Nanyang Technological University (NTU)

CZ3005 Artificial Intelligence

Lab Assignment 4

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TSP1

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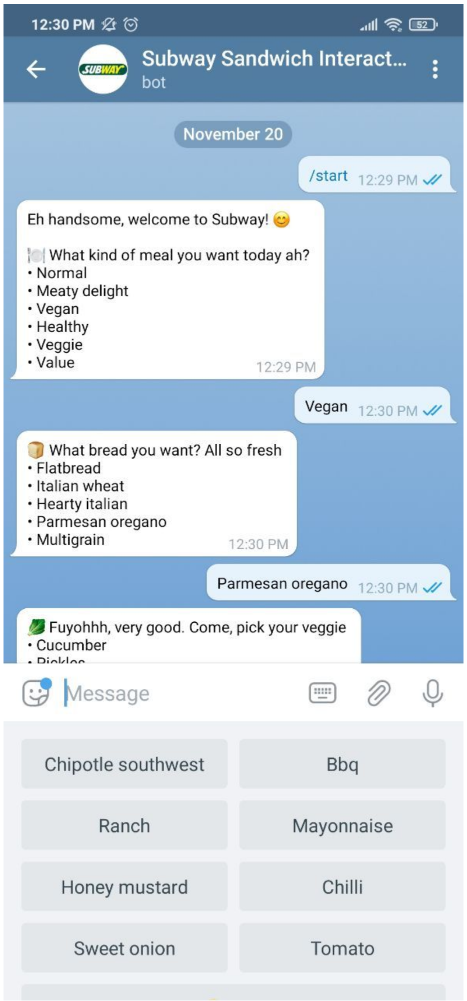
Question 3: Subway Sandwich Interactor

Introduction

The Prolog script offers different meal options (healthy, normal, value, vegan, veggie, meaty delight) for a user. It will then intelligently suggest a list of recommended fillings (breads, mains, veggies, sauces, top ups, sides, drinks) based on what the user has chosen to create a customized subway order.

In this assignment, I have created an interactive Telegram bot to interact with the Prolog script. This will improve the interactions with the script as options are limited and Prolog commands are hidden from the user.



/start 12:29 PM

Eh handsome, welcome to Subway! 😊

🍽️ What kind of meal you want today ah?
- Normal
- Meaty delight
- Vegan
- Healthy
- Veggie
- Value

12:29 PM

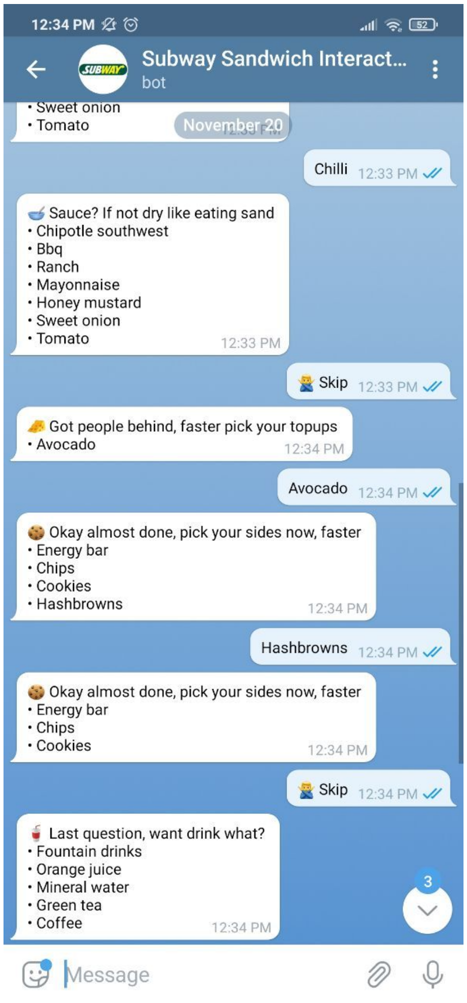
Vegan 12:30 PM

🍞 What bread you want? All so fresh
- Flatbread
- Italian wheat
- Hearty italian
- Parmesan oregano
- Multigrain

12:30 PM

Parmesan oregano 12:30 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Cucumber



- Sweet onion
- Tomato

Chilli 12:33 PM

🥣 Sauce? If not dry like eating sand
- Chipotle southwest
- Bbq
- Ranch
- Mayonnaise
- Honey mustard
- Sweet onion
- Tomato

12:33 PM

🤷 Skip 12:33 PM

🧀 Got people behind, faster pick your topups
- Avocado

12:34 PM

Avocado 12:34 PM

🍪 Okay almost done, pick your sides now, faster
- Energy bar
- Chips
- Cookies
- Hashbrowns

12:34 PM

Hashbrowns 12:34 PM

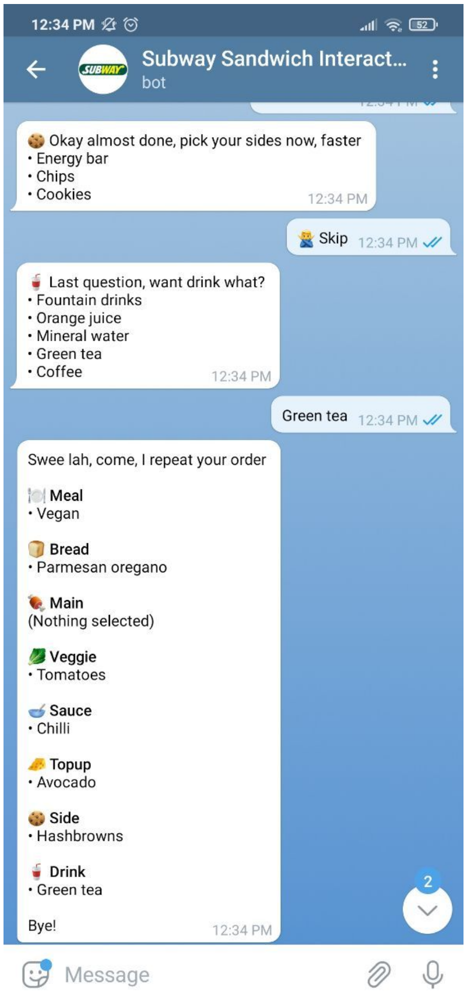
🍪 Okay almost done, pick your sides now, faster
- Energy bar
- Chips
- Cookies

12:34 PM

🤷 Skip 12:34 PM

🥤 Last question, want drink what?
- Fountain drinks
- Orange juice
- Mineral water
- Green tea
- Coffee

12:34 PM



🍪 Okay almost done, pick your sides now, faster
- Energy bar
- Chips
- Cookies

12:34 PM

🤷 Skip 12:34 PM

🥤 Last question, want drink what?
- Fountain drinks
- Orange juice
- Mineral water
- Green tea
- Coffee

