**Things to be submitted:**

1. **Link for the app**
2. **Code Repository link**
3. **Application Architecture**
4. **Product Documentation- Steps to use the app** *- optional*
5. **Developer Documentation(APIs/Modules) *- optional***

**Completed in 3 days.**

**1.**

**2.**[**https://github.com/krishnakurtakoti/chatBot**](https://github.com/krishnakurtakoti/chatBot)

**3.Architecture:**

**Facebook Page – UI**

**Node.js -Backend**

**MongoDb -Database**

**Dialog Flow -NLP** **3rd party API**

**Facebook messenger-3rd party API Web Hook to send(POST) and receive(GET) the messages to and from Dialog flow Platform.**

**4.Product documentation:**

**Facebook DialogFlow MongoDb Node.js Pizza Ordering Bot:**

Sample Bot[Sample BotSample Bot](https://www.facebook.com/100685871513281)Thurs 16:40

hi

Greetings! How can I assist?

hi

Good day! What can I do for you today?

hi

Hi! How are you doing?

order pizza

your order registered

hello

Hi! How are you doing?

fine

Glad you think so!

kindly supply me 2 garlic pizza

your order registered now.

14:41

hey

hi

hi

hi

hi

Hi! How are you doing?

place an order

type "item Pizza Margherita"

place an order

Select the item name for example,if you want to order a Pizza Margherita, type "item Pizza Margherita"

item Pizza Marinara

Select the item name for example,if you want to order a Pizza Margherita, type "item Pizza Margherita"

item Marinara

Sorry, can you say that again?

item Marinara

Please type the qauntity/numbers, if you want 2 Pizza Margherita,

item Marinara

Please type the qauntity/numbers, if you want 2 Pizza Margherita, type "2",just the number.

2

O.K.If you want to order other item,repeat same step.Else type "Order Complete"

Order Complete

Your order has been saved to Database.Thank You

order pizza

Select the item name for example,if you want to order a Pizza Margherita, type "item Margherita",Marinara,Quattro Stagioni,Carbonara,Frutti di Mare

Carbonara

Please type the qauntity/numbers, if you want 2 Pizza Margherita, type "2",just the number.

1

O.K.If you want to order other item,repeat same step.Else type "Order Complete"

Frutti di Mare

Please type the qauntity/numbers, if you want 2 Pizza Margherita, type "2",just the number.

1

O.K.If you want to order other item,repeat same step.Else type "Order Complete"

Order Complete

Your order has been saved to Database.Thank You

hi

Hi! How are you doing?

hi

Hi! How are you doing?

hi

Hello! How can I help you?

hi

Hello! How can I help you?

hi

Good day! What can I do for you today?

hi

Hello! How can I help you?

hi

Greetings! How can I assist?

order pizza

Select the item name for example,if you want to order a Pizza Margherita, type "item Margherita",Marinara,Quattro Stagioni,Carbonara,Frutti di Mare

item Carbonara

Please type the qauntity/numbers, if you want 2 Pizza Margherita, type "2",just the number.

3

O.K.If you want to order other item,repeat same step.Else type "Order Complete"

Order Complete

Your order has been saved to Database.Thank You

**End to End Conversation:**

Blue – Customer

Black - Bot

Hi!.

Hi! How are you doing?

Extremely Fine.

I agree!

I wish to place an order for a Pizza.

Select the item name for example,if you want to order a Pizza Margherita, type "item Margherita",Marinara,Quattro Stagioni,Carbonara,Frutti di Mare

"Item Marinara"

Please type the qauntity/numbers, if you want 2 Pizza Margherita, type "2",just the number.

"3"

O.K.If you want to order other item,repeat same step.Else type "Order Complete"

Order Complete

Your order has been saved to Database.Thank You

**Code;**

**Reference:**

**1.**

[**https://blog.pusher.com/facebook-chatbot-dialogflow/**](https://blog.pusher.com/facebook-chatbot-dialogflow/)

**2.**

[**https://girliemac.com/blog/2017/01/06/facebook-apiai-bot-nodejs/**](https://girliemac.com/blog/2017/01/06/facebook-apiai-bot-nodejs/)

**package.json**

{

"name": "bot",

"version": "1.0.0",

"description": "",

"main": "index.js",

"scripts": {

"test": "echo \"Error: no test specified\" && exit 1"

},

"author": "",

"license": "ISC",

"dependencies": {

"body-parser": "^1.19.0",

"dialogflow": "^1.1.2",

"dotenv": "^8.2.0",

"express": "^4.17.1",

"mongodb": "^3.5.2",

"node-fetch": "^2.6.0"

}

}

**index.js**

const express = require('express');

const bodyParser = require('body-parser');

const app = express();

require('dotenv').config({ path: 'variables.env' });

app.use(bodyParser.json());

app.use(bodyParser.urlencoded({ extended: true }));

/\*

var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {

if (err) throw err;

var dbo = db.db("mydb");

var myobj = { name: "Company Inc", address: "Highway 37" };

dbo.collection("customers").insertOne(myobj, function(err, res) {

if (err) throw err;

console.log("1 document inserted");

db.close();

});

});

\*/

const verifyWebhook = require('./verify-webhook');

app.get('/', verifyWebhook);

const messageWebhook = require('./message-webhook');

app.post('/', messageWebhook);

app.listen(5000, () => console.log('Express server is listening on port 5000'));

**message-webhook.js**

const processMessage = require('./process-message');

module.exports = (req, res) => {

if (req.body.object === 'page') {

req.body.entry.forEach(entry => {

entry.messaging.forEach(event => {

if (event.message && event.message.text) {

processMessage(event);

}

});

});

res.status(200).end();

}

};

**process-message.js**

const fetch = require('node-fetch');

// You can find your project ID in your Dialogflow agent settings

const projectId = 'sample-bot-monlhx'; //https://dialogflow.com/docs/agents#settings

const sessionId = '123456';

const languageCode = 'en-US';

const dialogflow = require('dialogflow');

const config = {

credentials: {

private\_key: process.env.DIALOGFLOW\_PRIVATE\_KEY,

client\_email: process.env.DIALOGFLOW\_CLIENT\_EMAIL

}

};

const sessionClient = new dialogflow.SessionsClient(config);

const sessionPath = sessionClient.sessionPath(projectId, sessionId);

// Remember the Page Access Token you got from Facebook earlier?

