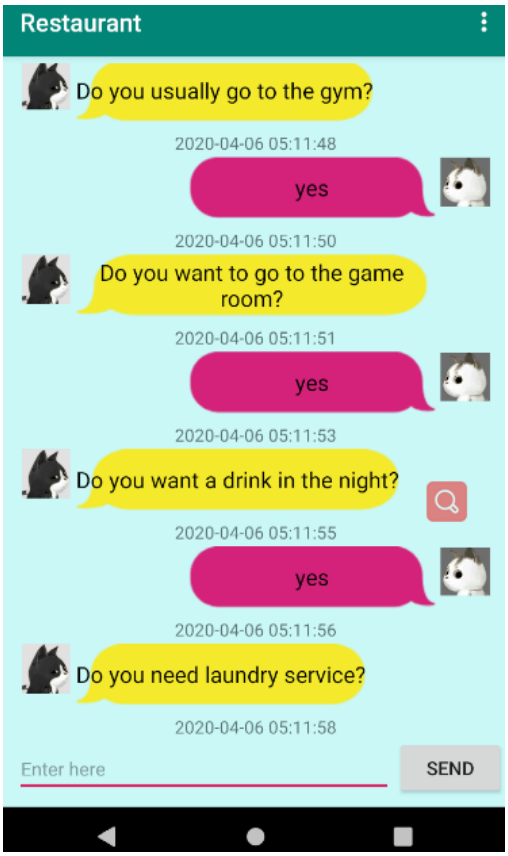


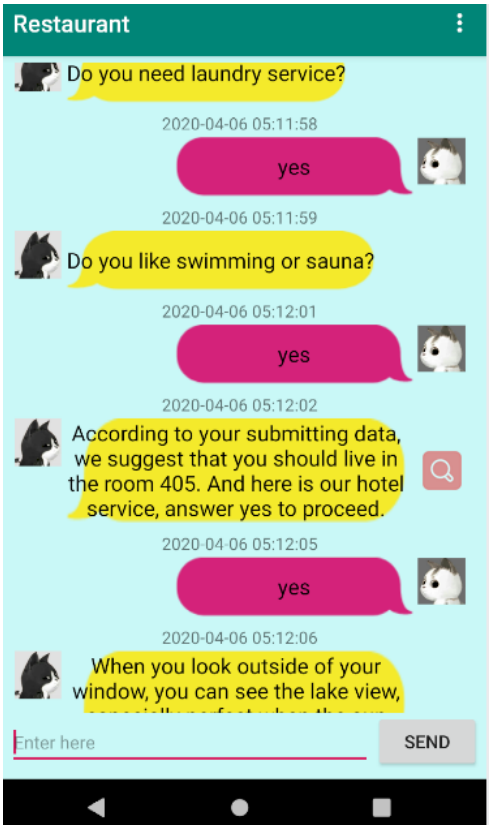

Do you have the desired room type that you want?
2020-04-06 05:10:11
yes
2020-04-06 05:10:12
What room type you want? Pls select your desired room type. Here is our available room type: single room double room triple room suite
2020-04-06 05:10:16
suite
2020-04-06 05:10:17
Please wait for a second.
2020-04-06 05:10:26
ok
Enter here
SEND