12:34 PM

Green tea 12:34 PM

Swee lah, come, I repeat your order

🍽️ **Meal**
- Vegan

🍞 **Bread**
- Parmesan oregano

🍖 **Main**
(Nothing selected)

🥬 **Veggie**
- Tomatoes

🥣 **Sauce**
- Chilli

🧀 **Topup**
- Avocado

🍪 **Side**
- Hashbrowns

🥤 **Drink**
- Green tea

Bye! 12:34 PM

Directory Structure

File/directory name	**Purposes**
ADRIAN_GOH_JUN_WEI_qn_3.pl	Prolog script containing the logic and knowledge base
prolog_convertor.py	Contain a Python class, which will interact with the Prolog script and interact with it via the library pyswip
ask.py	Python script to host the Telegram bot to produce the correct response
keyboard.py	Python script to generate the respective keyboard options
replies.py	Python script to generate the respective replies
requirements.txt	Contains the list of package that will be installed during the setup
telegram_token.py	Contains the Telegram API token
images	Contains media files which will be used by the bot

Instructions for setting up

```
### Prerequisite

1. Installed `python3`
2. Installed `pip`
3. Have Telegram mobile application installed

### Creating and setting up a Telegram Bot

Alternatively, you can skip the steps below and use the API key I generated to interact with my bot. Simply
search for @adriangohjw_ask_bot on Telegram to interact with it (NOTE: You will still need to follow the
instructions in “Running the program” to host the bot.

In the Telegram mobile application, do the following steps:
1. Search for BotFather (@BotFather)
2. Request for a new bot via /newbot
3. Retrieve the HTTP API key given
4. Create a file called `telegram_token.py` in the root directory and add the following line of code
   TOKEN = "XXX"
   where XXX is the HTTP API key given by BotFather

### Setting up virtual environment in project

1. Run `python -m venv venv`
2. Run `venv\Scripts\activate`
3. Run `pip install -r requirements.txt`

All required packages should have been installed!

### Running the program

Run the command `python ask.py` in your console to get the server hosting the Telegram Bot running
```

Prolog code explanation

Appending elements into a single list

```
append([], Y, Y).
append([H|X], Y, [H|Z]):-
    append(X, Y, Z).
```

Declaring an empty list variable

```
empty_list([]).
```

Facts to check the type of meal chosen

```
healthy_meal(healthy).
value_meal(value).
vegan_meal(vegan).
veggie_meal(veggie).
meaty_delight_meal(meaty_delight).
```

Possible options for each category

```
meals([healthy, normal, value, vegan, veggie, meaty_delight]).

vegan_breads([italian_wheat, parmesan_oregano, hearty_italian, multigrain, flatbread]).
non_vegan_breads([honey_oat]).

value_mains([chicken, ham, bacon, tuna]).
expensive_mains([beef, salmon, turkey]).

veggies([cucumber, green_peppers, lettuce, red_onions, tomatoes, olives, jalapenos, pickles]).

healthy_sauces([honey_mustard, sweet_onion, chilli, tomato]).
unhealthy_sauces([chipotle_southwest, bbq, ranch, mayonnaise]).

non_vegan_topups([american, monterey_jack, cheddar, egg_mayonnaise]).
vegan_topups([avocado]).

healthy_sides([cookies, energy_bar]).
unhealthy_sides([chips, hashbrowns]).

healthy_drinks([mineral_water, orange_juice, green_tea, coffee]).
unhealthy_drinks([fountain_drinks]).
```

All options for a particular category

```
all_options(A, X):-
    A == meals -> meals(X);
    A == breads -> breads(X);
    A == mains -> mains(X);
    A == veggies -> veggies(X);
    A == sauces -> sauces(X);
    A == topups -> topups(X);
    A == sides -> sides(X);
    A == drinks -> drinks(X).
```

Available options for a particular category

```
available_options(A, X):-
    A == meals -> ask_meals(X);
    A == breads -> ask_breads(X);
    A == mains -> ask_mains(X);
    A == veggies -> ask_veggies(X);
    A == sauces -> ask_sauces(X);
    A == topups -> ask_topups(X);
    A == sides -> ask_sides(X);
    A == drinks -> ask_drinks(X).
```

Selected options for a particular category

```
selected_options(A, X):-
    A == meals -> findall(X, selected_meals(X), X);
    A == breads -> findall(X, selected_breads(X), X);
    A == mains -> findall(X, selected_mains(X), X);
    A == veggies -> findall(X, selected_veggies(X), X);
    A == sauces -> findall(X, selected_sauces(X), X);
    A == topups -> findall(X, selected_topups(X), X);
    A == sides -> findall(X, selected_sides(X), X);
    A == drinks -> findall(X, selected_drinks(X), X).
```

Combining all options for categories with multiple sub-categories

```
% Return a list of all the breads available
breads(X):-
    vegan_breads(B1), non_vegan_breads(B2), append(B1, B2, X).

% Return a list of all the mains available
mains(X):-
    value_mains(M1), expensive_mains(M2), append(M1, M2, X).

% Return a list of all the sauces available
sauces(X):-
    healthy_sauces(S1), unhealthy_sauces(S2), append(S1, S2, X).

% Return a list of all the topups available
topups(X):-
    non_vegan_topups(T1), vegan_topups(T2), append(T1, T2, X).

% Return a list of all the sides available
sides(X):-
    healthy_sides(S1), unhealthy_sides(S2), append(S1, S2, X).

% Return a list of all the drinks available
drinks(X):-
    healthy_drinks(D1), unhealthy_drinks(D2), append(D1, D2, X).
```

Logic to derive all available options for a particular category

Vegan meals do not have “Honey oat” as a bread option.

```
% Return a list of possible breads based on previous choices
% Vegan meals do not have honey oat as an option, return vegan_breads
ask_breads(X):-
    selected_meals(Y), vegan_meal(Y) -> vegan_breads(X);
    breads(X).
```

Vegan and Veggie meals do not have main options (e.g. chicken, ham)

Value meals do not offer expensive main options (e.g. beef, salmon)

```
% Return a list of possible mains based on previous choices
% Value meals do not have expensive mains as an option, return value_mains
% Vegan and Veggie meals do not have main options, return empty list [].
ask_mains(X):-
    selected_meals(Y), vegan_meal(Y) -> empty_list(X);
    selected_meals(Y), veggie_meal(Y) -> empty_list(X);
    selected_meals(Y), value_meal(Y) -> value_mains(X);
    mains(X).
```

Meaty delight meals do not have veggie options (e.g. cucumber, lettuce)

```
% Return a list of possible veggies based on previous choices
% Meaty delight meals do not have veggie options, return empty list [].
ask_veggies(X):-
    selected_meals(Y), \+ meaty_delight_meal(Y), veggies(X).
```

