SEBASTIAN WITALEC

SENIOR DEVELOPER ADVOCATE

@SEBAWITA

A CHATBOT CRASH COURSE

▸ What do chatbots eat?

▸ Do chatbots have dreams?

▸ Why chatbots?

▸ What are the usual chatbot challenges?

▸ Let's build a chatbot - **do** try it at home

▸ Ask questions as we go => Rob is here

What do chatbots eat?

Every 6 years old

WHAT ELSE IS BETTER THAN?

PIZZA

Do chatbots have dreams?

Rick Deckard
Blade Runner

YES, THEY DO

THEY DREAM OF ELECTRIC SHEEP

Why Chatbots?

The voice on the back of your head

▸ Improved customer service

▸ Reduce the common reception/call centre pain points

▸ 24/7

▸ Great at handling repetitive tasks

▸ Speed of communication

▸ Access to the data

What are the usual chatbot challenges?
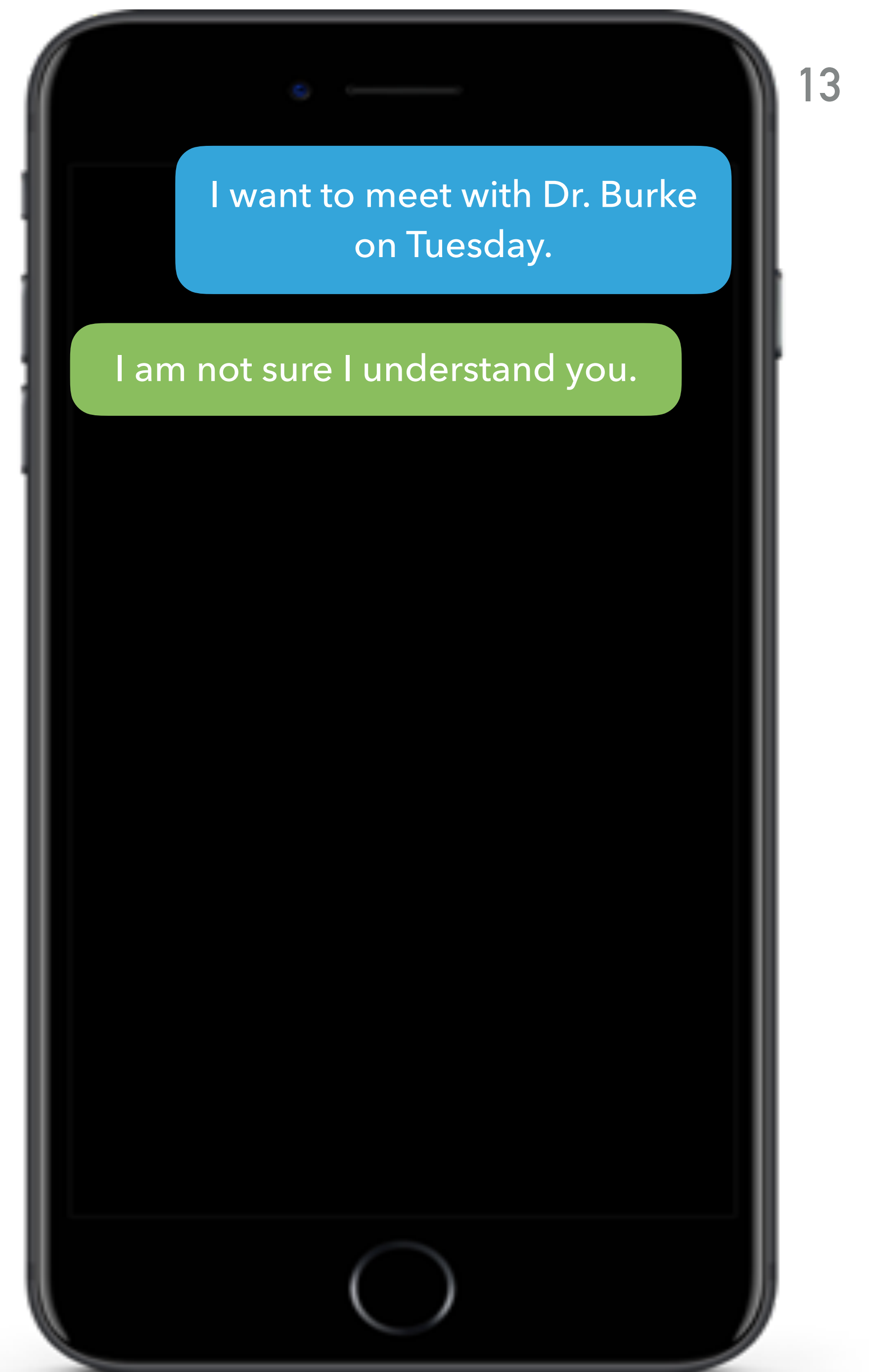
Every smart developer