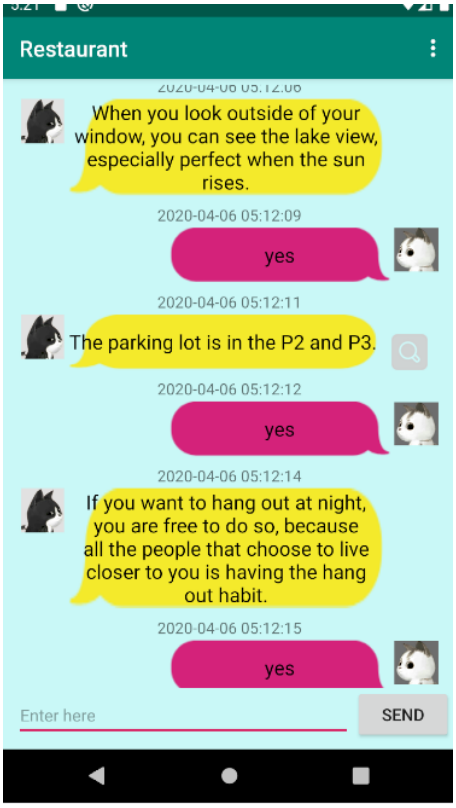

Restaurant
ok
2020-04-06 05:10:28
Do you have the reservation?
2020-04-06 05:10:36
yes
2020-04-06 05:10:37
Give us one second, we are checking the data. Pls confirm your reservation: one double room.
2020-04-06 05:10:46
wrong room
2020-04-06 05:10:48
Enter the code that we gave you on the reservation email.
2020-04-06 05:10:51
111111
Enter here
SEND


Restaurant
the reservation email.
2020-04-06 05:10:51
111111
2020-04-06 05:10:53
Check and proceed
2020-04-06 05:11:17
ok
2020-04-06 05:11:19
Do you want to live near the lake?
2020-04-06 05:11:22
yes
2020-04-06 05:11:24
Do you have the car?
2020-04-06 05:11:29
Enter here
SEND

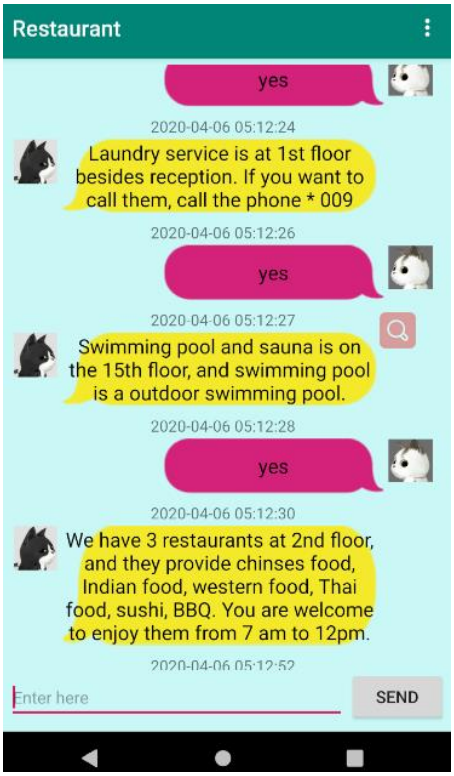

Restaurant
Do you have the car?
2020-04-06 05:11:29
no
2020-04-06 05:11:30
Do you usually hang out at night?
2020-04-06 05:11:41
yes
2020-04-06 05:11:42
Do you like to live close to elevator or not?
2020-04-06 05:11:45
yes
2020-04-06 05:11:46
Do you usually go to the gym?
2020-04-06 05:11:48
Enter here
SEND