Healthy meals do not have unhealthy sauce options (e.g. BBQ, mayonnaise)

```
% Return a list of possible sauces based on previous choices
% Healthy meals do not have unhealthy sauces, return a list containing only healthy_sauces
ask_sauces(X):-
    selected_meals(Y), healthy_meal(Y) -> healthy_sauces(X);
    sauces(X).
```

Value meals do not have top-up options (e.g. avocado, cheddar)

Vegan meals do not have non-vegan top-up options (e.g. cheddar, american)

```
% Return a list of possible top-ups based on previous choices
% Value meal does not have topup, returns an empty list
% Vegan meal does not have non vegan topups, return a list containing vegan_topups
ask_topups(X):-
    selected_meals(Y), value_meal(Y) -> empty_list(X);
    selected_meals(Y), vegan_meal(Y) -> vegan_topups(X);
    topups(X).
```

Healthy meals do not have unhealthy side options (e.g. chips, hash browns)

```
% Return a list of possible top-ups based on previous choices
% Return a list of possible sides based on previous choices
% Healthy meals does not have unhealthy sides, return a list containing healthy_sides
ask_sides(X):-
    selected_meals(Y), healthy_meal(Y) -> healthy_sides(X);
    sides(X).
```

Healthy meals do not have unhealthy drink options (fountain drinks)

```
% Return a list of possible drinks based on previous choices
% Healthy meals does not have unhealthy drinks, return a list containing healthy_drinks
ask_drinks(X):-
    selected_meals(Y), healthy_meal(Y) -> healthy_drinks(X);
    drinks(X).
```

PrologConvertor

Initialization of the object

```
from pyswip import Prolog, prolog

PROLOG_FILENAME = "ADRIAN_GOH_JUN_WEI_qn_3.pl"

class PrologConvertor():
  def __init__(self):
    self.prolog = Prolog()
    self.prolog.consult(PROLOG_FILENAME)
    self.__retractall()

  def __retractall(self):
    self.prolog.retractall("selected_meals(X)")
    self.prolog.retractall("selected_breads(X)")
    self.prolog.retractall("selected_mains(X)")
    self.prolog.retractall("selected_veggies(X)")
    self.prolog.retractall("selected_sauces(X)")
    self.prolog.retractall("selected_topups(X)")
    self.prolog.retractall("selected_sides(X)")
    self.prolog.retractall("selected_drinks(X)")
```

We will import the Prolog script using `self.prolog.consult(PROLOG_FILENAME)`
We will then make sure that all existing selections are cleared by retracting them.

Retrieving the options using query

```
def all_options(self, category):
    res = list(self.prolog.query("all_options({}, X)".format(category)))[0]["X"]
    return self.convert_res_to_list(res)

def available_options(self, category):
    res = list(self.prolog.query("available_options({}, X)".format(category)))
    return res if res == [] else self.convert_res_to_list(res[0]["X"])

def selected_options(self, category):
    res = list(self.prolog.query("selected_options({}, X)".format(category)))
    return res if res == [] else self.convert_res_to_list(res[0]["X"])

def convert_res_to_list(self, res):
    counter = 0
    list_result = []
    while (counter < len(res)):
      list_result.append(res[counter].value)
      counter += 1
    return list_result
```

We will retrieve the options using `self.prolog.query(...)` and then process them into usable list in for Python

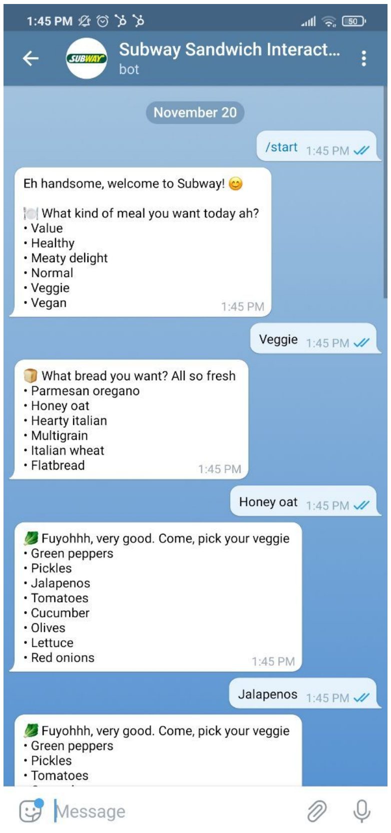
Adding selection input by user using assertz

```
def add_meal(self, X):
    self.prolog.assertz("selected_meals({})".format(X))

def add_bread(self, X):
    self.prolog.assertz("selected_breads({})".format(X))

def add_main(self, X):
    self.prolog.assertz("selected_mains({})".format(X))

def add_veggie(self, X):
    self.prolog.assertz("selected_veggies({})".format(X))

def add_sauce(self, X):
    self.prolog.assertz("selected_sauces({})".format(X))

def add_topup(self, X):
    self.prolog.assertz("selected_topups({})".format(X))

def add_side(self, X):
    self.prolog.assertz("selected_sides({})".format(X))

def add_drink(self, X):
    self.prolog.assertz("selected_drinks({})".format(X))
```

We will add inputs selected by the user using `self.prolog.assertz(...)`

Screenshots of interactions

Veggie meal (mains not asked)



/start 1:45 PM

Eh handsome, welcome to Subway! 😊

🍽️ What kind of meal you want today ah?
- Value
- Healthy
- Meaty delight
- Normal
- Veggie
- Vegan

1:45 PM

Veggie 1:45 PM

🍞 What bread you want? All so fresh
- Parmesan oregano
- Honey oat
- Hearty italian
- Multigrain
- Italian wheat
- Flatbread

1:45 PM

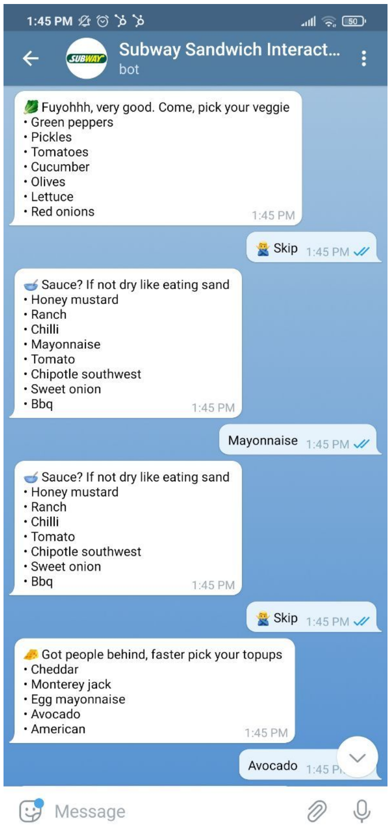
Honey oat 1:45 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Green peppers
- Pickles
- Jalapenos
- Tomatoes
- Cucumber
- Olives
- Lettuce
- Red onions

1:45 PM

Jalapenos 1:45 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Green peppers
- Pickles
- Tomatoes