FIXED DECISION TREES

Majority of chatbots today force users to navigate a decision tree built by developers. There is no way for a user to say things concerning previous steps or change his intent midway through the conversation.
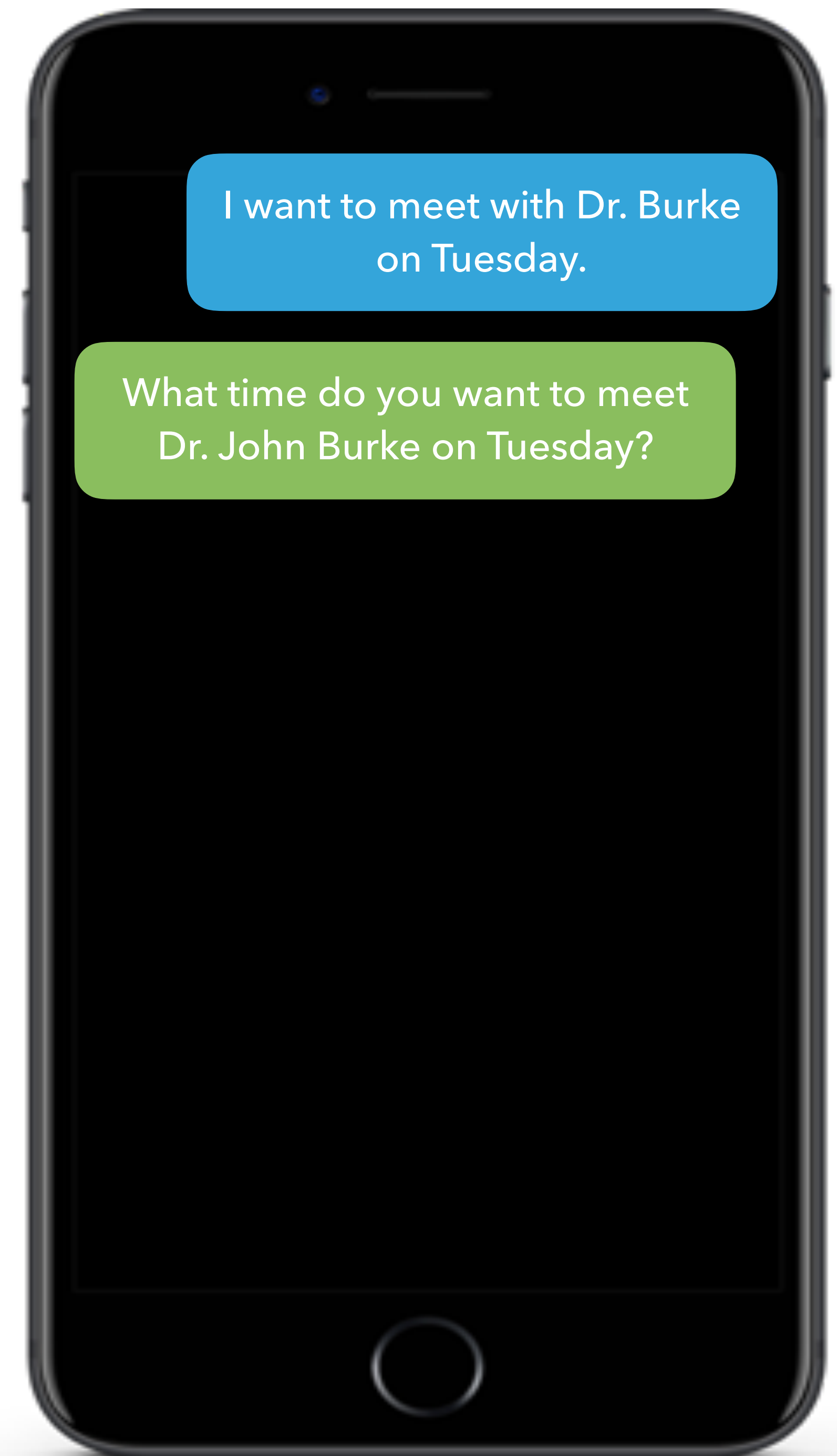
NO UNDERSTANDING OF BUSINESS ENTITIES