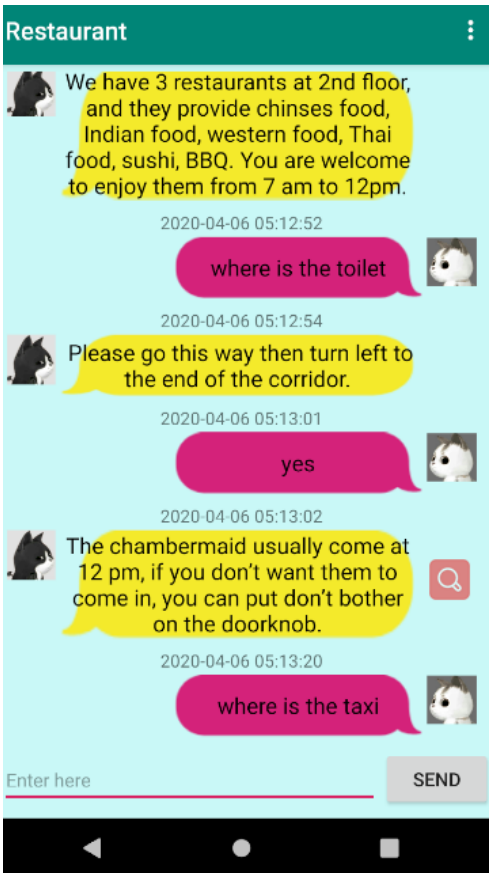

Restaurant
Do you usually go to the gym?
2020-04-06 05:11:48
yes
2020-04-06 05:11:50
Do you want to go to the game room?
2020-04-06 05:11:51
yes
2020-04-06 05:11:53
Do you want a drink in the night?
2020-04-06 05:11:55
yes
2020-04-06 05:11:56
Do you need laundry service?
2020-04-06 05:11:58
Enter here
SEND

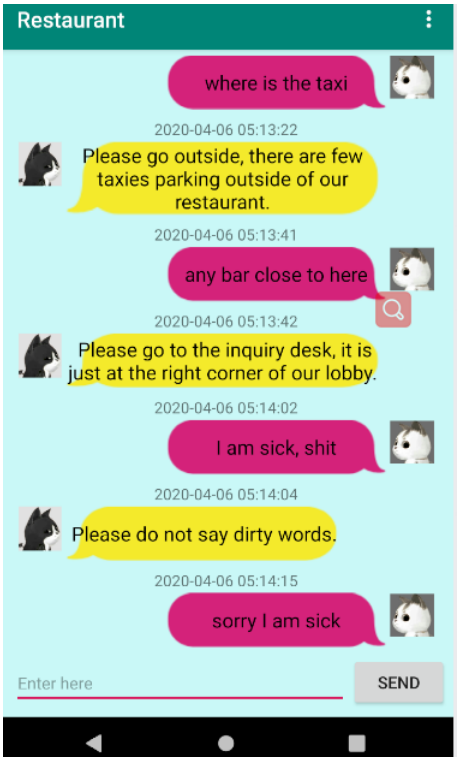

Restaurant
Do you need laundry service?
2020-04-06 05:11:58
yes
2020-04-06 05:11:59
Do you like swimming or sauna?
2020-04-06 05:12:01
yes
2020-04-06 05:12:02
According to your submitting data, we suggest that you should live in the room 405. And here is our hotel service, answer yes to proceed.
2020-04-06 05:12:05
yes
2020-04-06 05:12:06
When you look outside of your window, you can see the lake view,
Enter here
SEND

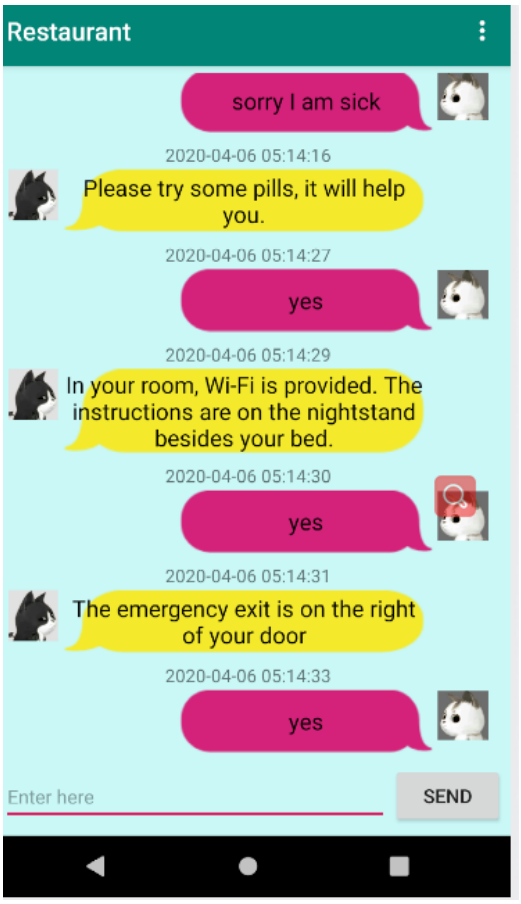

Restaurant
When you look outside of your window, you can see the lake view, especially perfect when the sun rises.
2020-04-06 05:12:09
yes
2020-04-06 05:12:11
The parking lot is in the P2 and P3.
2020-04-06 05:12:12
yes
2020-04-06 05:12:14
If you want to hang out at night, you are free to do so, because all the people that choose to live closer to you is having the hang out habit.
2020-04-06 05:12:15
yes
Enter here
SEND