🥬 Fuyohhh, very good. Come, pick your veggie
- Green peppers
- Pickles
- Tomatoes
- Cucumber
- Olives
- Lettuce
- Red onions

1:45 PM

🙅 Skip 1:45 PM

🥣 Sauce? If not dry like eating sand
- Honey mustard
- Ranch
- Chilli
- Mayonnaise
- Tomato
- Chipotle southwest
- Sweet onion
- Bbq

1:45 PM

Mayonnaise 1:45 PM

🥣 Sauce? If not dry like eating sand
- Honey mustard
- Ranch
- Chilli
- Tomato
- Chipotle southwest
- Sweet onion
- Bbq

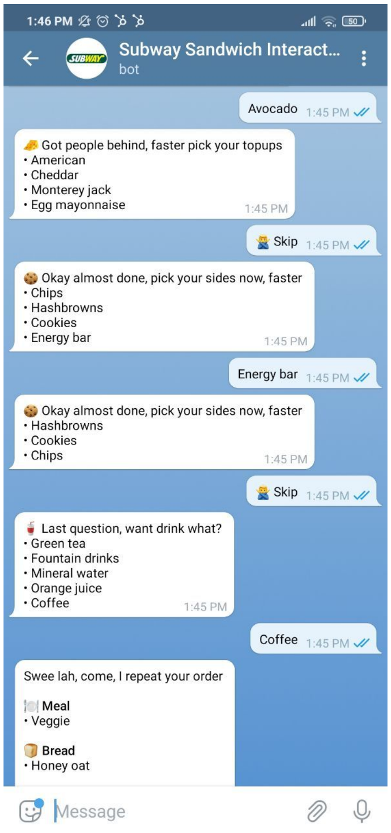
1:45 PM

🙅 Skip 1:45 PM

🧀 Got people behind, faster pick your topups
- Cheddar
- Monterey jack
- Egg mayonnaise
- Avocado
- American

1:45 PM

Avocado 1:45 P



Avocado 1:45 PM

🧀 Got people behind, faster pick your topups
- American
- Cheddar
- Monterey jack
- Egg mayonnaise

1:45 PM

🙅 Skip 1:45 PM

🍪 Okay almost done, pick your sides now, faster
- Chips
- Hashbrowns
- Cookies
- Energy bar

1:45 PM

Energy bar 1:45 PM

🍪 Okay almost done, pick your sides now, faster
- Hashbrowns
- Cookies
- Chips

1:45 PM

🙅 Skip 1:45 PM

🥤 Last question, want drink what?
- Green tea
- Fountain drinks
- Mineral water
- Orange juice
- Coffee

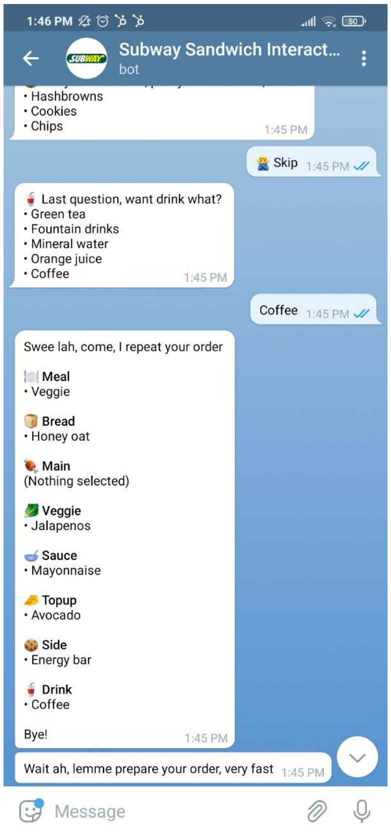
1:45 PM

Coffee 1:45 PM

Swee lah, come, I repeat your order

🍽️ **Meal**
- Veggie

🍞 **Bread**
- Honey oat



- Hashbrowns
- Cookies
- Chips

1:45 PM

🙅 Skip 1:45 PM

🥤 Last question, want drink what?
- Green tea
- Fountain drinks
- Mineral water
- Orange juice
- Coffee

1:45 PM

Coffee 1:45 PM

Swee lah, come, I repeat your order

🍽️ **Meal**
- Veggie

🍞 **Bread**
- Honey oat

🍖 **Main**
(Nothing selected)

🥬 **Veggie**
- Jalapenos

🥣 **Sauce**
- Mayonnaise

🧀 **Topup**
- Avocado

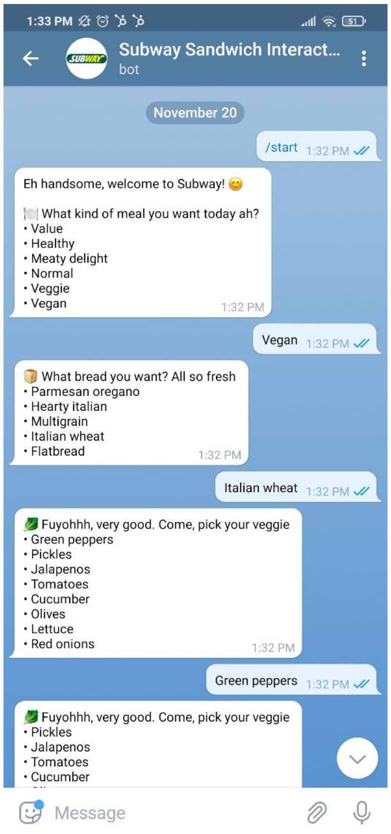
🍪 **Side**
- Energy bar

🥤 **Drink**
- Coffee

Bye! 1:45 PM

Wait ah, lemme prepare your order, very fast 1:45 PM

Vegan meal (non-vegan bread excluded + mains not asked + non-vegan topup excluded)



/start 1:32 PM

Eh handsome, welcome to Subway! 😊

🍽️ What kind of meal you want today ah?
- Value
- Healthy
- Meaty delight
- Normal
- Veggie
- Vegan

1:32 PM

Vegan 1:32 PM

🍞 What bread you want? All so fresh
- Parmesan oregano
- Hearty italian
- Multigrain
- Italian wheat
- Flatbread

1:32 PM

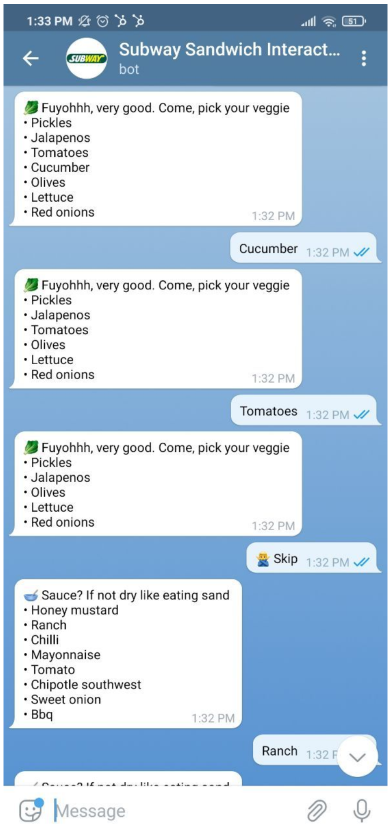
Italian wheat 1:32 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Green peppers
- Pickles
- Jalapenos
- Tomatoes
- Cucumber
- Olives
- Lettuce
- Red onions