Your chatbot should be able to understand **common entities** such as: Doctors, Offices, or Categories using natural language and return the object equivalent for these from your own business systems.
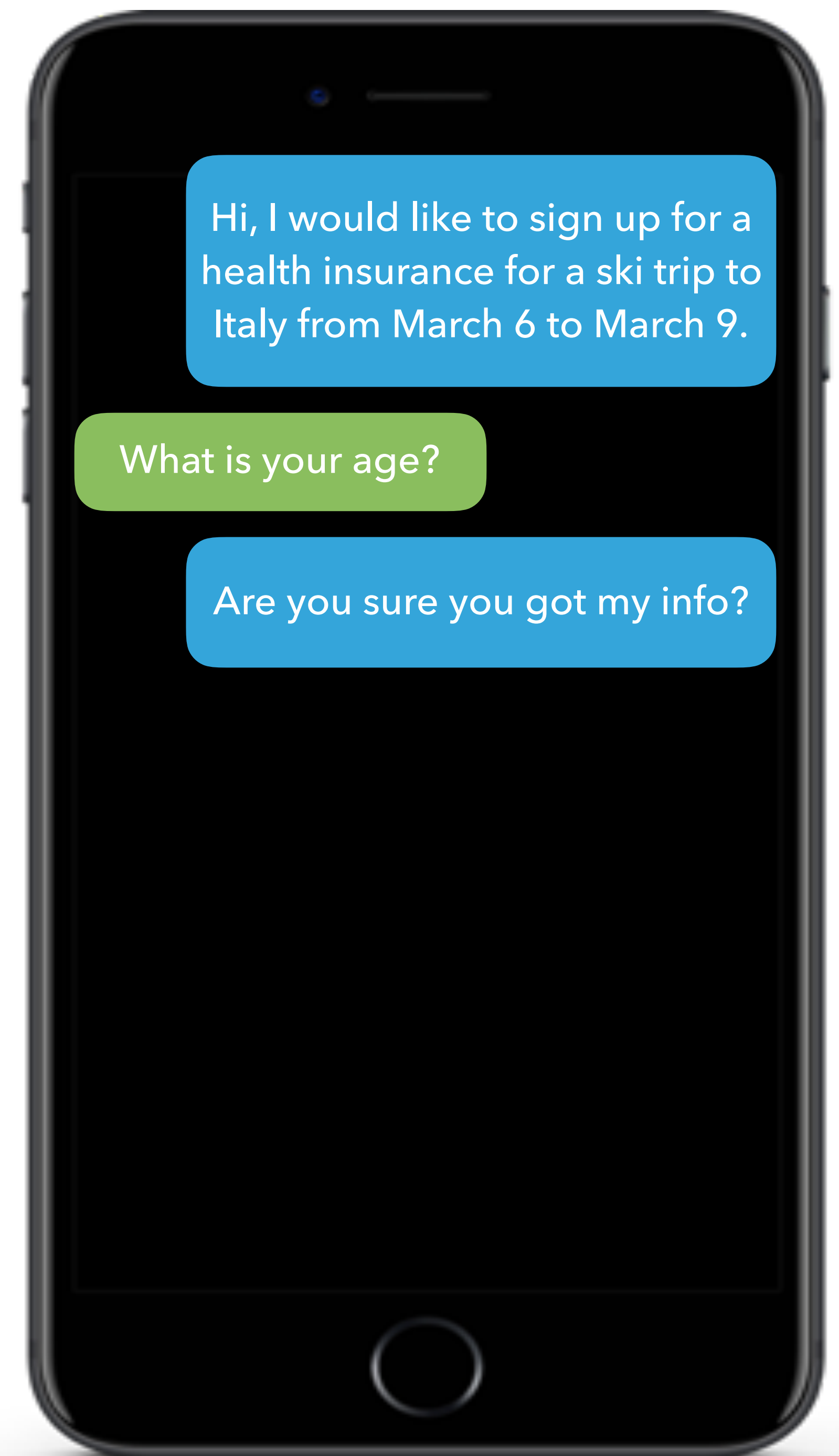
~~NO~~ UNDERSTANDING OF BUSINESS ENTITIES

```
{
  "Understanding": {
    "Doctor": [
      {
        "value": "Dr. John Burke",
        "confidence": 1,
        "metadata": {
          "FirstName": "John",
          "LastName": "Burke",
          "Title": "Dr.",
          "ExternalId": "24806",
          "Language": "en",
          "Id": "1b9a4550-5a53-11e7-92af-afc84d85b2b5"
        }
      }
    ],
    "Conversation": [
      {
        "value": "bookDoctor",
        "confidence": 0.7785863627142946,
        "_entity": "Conversation"
      }
    ],
    "Date": [
      {
        "value": "2018.04.27"
      }
    ]
  }
}
```