// Don't forget to add it to your `variables.env` file.

const { FACEBOOK\_ACCESS\_TOKEN } = process.env;

const sendTextMessage = (userId, text) => {

console.log( {

messaging\_type: 'RESPONSE from Bot',

recipient: {

id: userId,

},

message: {

text,

},

});

return fetch(

`https://graph.facebook.com/v2.6/me/messages?access\_token=${FACEBOOK\_ACCESS\_TOKEN}`,

{

headers: {

'Content-Type': 'application/json',

},

method: 'POST',

body: JSON.stringify({

messaging\_type: 'RESPONSE',

recipient: {

id: userId,

},

message: {

text,

},

}),

}

);

}

/\*

console.log({

messaging\_type: 'RESPONSE',

recipient: {

id: userId,

},

message: {

text,

},

});

\*/

module.exports = (event) => {

const userId = event.sender.id;

const message = event.message.text;

//console.log()

const request = {

session: sessionPath,

queryInput: {

text: {

text: message,

languageCode: languageCode,

},

},

};

console.log("FRom Customer side");

console.log(request);

sessionClient

.detectIntent(request)

.then(responses => {

const result = responses[0].queryResult;

return sendTextMessage(userId, result.fulfillmentText);

})

.catch(err => {

console.error('ERROR:', err);

});

var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {

if (err) throw err;

var dbo = db.db("mydb");

var myobj = request.queryInput.text;

dbo.collection("customers").insertOne(myobj, function(err, res) {

if (err) throw err;

console.log("1 document inserted");

db.close();

});

});

}

**verify-webhook.js**

const verifyWebhook = (req, res) => {

let VERIFY\_TOKEN = 'pusher-bot';

let mode = req.query['hub.mode'];

let token = req.query['hub.verify\_token'];

let challenge = req.query['hub.challenge'];

if (mode && token === VERIFY\_TOKEN) {

res.status(200).send(challenge);

} else {

res.sendStatus(403);

}

};

module.exports = verifyWebhook;