1:32 PM

Green peppers 1:32 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Pickles
- Jalapenos
- Tomatoes
- Cucumber



🥬 Fuyohhh, very good. Come, pick your veggie
- Pickles
- Jalapenos
- Tomatoes
- Cucumber
- Olives
- Lettuce
- Red onions

1:32 PM

Cucumber 1:32 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Pickles
- Jalapenos
- Tomatoes
- Olives
- Lettuce
- Red onions

1:32 PM

Tomatoes 1:32 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Pickles
- Jalapenos
- Olives
- Lettuce
- Red onions

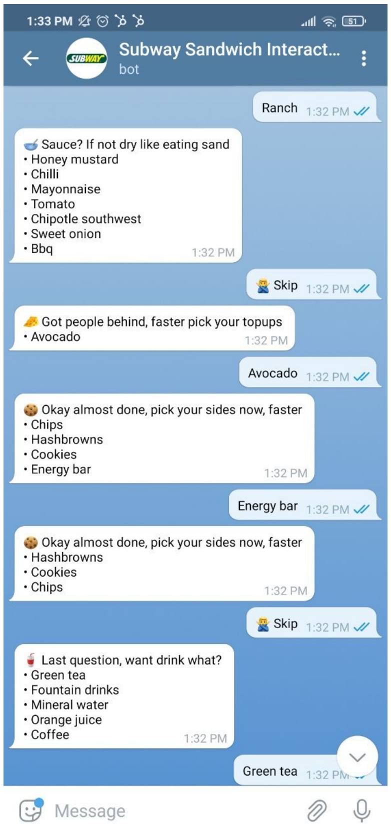
1:32 PM

Skip 1:32 PM

🥣 Sauce? If not dry like eating sand
- Honey mustard
- Ranch
- Chilli
- Mayonnaise
- Tomato
- Chipotle southwest
- Sweet onion
- Bbq

1:32 PM

Ranch 1:32 P



Ranch 1:32 PM

🥣 Sauce? If not dry like eating sand
- Honey mustard
- Chilli
- Mayonnaise
- Tomato
- Chipotle southwest
- Sweet onion
- Bbq

1:32 PM

Skip 1:32 PM

🧀 Got people behind, faster pick your topups
- Avocado

1:32 PM

Avocado 1:32 PM

🍪 Okay almost done, pick your sides now, faster
- Chips
- Hashbrowns
- Cookies
- Energy bar

1:32 PM

Energy bar 1:32 PM

🍪 Okay almost done, pick your sides now, faster
- Hashbrowns
- Cookies
- Chips

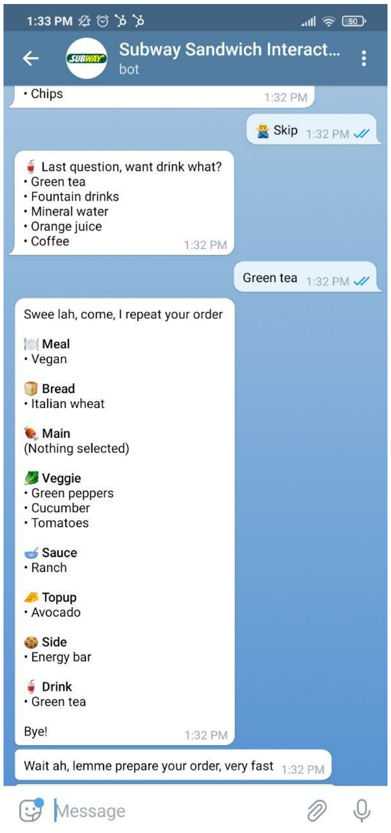
1:32 PM

Skip 1:32 PM

🥤 Last question, want drink what?
- Green tea
- Fountain drinks
- Mineral water
- Orange juice
- Coffee

1:32 PM

Green tea 1:32 PM



- Chips

1:32 PM

Skip 1:32 PM

🥤 Last question, want drink what?
- Green tea
- Fountain drinks
- Mineral water
- Orange juice
- Coffee

1:32 PM

Green tea 1:32 PM

Swee lah, come, I repeat your order

🍽️ **Meal**
- Vegan

🍞 **Bread**
- Italian wheat

🍖 **Main**
(Nothing selected)

🥬 **Veggie**
- Green peppers
- Cucumber
- Tomatoes

🥣 **Sauce**
- Ranch

🧀 **Topup**
- Avocado

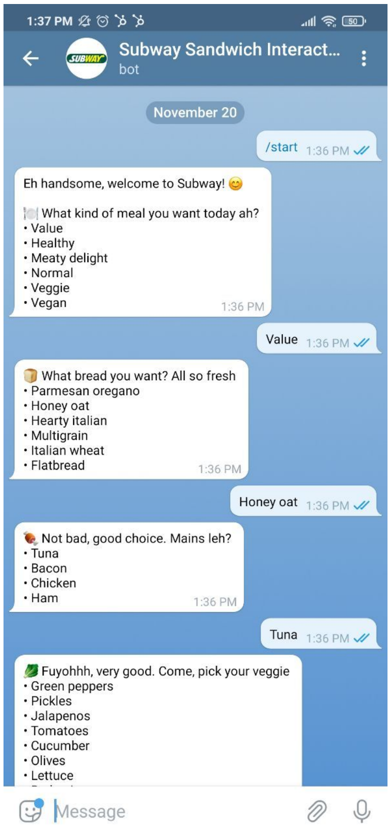
🍪 **Side**
- Energy bar

🥤 **Drink**
- Green tea

Bye! 1:32 PM

Wait ah, lemme prepare your order, very fast 1:32 PM

Value meal (expensive mains excluded + topup not asked)



November 20

/start 1:36 PM

Eh handsome, welcome to Subway! 😊

🍽️ What kind of meal you want today ah?
- Value
- Healthy
- Meaty delight
- Normal
- Veggie
- Vegan

1:36 PM

Value 1:36 PM

🍞 What bread you want? All so fresh
- Parmesan oregano
- Honey oat
- Hearty italian
- Multigrain
- Italian wheat
- Flatbread