I want to meet with Dr. Burke on Tuesday.

What time do you want to meet Dr. John Burke on Tuesday?

LACK OF PROPER ACKNOWLEDGMENTS

Ensure that your chatbot communicates back the information it has identified during a conversation. Don't leave your users to guess where they are in the process.

Hi, I would like to sign up for a health insurance for a ski trip to Italy from March 6 to March 9.

What is your age?

Are you sure you got my info?
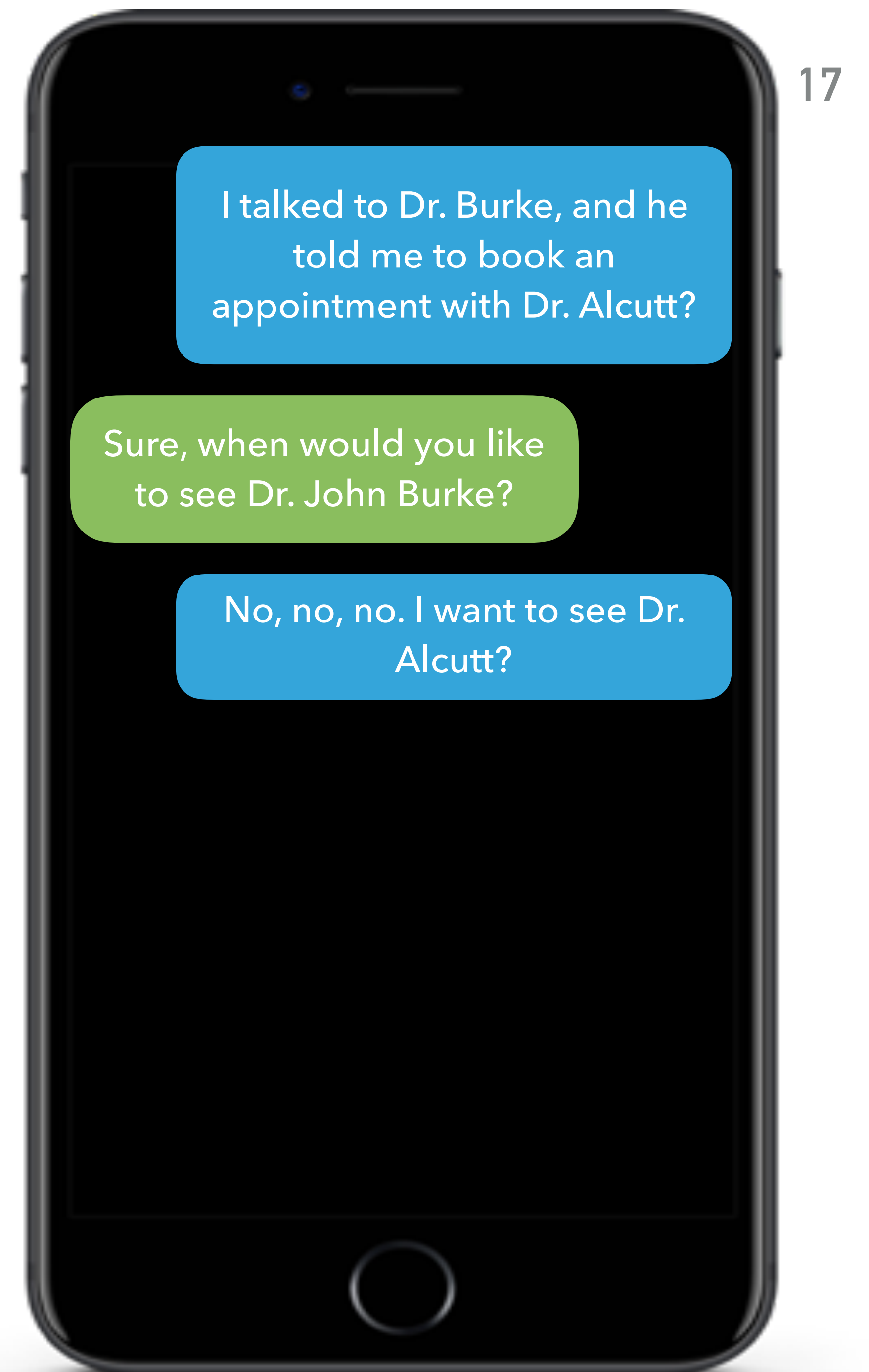
~~LACK OF~~ PROPER ACKNOWLEDGMENTS

Ensure that your chatbot communicates back the information it has identified during a conversation. Don't leave your users to guess where they are in the process.

Hi, I would like to sign up for a health insurance for a ski trip to Italy from March 6 to March 9.

A trip to Italy is always a good idea.