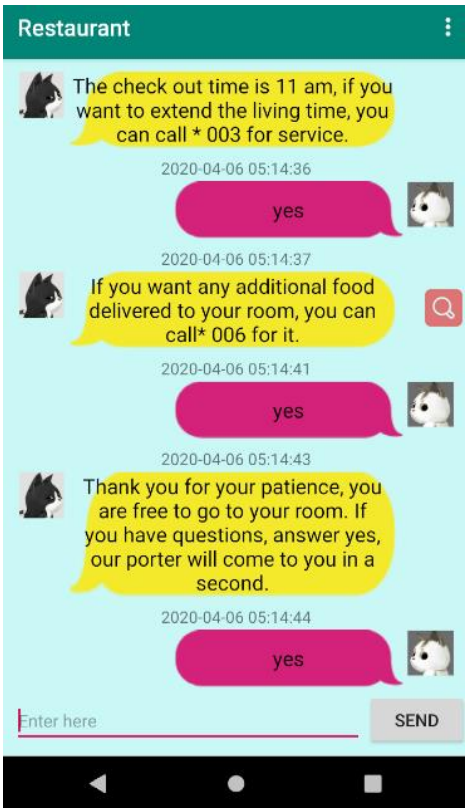

Restaurant
yes
2020-04-06 05:12:16
Elevator is on the left side of your door for about 100 meters.
2020-04-06 05:12:17
yes
2020-04-06 05:12:19
Gym is on the 10th floor, along with a games room.
2020-04-06 05:12:20
yes
2020-04-06 05:12:22
Bar is at P1 floor along with a big casino.
2020-04-06 05:12:23
yes
2020-04-06 05:12:24
Enter here
SEND

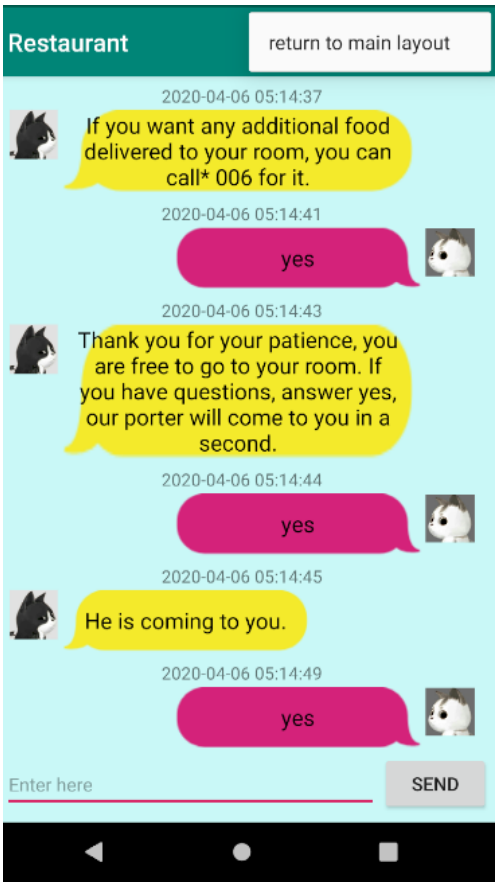

Restaurant
yes
2020-04-06 05:12:24
Laundry service is at 1st floor besides reception. If you want to call them, call the phone * 009
2020-04-06 05:12:26
yes
2020-04-06 05:12:27
Swimming pool and sauna is on the 15th floor, and swimming pool is a outdoor swimming pool.
2020-04-06 05:12:28
yes
2020-04-06 05:12:30
We have 3 restaurants at 2nd floor, and they provide chinses food, Indian food, western food, Thai food, sushi, BBQ. You are welcome to enjoy them from 7 am to 12pm.
Enter here
SEND