1:36 PM

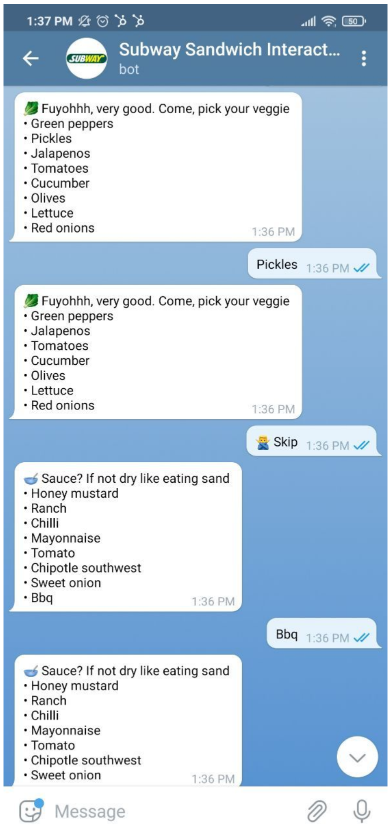
Honey oat 1:36 PM

🍗 Not bad, good choice. Mains leh?
- Tuna
- Bacon
- Chicken
- Ham

1:36 PM

Tuna 1:36 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Green peppers
- Pickles
- Jalapenos
- Tomatoes
- Cucumber
- Olives
- Lettuce



🥬 Fuyohhh, very good. Come, pick your veggie
- Green peppers
- Pickles
- Jalapenos
- Tomatoes
- Cucumber
- Olives
- Lettuce
- Red onions

1:36 PM

Pickles 1:36 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Green peppers
- Jalapenos
- Tomatoes
- Cucumber
- Olives
- Lettuce
- Red onions

1:36 PM

🙅 Skip 1:36 PM

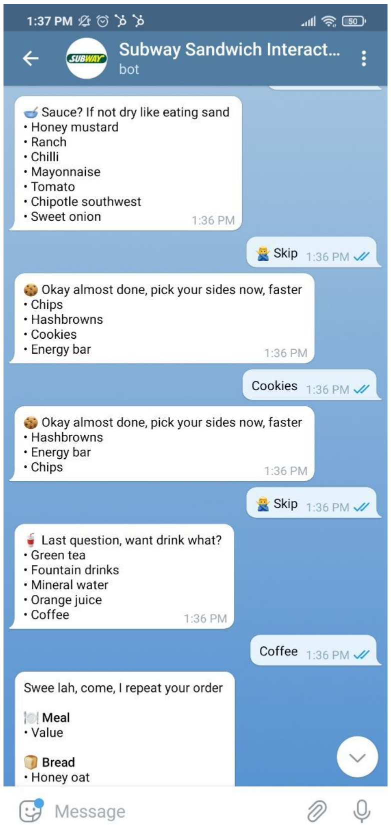
🥣 Sauce? If not dry like eating sand
- Honey mustard
- Ranch
- Chilli
- Mayonnaise
- Tomato
- Chipotle southwest
- Sweet onion
- Bbq

1:36 PM

Bbq 1:36 PM

🥣 Sauce? If not dry like eating sand
- Honey mustard
- Ranch
- Chilli
- Mayonnaise
- Tomato
- Chipotle southwest
- Sweet onion

1:36 PM



🥣 Sauce? If not dry like eating sand
- Honey mustard
- Ranch
- Chilli
- Mayonnaise
- Tomato
- Chipotle southwest
- Sweet onion

1:36 PM

🙅 Skip 1:36 PM

🍪 Okay almost done, pick your sides now, faster
- Chips
- Hashbrowns
- Cookies
- Energy bar

1:36 PM

Cookies 1:36 PM

🍪 Okay almost done, pick your sides now, faster
- Hashbrowns
- Energy bar
- Chips

1:36 PM

🙅 Skip 1:36 PM

🥤 Last question, want drink what?
- Green tea
- Fountain drinks
- Mineral water
- Orange juice
- Coffee

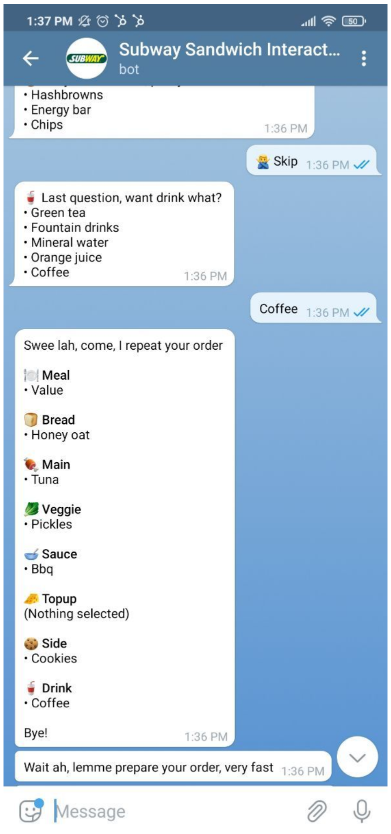
1:36 PM

Coffee 1:36 PM

Swee lah, come, I repeat your order

🍽️ **Meal**
- Value

🍞 **Bread**
- Honey oat



- Hashbrowns
- Energy bar
- Chips

1:36 PM

🙅 Skip 1:36 PM

🥤 Last question, want drink what?
- Green tea
- Fountain drinks
- Mineral water
- Orange juice
- Coffee

1:36 PM

Coffee 1:36 PM

Swee lah, come, I repeat your order

🍽️ **Meal**
- Value

🍞 **Bread**
- Honey oat

🍗 **Main**
- Tuna

🥬 **Veggie**
- Pickles

🥣 **Sauce**
- Bbq

🧀 **Topup**
(Nothing selected)

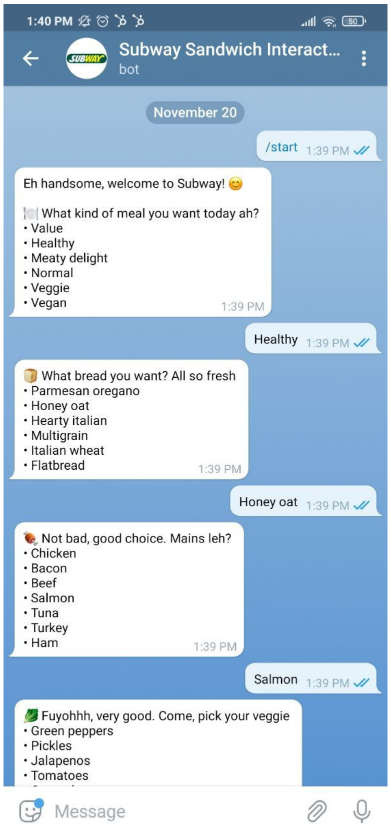
🍪 **Side**
- Cookies

🥤 **Drink**
- Coffee

Bye! 1:36 PM

Wait ah, lemme prepare your order, very fast 1:36 PM

Healthy meal (Unhealthy sauces excluded + unhealthy sides excluded + unhealthy drinks excluded)



November 20

/start 1:39 PM

Eh handsome, welcome to Subway! 😊

🍽 What kind of meal you want today ah?
- Value
- Healthy
- Meaty delight
- Normal
- Veggie
- Vegan