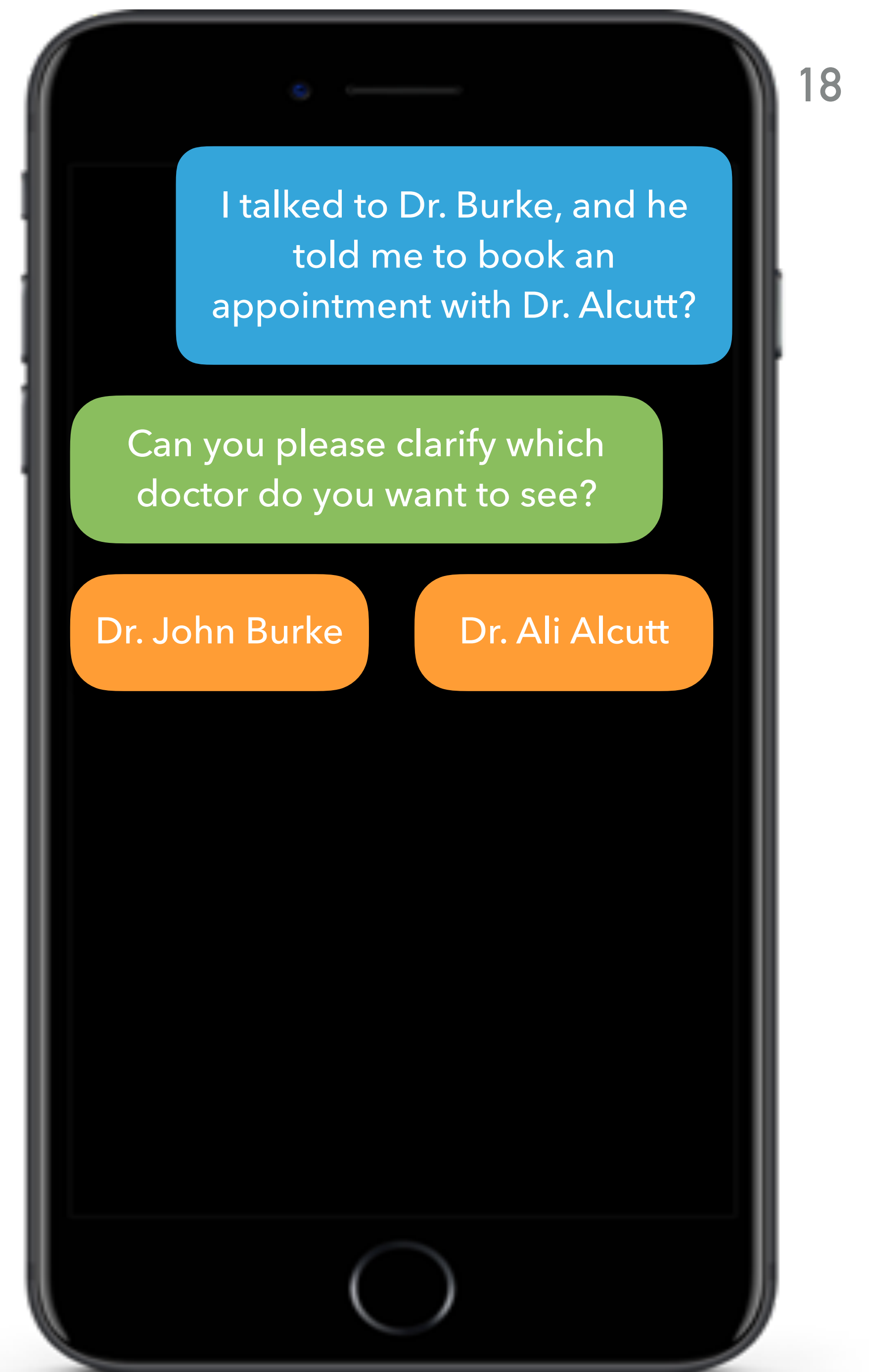Let's find you an insurance from 2018.03.06 to 2018.03.09.

What is your age?

DEALING WITH AMBIGUITIES

Ambiguities are common in everyday language and you have to be prepared to deal with them when building chatbots.

DEALING WITH AMBIGUITIES

Ambiguities are common in everyday language and you have to be prepared to deal with them when building chatbots.

I talked to Dr. Burke, and he told me to book an appointment with Dr. Alcutt?