**variables.env**

FACEBOOK\_ACCESS\_TOKEN=

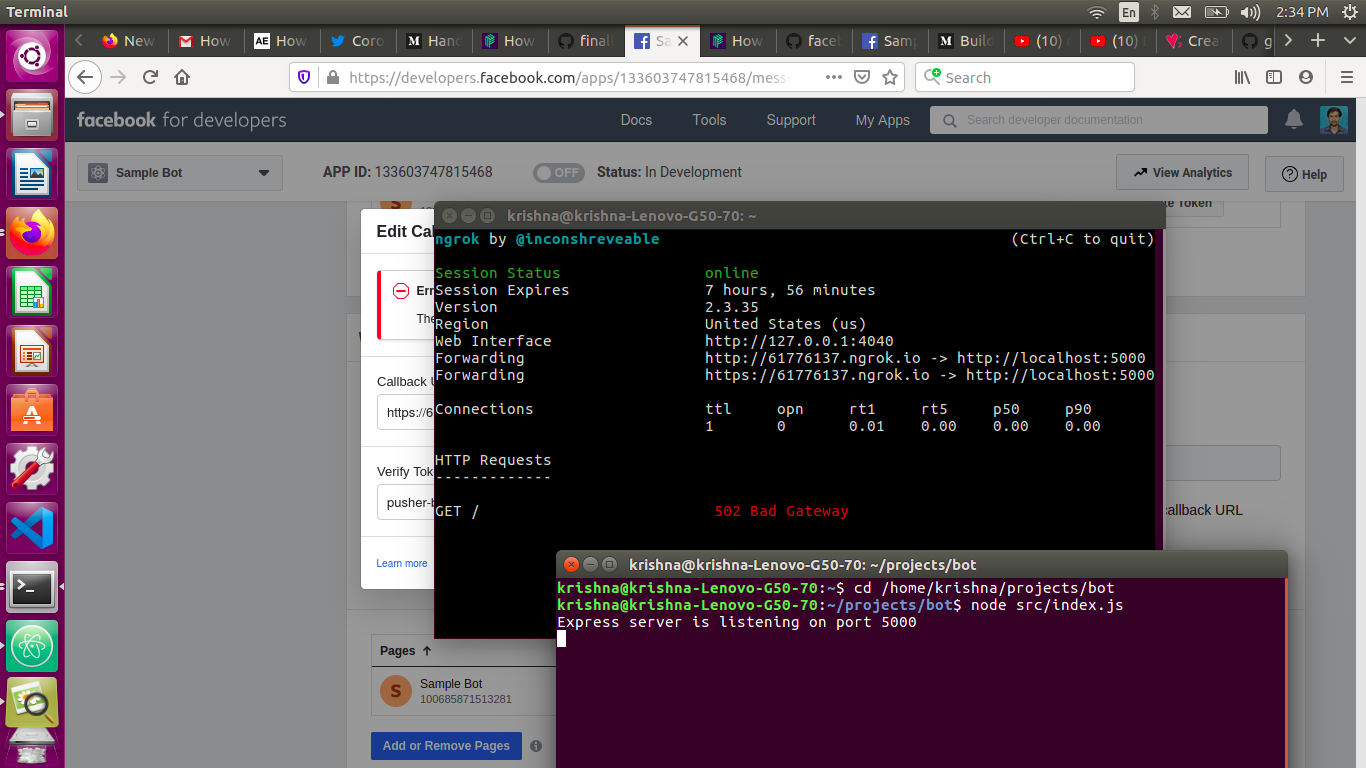
DIALOGFLOW\_PRIVATE\_KEY=

DIALOGFLOW\_CLIENT\_EMAIL=

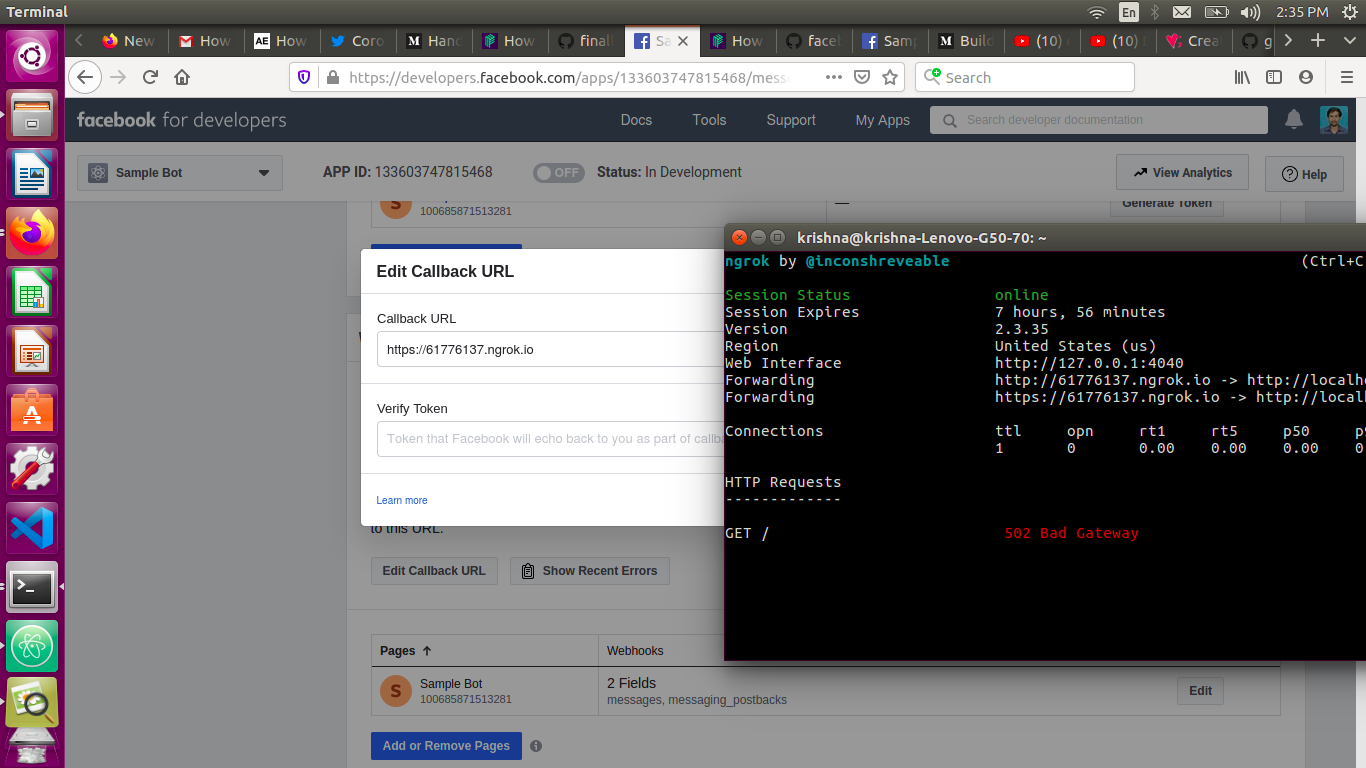
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Photos:

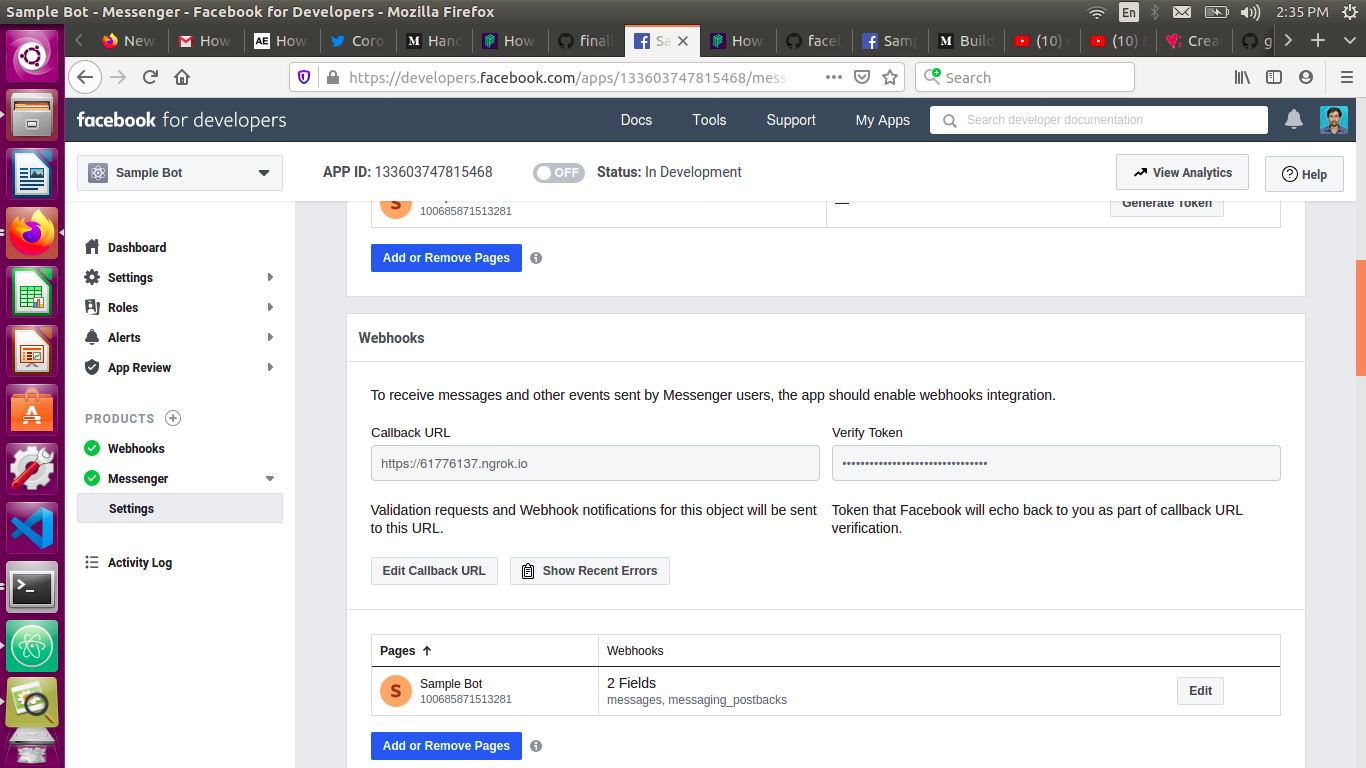
1.