1:39 PM

Healthy 1:39 PM

🍞 What bread you want? All so fresh
- Parmesan oregano
- Honey oat
- Hearty italian
- Multigrain
- Italian wheat
- Flatbread

1:39 PM

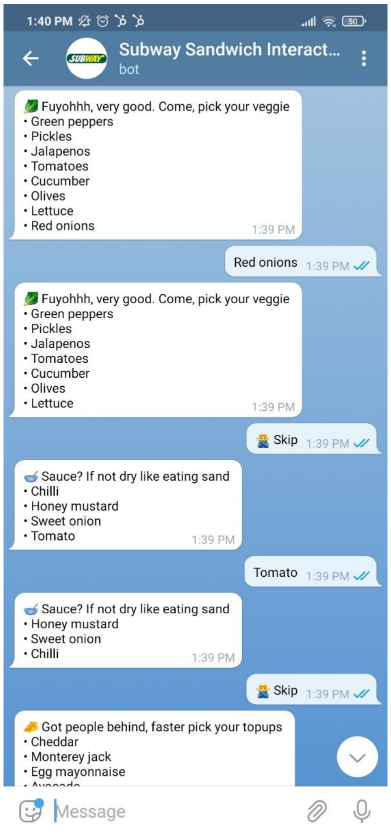
Honey oat 1:39 PM

🍗 Not bad, good choice. Mains leh?
- Chicken
- Bacon
- Beef
- Salmon
- Tuna
- Turkey
- Ham

1:39 PM

Salmon 1:39 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Green peppers
- Pickles
- Jalapenos
- Tomatoes



🥬 Fuyohhh, very good. Come, pick your veggie
- Green peppers
- Pickles
- Jalapenos
- Tomatoes
- Cucumber
- Olives
- Lettuce
- Red onions

1:39 PM

Red onions 1:39 PM

🥬 Fuyohhh, very good. Come, pick your veggie
- Green peppers
- Pickles
- Jalapenos
- Tomatoes
- Cucumber
- Olives
- Lettuce

1:39 PM

Skip 1:39 PM

🥣 Sauce? If not dry like eating sand
- Chilli
- Honey mustard
- Sweet onion
- Tomato

1:39 PM

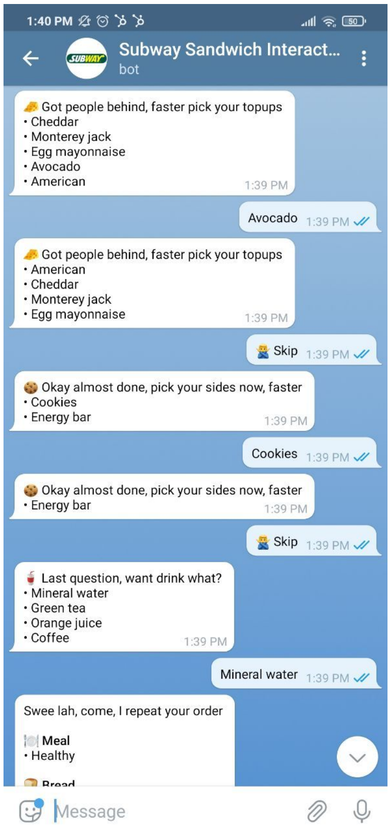
Tomato 1:39 PM

🥣 Sauce? If not dry like eating sand
- Honey mustard
- Sweet onion
- Chilli

1:39 PM

Skip 1:39 PM

🧀 Got people behind, faster pick your topups
- Cheddar
- Monterey jack
- Egg mayonnaise



🧀 Got people behind, faster pick your topups
- Cheddar
- Monterey jack
- Egg mayonnaise
- Avocado
- American

1:39 PM

Avocado 1:39 PM

🧀 Got people behind, faster pick your topups
- American
- Cheddar
- Monterey jack
- Egg mayonnaise

1:39 PM

Skip 1:39 PM

🍪 Okay almost done, pick your sides now, faster
- Cookies
- Energy bar

1:39 PM

Cookies 1:39 PM

🍪 Okay almost done, pick your sides now, faster
- Energy bar

1:39 PM

Skip 1:39 PM

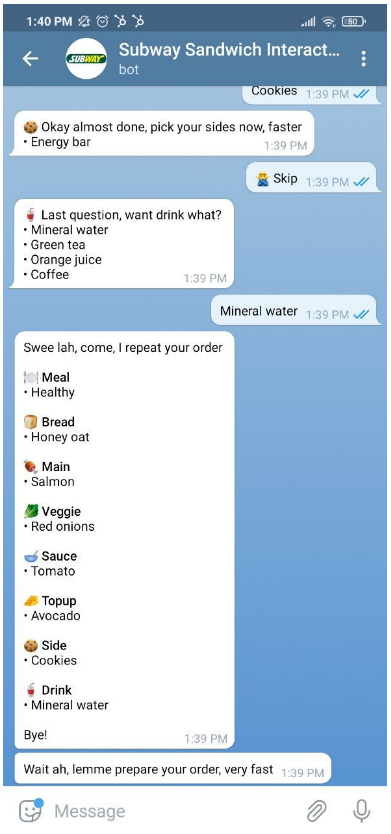
🥤 Last question, want drink what?
- Mineral water
- Green tea
- Orange juice
- Coffee

1:39 PM

Mineral water 1:39 PM

Swee lah, come, I repeat your order

🍽 **Meal**
- Healthy



Cookies 1:39 PM

🍪 Okay almost done, pick your sides now, faster
- Energy bar

1:39 PM

Skip 1:39 PM

🥤 Last question, want drink what?
- Mineral water
- Green tea
- Orange juice
- Coffee

1:39 PM

Mineral water 1:39 PM

Swee lah, come, I repeat your order

🍽 **Meal**
- Healthy

🍞 **Bread**
- Honey oat

🍗 **Main**
- Salmon

🥬 **Veggie**
- Red onions

🥣 **Sauce**
- Tomato

🧀 **Topup**
- Avocado

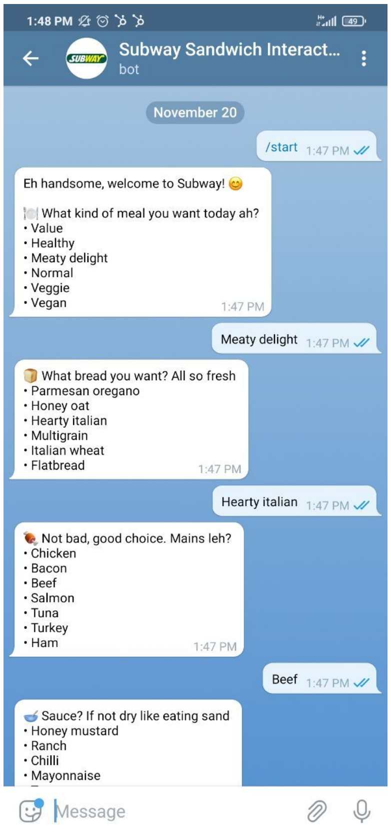
🍪 **Side**
- Cookies

🥤 **Drink**
- Mineral water

Bye! 1:39 PM

Wait ah, lemme prepare your order, very fast 1:39 PM

Meaty delight meal (veggies not asked)