Can you please clarify which doctor do you want to see?
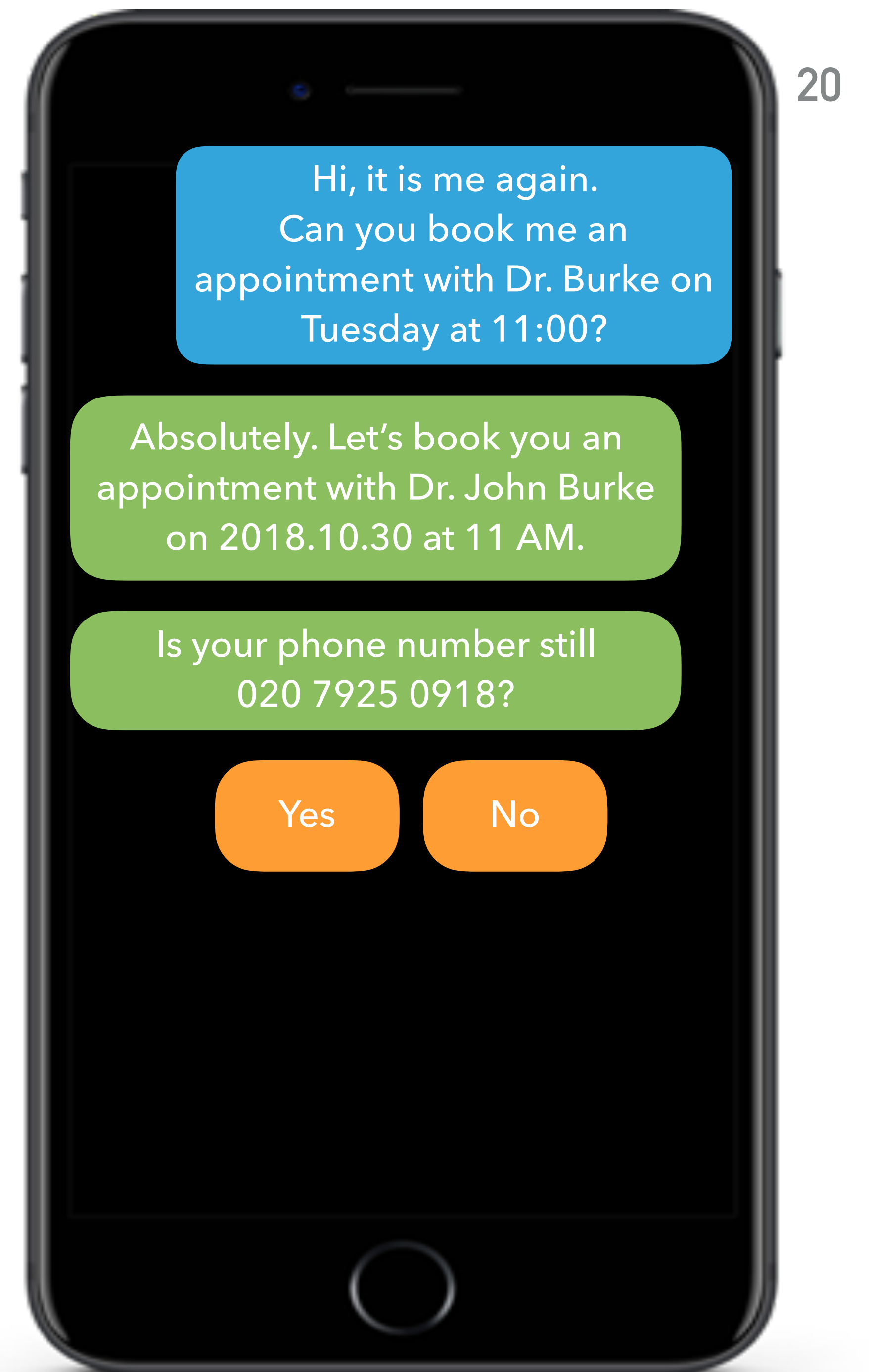
Dr. John Burke

Dr. Ali Alcutt

NO LONG-TERM MEMORY

Chatbots are most suitable to automate repetitive business processes for users.
The expectation is that a chatbot learns your preferences over time.

Hi, it is me again.
Can you book me an appointment with Dr. Burke on Tuesday at 11:00?

Absolutely. Let's book you an appointment with Dr. John Burke on 2018.10.30 at 11 AM.

What is your phone number?

Don't you have it already?

~~NO~~ LONG-TERM MEMORY

Chatbots are most suitable to automate repetitive business processes for users.

The expectation is that a chatbot learns your preferences over time.

Hi, it is me again.
Can you book me an appointment with Dr. Burke on Tuesday at 11:00?

Absolutely. Let's book you an appointment with Dr. John Burke on 2018.10.30 at 11 AM.