2.



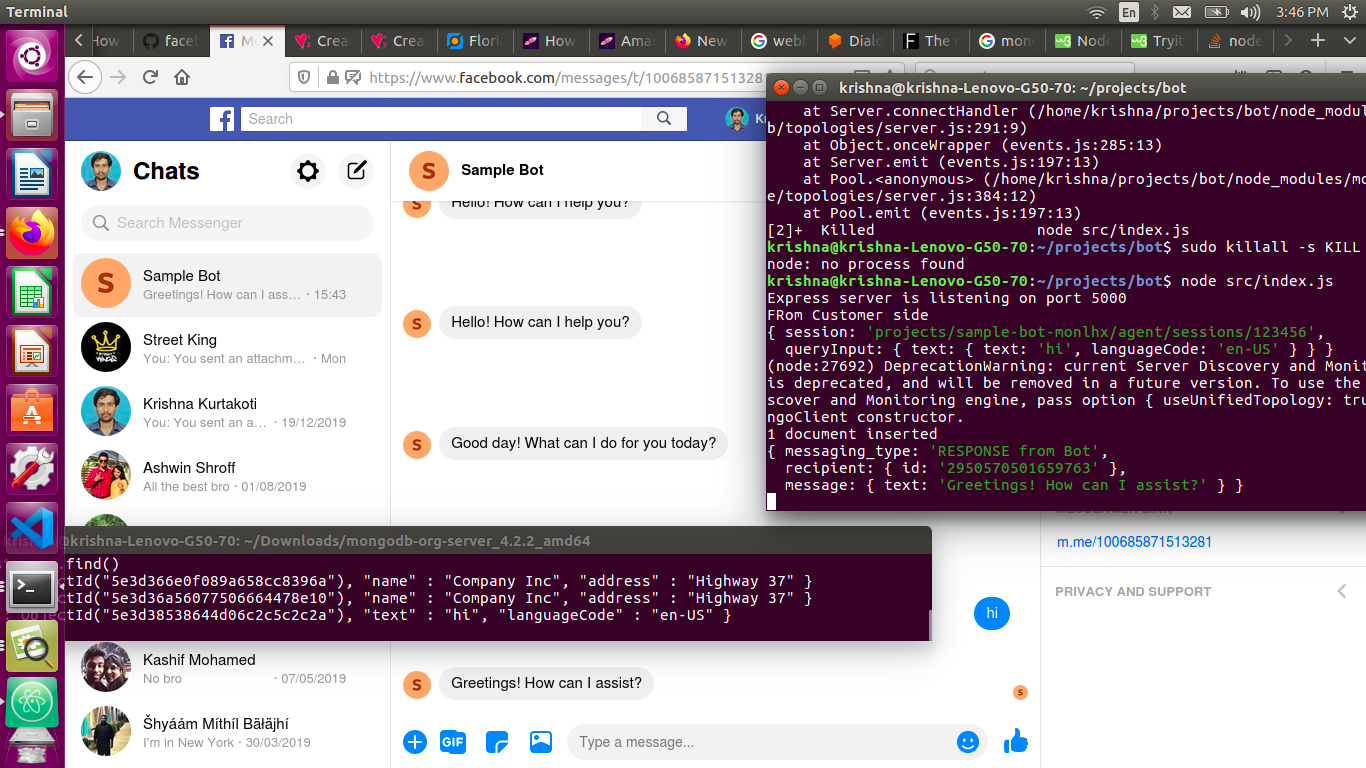
3.



4.

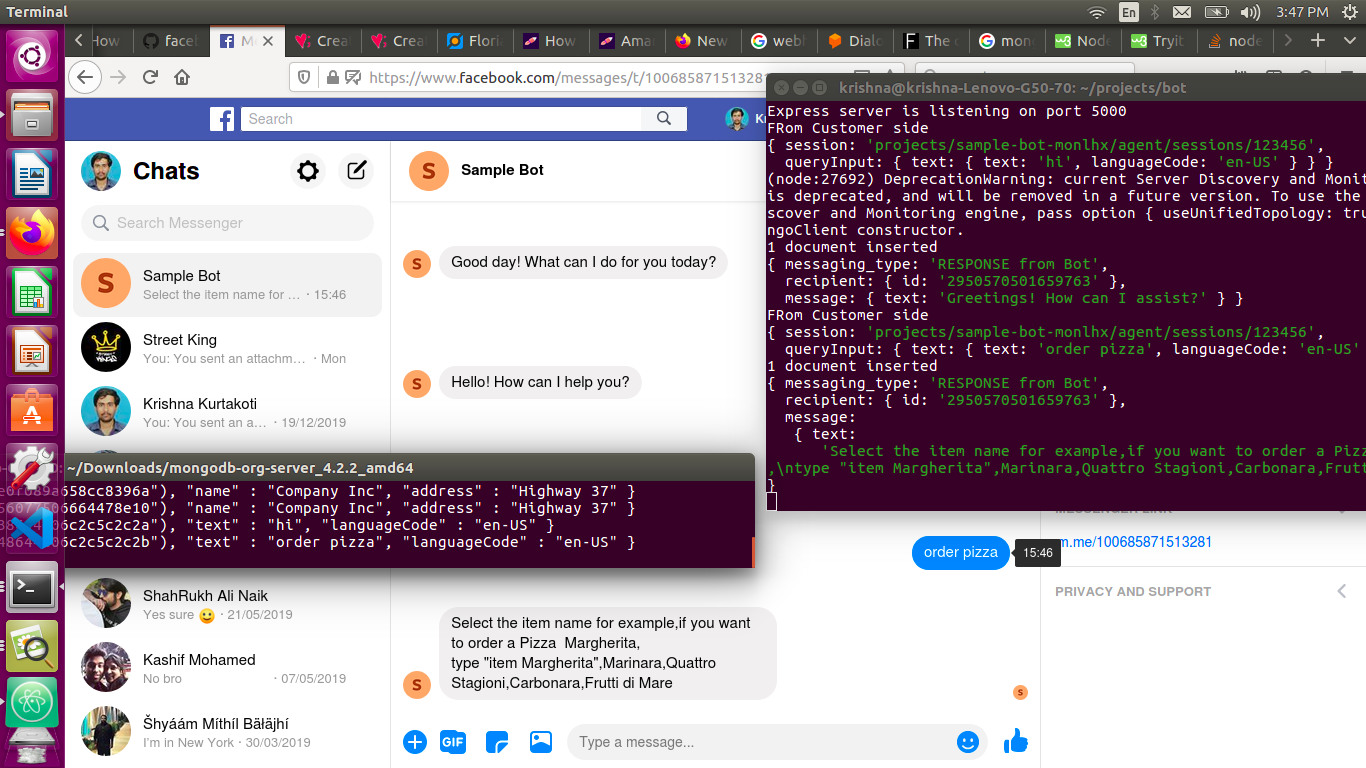
**Chat conversation snap shot**:

**HI**



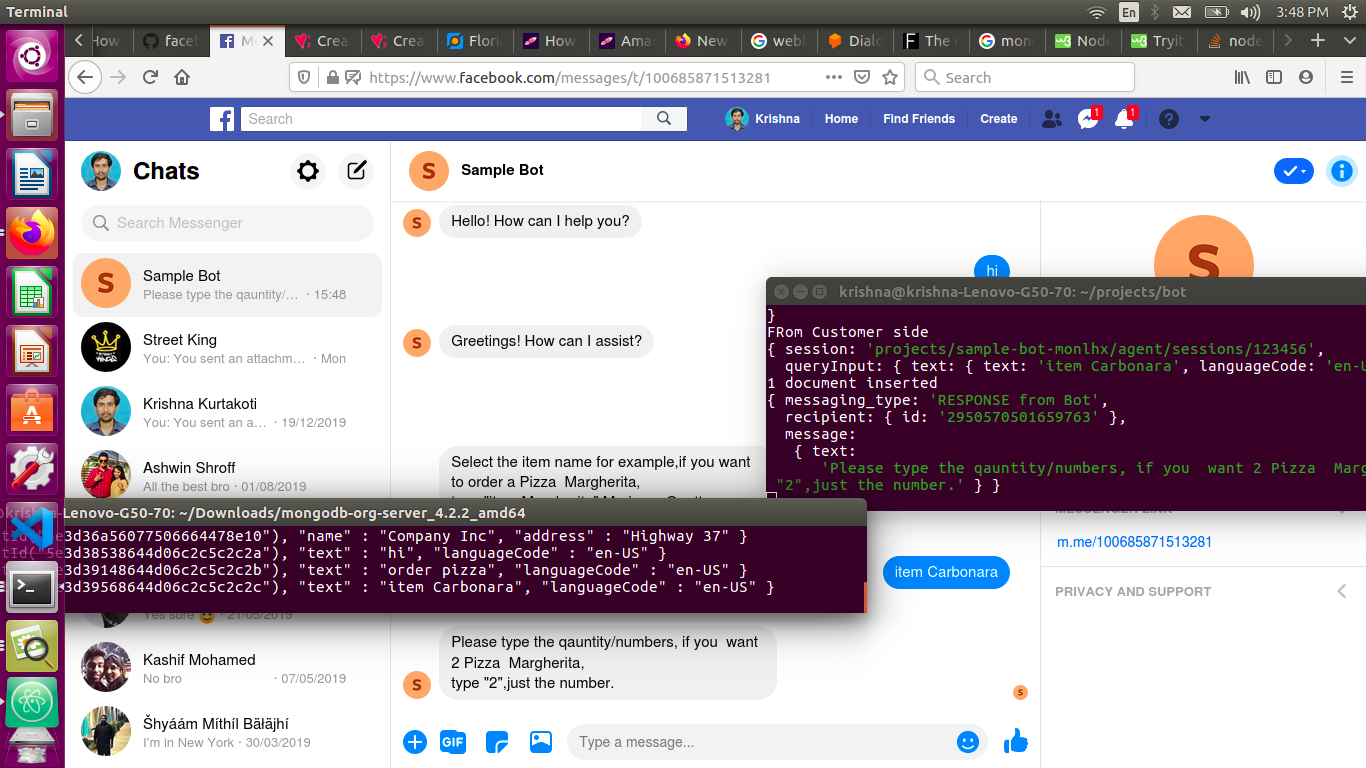
5.

**Order pizza**



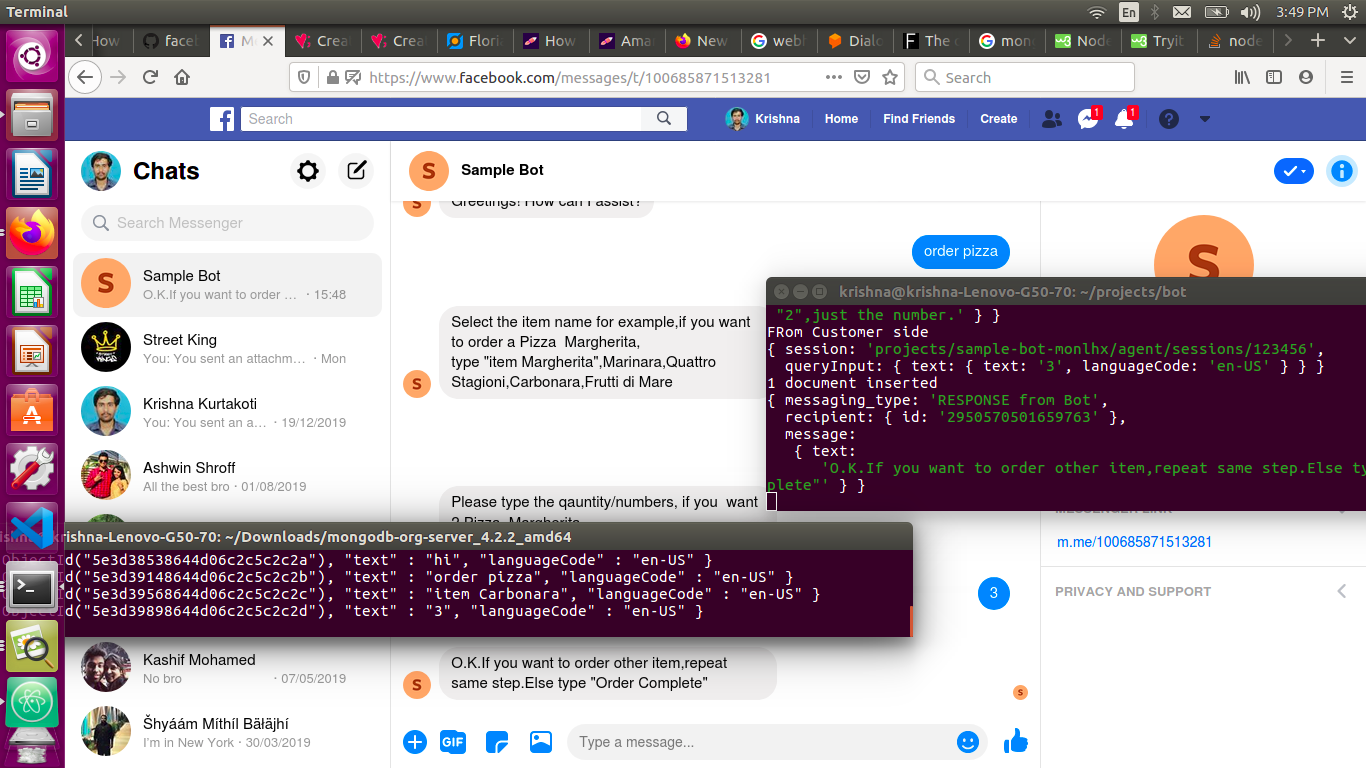
6.