/start 1:47 PM

Eh handsome, welcome to Subway! 😊

🍽️ What kind of meal you want today ah?
- Value
- Healthy
- Meaty delight
- Normal
- Veggie
- Vegan

1:47 PM

Meaty delight 1:47 PM

🍞 What bread you want? All so fresh
- Parmesan oregano
- Honey oat
- Hearty italian
- Multigrain
- Italian wheat
- Flatbread

1:47 PM

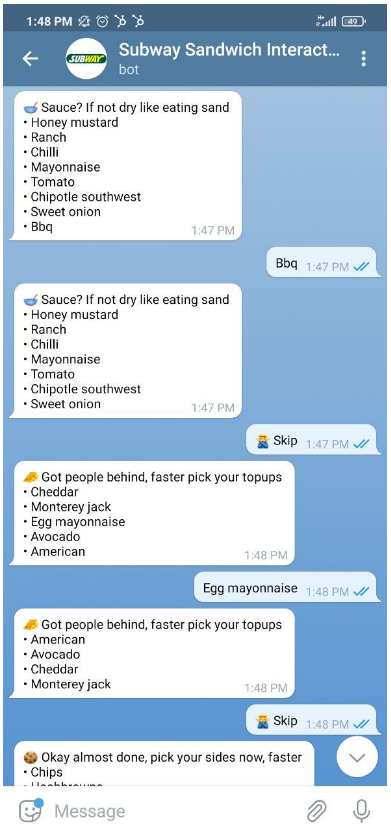
Hearty italian 1:47 PM

🍗 Not bad, good choice. Mains leh?
- Chicken
- Bacon
- Beef
- Salmon
- Tuna
- Turkey
- Ham

1:47 PM

Beef 1:47 PM

🥣 Sauce? If not dry like eating sand
- Honey mustard
- Ranch
- Chilli
- Mayonnaise



🥣 Sauce? If not dry like eating sand
- Honey mustard
- Ranch
- Chilli
- Mayonnaise
- Tomato
- Chipotle southwest
- Sweet onion
- Bbq

1:47 PM

Bbq 1:47 PM

🥣 Sauce? If not dry like eating sand
- Honey mustard
- Ranch
- Chilli
- Mayonnaise
- Tomato
- Chipotle southwest
- Sweet onion

1:47 PM

🤷 Skip 1:47 PM

🧀 Got people behind, faster pick your topups
- Cheddar
- Monterey jack
- Egg mayonnaise
- Avocado
- American

1:48 PM

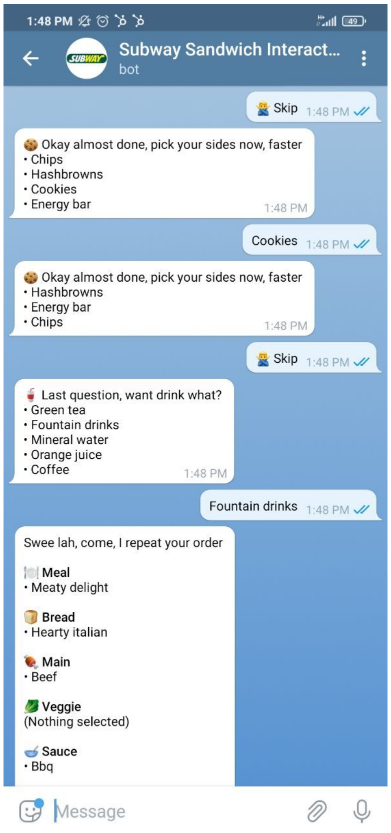
Egg mayonnaise 1:48 PM

🧀 Got people behind, faster pick your topups
- American
- Avocado
- Cheddar
- Monterey jack

1:48 PM

🤷 Skip 1:48 PM

🍪 Okay almost done, pick your sides now, faster
- Chips



🤷 Skip 1:48 PM

🍪 Okay almost done, pick your sides now, faster
- Chips
- Hashbrowns
- Cookies
- Energy bar

1:48 PM

Cookies 1:48 PM

🍪 Okay almost done, pick your sides now, faster
- Hashbrowns
- Energy bar
- Chips

1:48 PM

🤷 Skip 1:48 PM

🥤 Last question, want drink what?
- Green tea
- Fountain drinks
- Mineral water
- Orange juice
- Coffee

1:48 PM

Fountain drinks 1:48 PM

Swee lah, come, I repeat your order

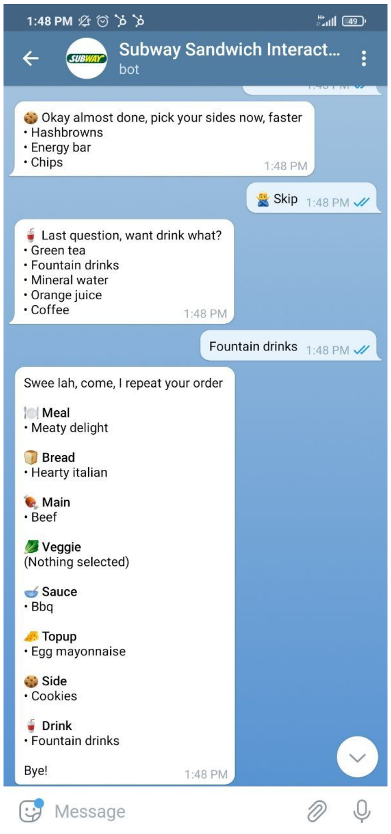
🍽️ **Meal**
- Meaty delight

🍞 **Bread**
- Hearty italian

🍗 **Main**
- Beef

🥬 **Veggie**
(Nothing selected)

🥣 **Sauce**
- Bbq



🍪 Okay almost done, pick your sides now, faster
- Hashbrowns
- Energy bar
- Chips

1:48 PM

🤷 Skip 1:48 PM

🥤 Last question, want drink what?
- Green tea
- Fountain drinks
- Mineral water
- Orange juice
- Coffee

1:48 PM

Fountain drinks 1:48 PM

Swee lah, come, I repeat your order

🍽️ **Meal**
- Meaty delight

🍞 **Bread**
- Hearty italian

🍗 **Main**
- Beef

🥬 **Veggie**
(Nothing selected)

🥣 **Sauce**
- Bbq

🧀 **Topup**
- Egg mayonnaise

🍪 **Side**
- Cookies

🥤 **Drink**
- Fountain drinks

Bye! 1:48 PM