Restaurant
We have 3 restaurants at 2nd floor, and they provide chinses food, Indian food, western food, Thai food, sushi, BBQ. You are welcome to enjoy them from 7 am to 12pm.
2020-04-06 05:12:52
where is the toilet
2020-04-06 05:12:54
Please go this way then turn left to the end of the corridor.
2020-04-06 05:13:01
yes
2020-04-06 05:13:02
The chambermaid usually come at 12 pm, if you don't want them to come in, you can put don't bother on the doorknob.
2020-04-06 05:13:20
where is the taxi
Enter here
SEND

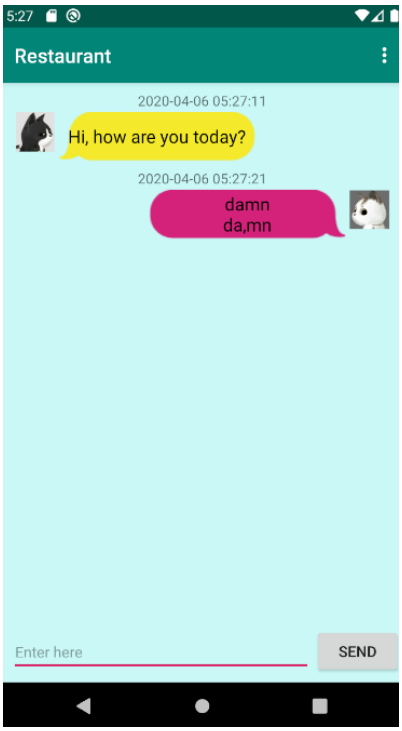

Restaurant
where is the taxi
2020-04-06 05:13:22
Please go outside, there are few taxies parking outside of our restaurant.
2020-04-06 05:13:41
any bar close to here
2020-04-06 05:13:42
Please go to the inquiry desk, it is just at the right corner of our lobby.
2020-04-06 05:14:02
I am sick, shit
2020-04-06 05:14:04
Please do not say dirty words.
2020-04-06 05:14:15
sorry I am sick
Enter here
SEND

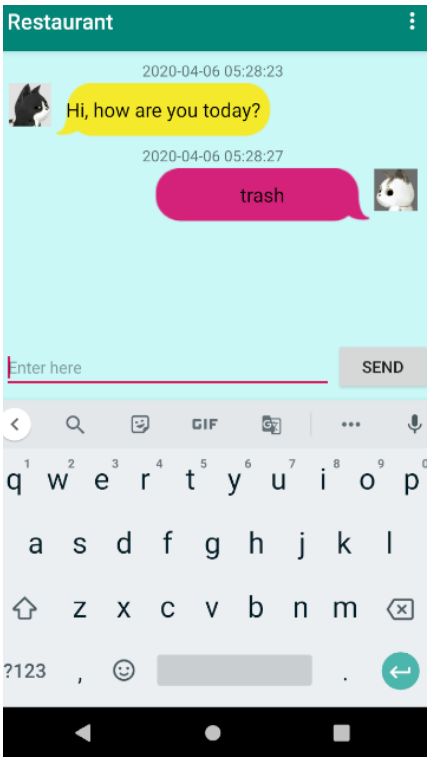

Restaurant
sorry I am sick
2020-04-06 05:14:16
Please try some pills, it will help you.
2020-04-06 05:14:27
yes
2020-04-06 05:14:29
In your room, Wi-Fi is provided. The instructions are on the nightstand besides your bed.
2020-04-06 05:14:30
yes
2020-04-06 05:14:31
The emergency exit is on the right of your door
2020-04-06 05:14:33
yes
Enter here
SEND