**Item Carbonara**



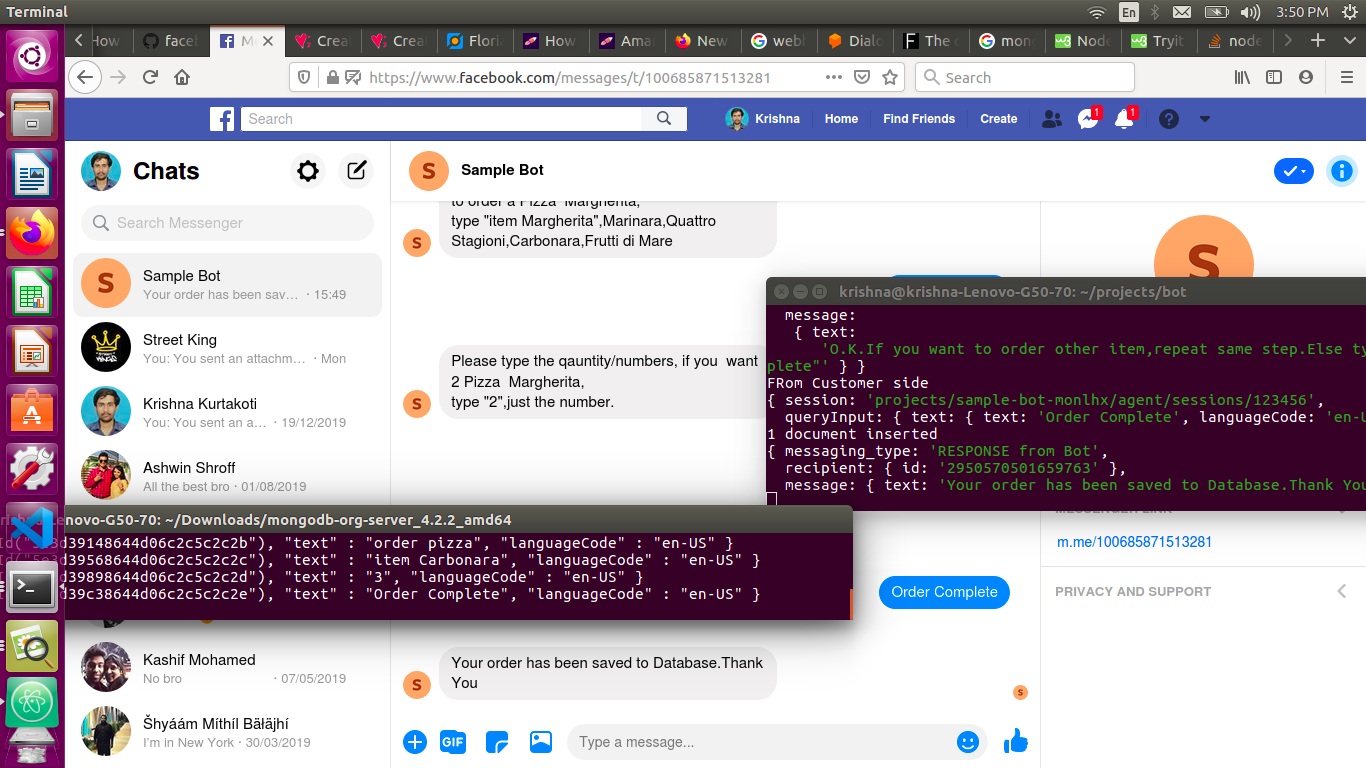
7.