Restaurant
The check out time is 11 am, if you want to extend the living time, you can call * 003 for service.
2020-04-06 05:14:36
yes
2020-04-06 05:14:37
If you want any additional food delivered to your room, you can call* 006 for it.
2020-04-06 05:14:41
yes
2020-04-06 05:14:43
Thank you for your patience, you are free to go to your room. If you have questions, answer yes, our porter will come to you in a second.
2020-04-06 05:14:44
yes
Enter here
SEND

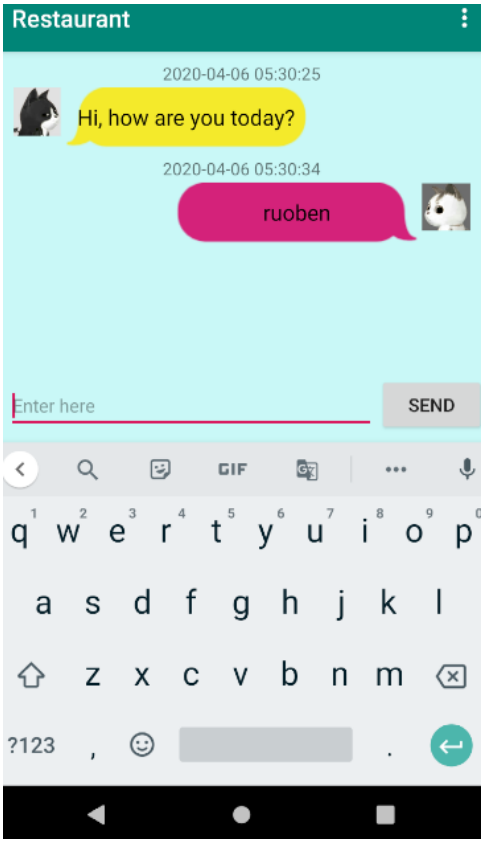

Restaurant
return to main layout
2020-04-06 05:14:37
If you want any additional food delivered to your room, you can call* 006 for it.
2020-04-06 05:14:41
yes
2020-04-06 05:14:43
Thank you for your patience, you are free to go to your room. If you have questions, answer yes, our porter will come to you in a second.
2020-04-06 05:14:44
yes
2020-04-06 05:14:45
He is coming to you.
2020-04-06 05:14:49
yes
Enter here
SEND

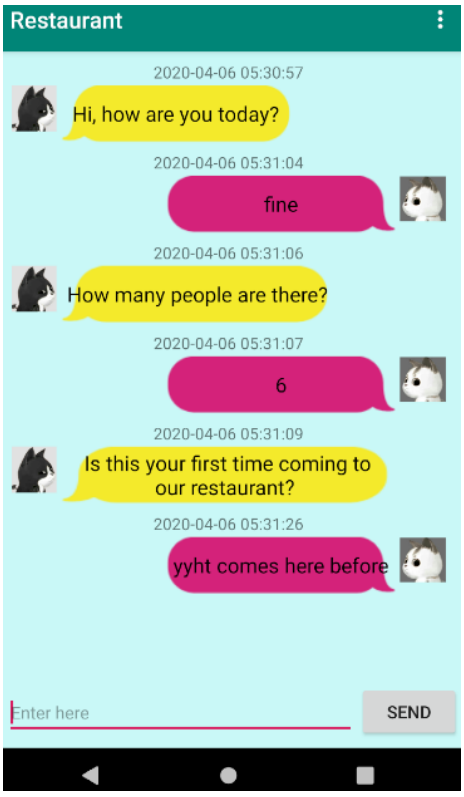
Limitation: we can’t handle some dirty words since we only added a little bit of dirty word in the recognition software.





We can’t catch some weird English names.





Lists of useful features that we can use in the future:

1 Message class which contains three attributes of the message object which can help us define the message is from user or agent

2 Override adaptors to fit the chat window.

3 Create our own view holders, one for agent, and another one for user.

4 An xml layout named right chat and left chat can represent the message object.

5 the real time above the message.