**3**



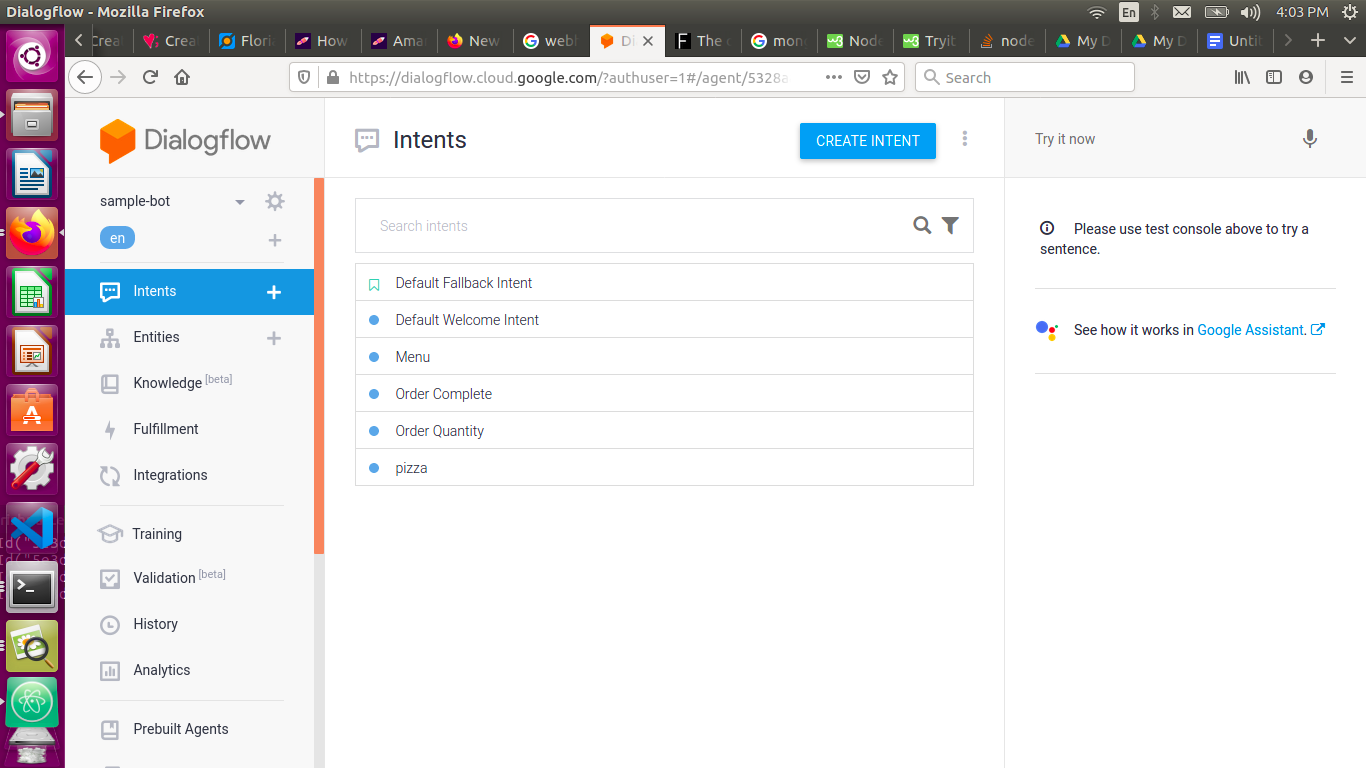
8.

**Order Complete**

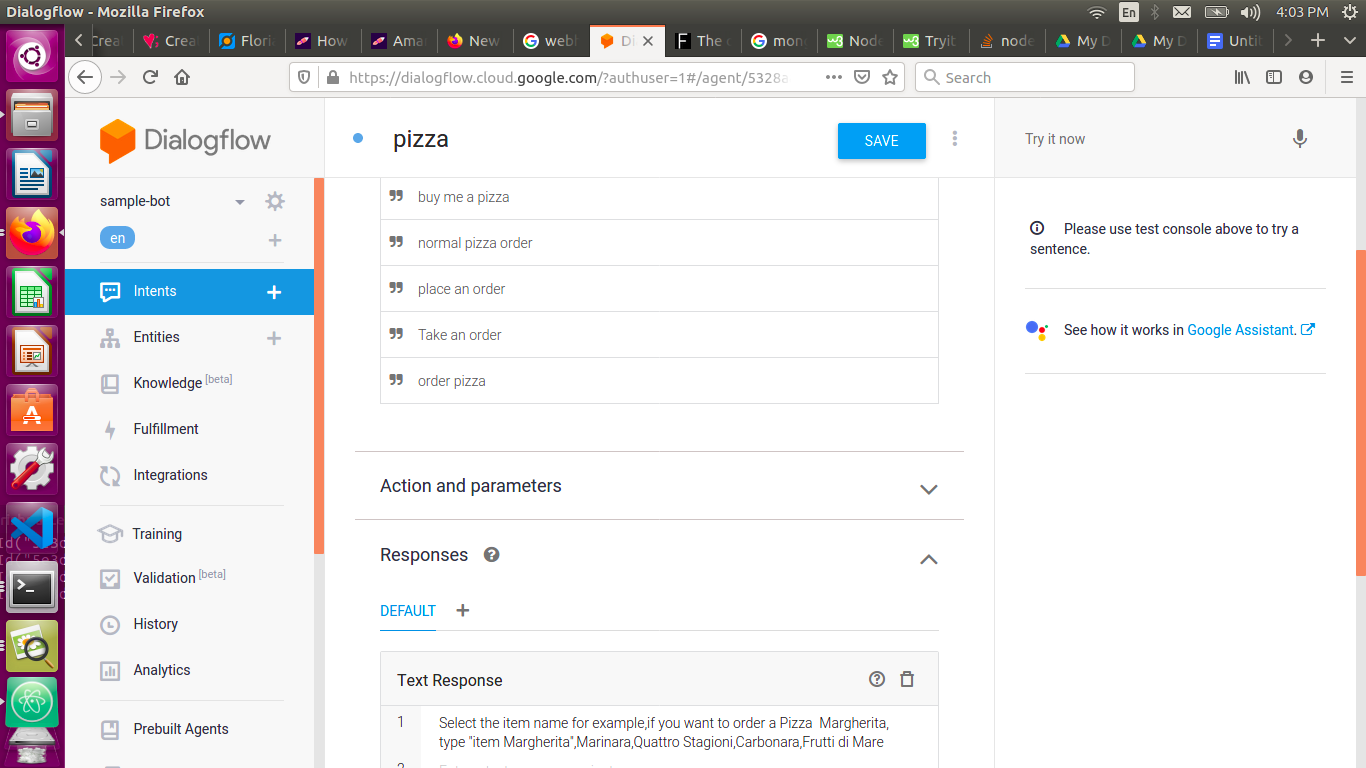


9.Dialog flow snap shots:

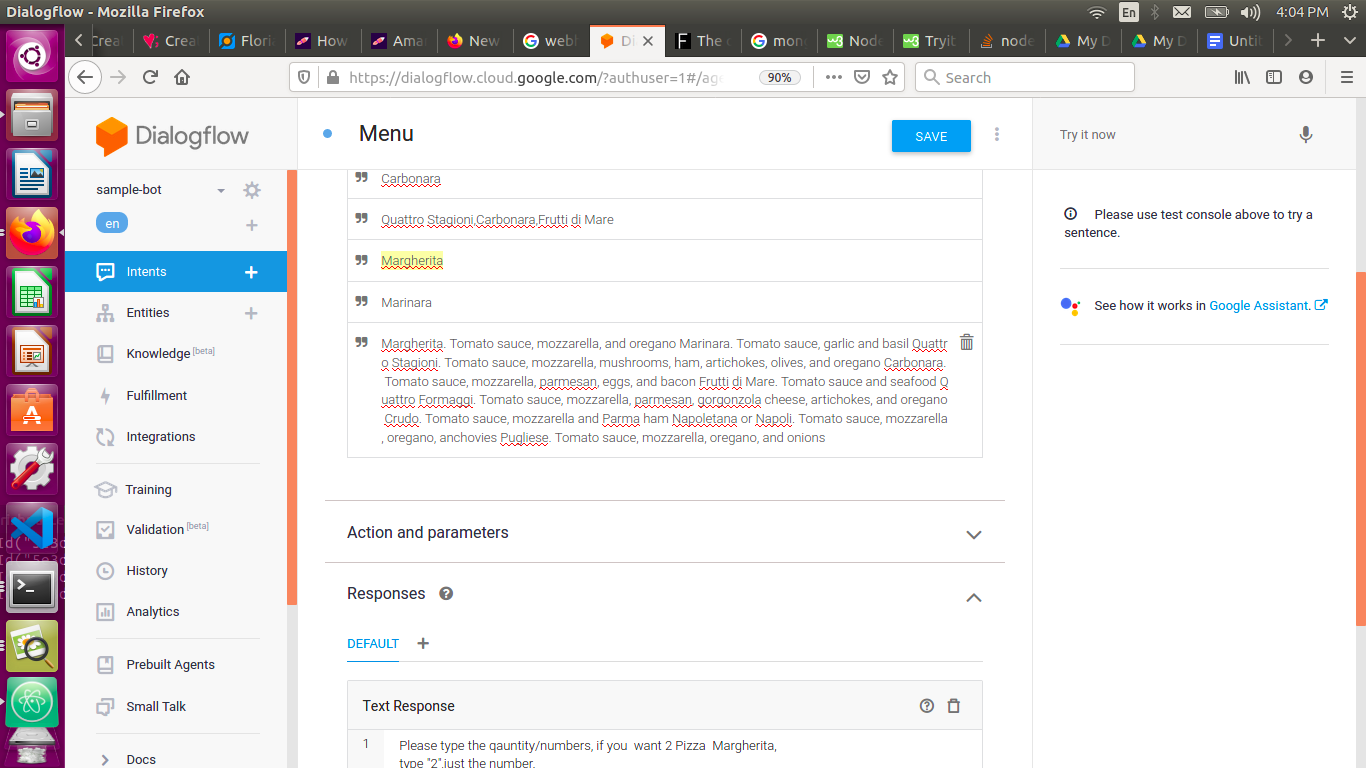
**Intents**



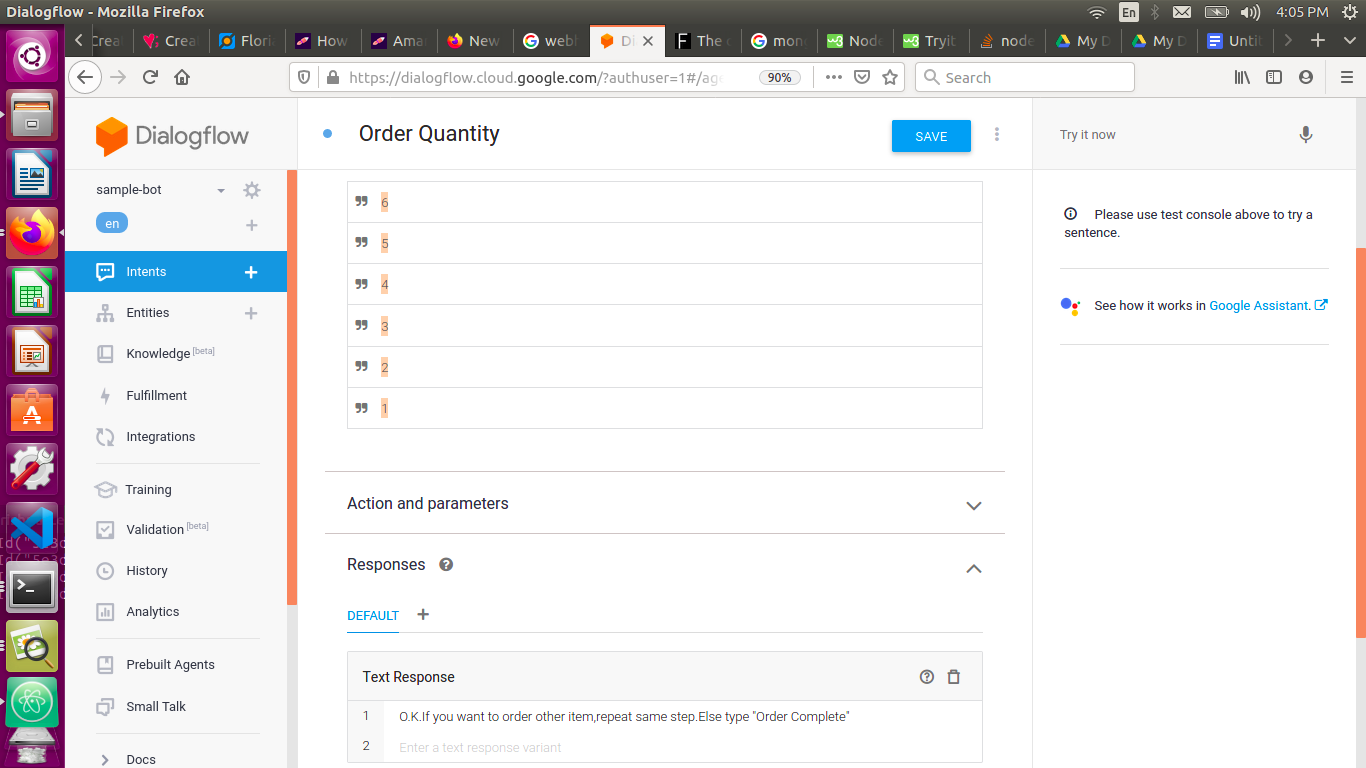
**Pizza Intent**



**Menu Intent**



**Order Quantity Intent**



**Order Complete Intent**