Is your phone number still 020 7925 0918?
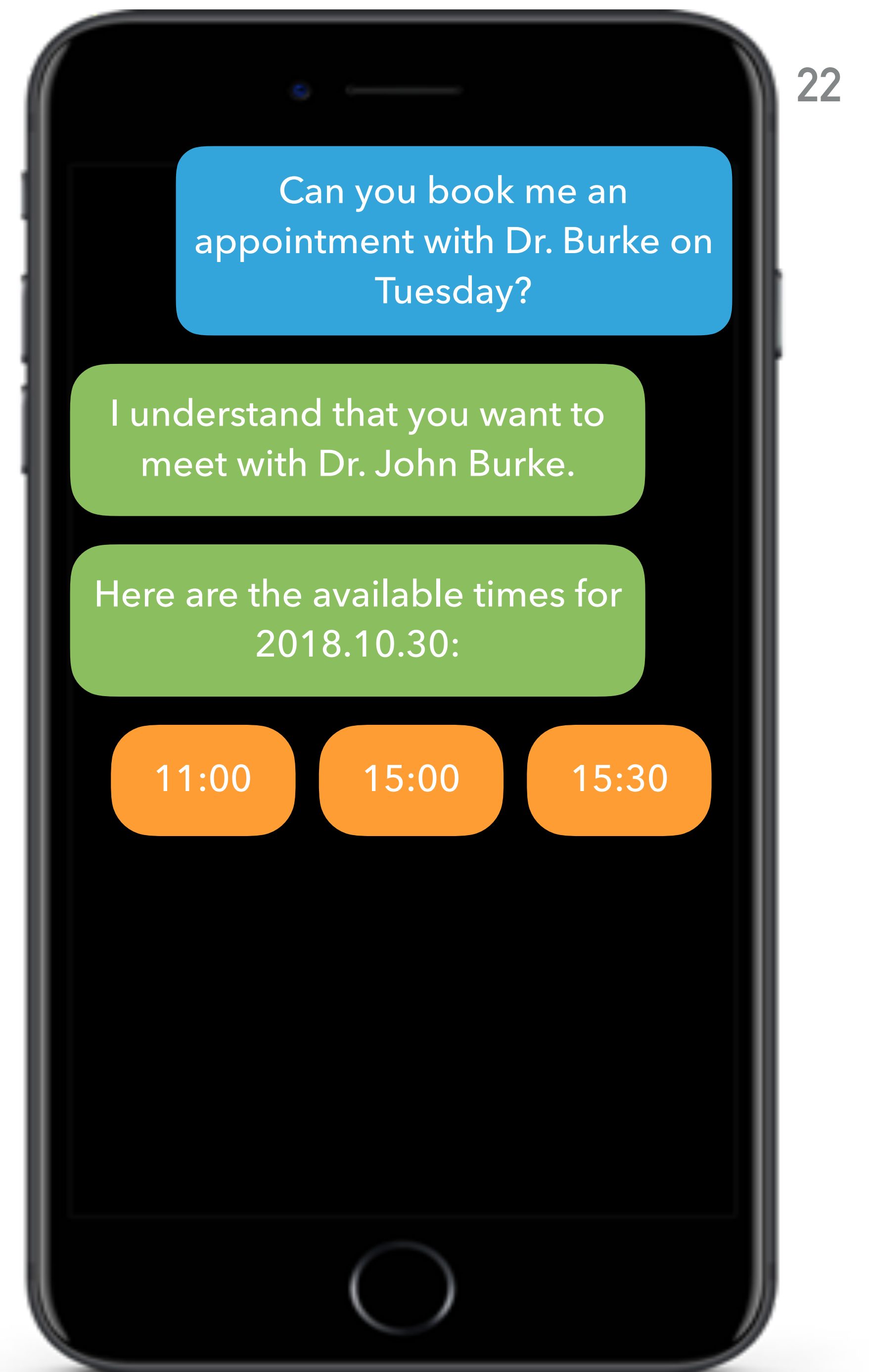
Yes   No

USE OF CONVERSATIONAL UI

It's always best to enable users to quickly select an option when there are a few predefined options. If you are building your own webchat or mobile chat, you have to incorporate these Conversational UI on your own.

Can you book me an appointment with Dr. Burke on Tuesday?

I understand that you want to meet with Dr. John Burke.

What time?

12:00

Sorry Dr. John Burke is busy at 12:00.

What time?

This is going to take a while.

Sorry, didn't get that.

USE OF CONVERSATIONAL UI

It's always best to enable users to quickly select an option when there are a few predefined options. If you are building your own webchat or mobile chat, you have to incorporate these Conversational UI on your own.
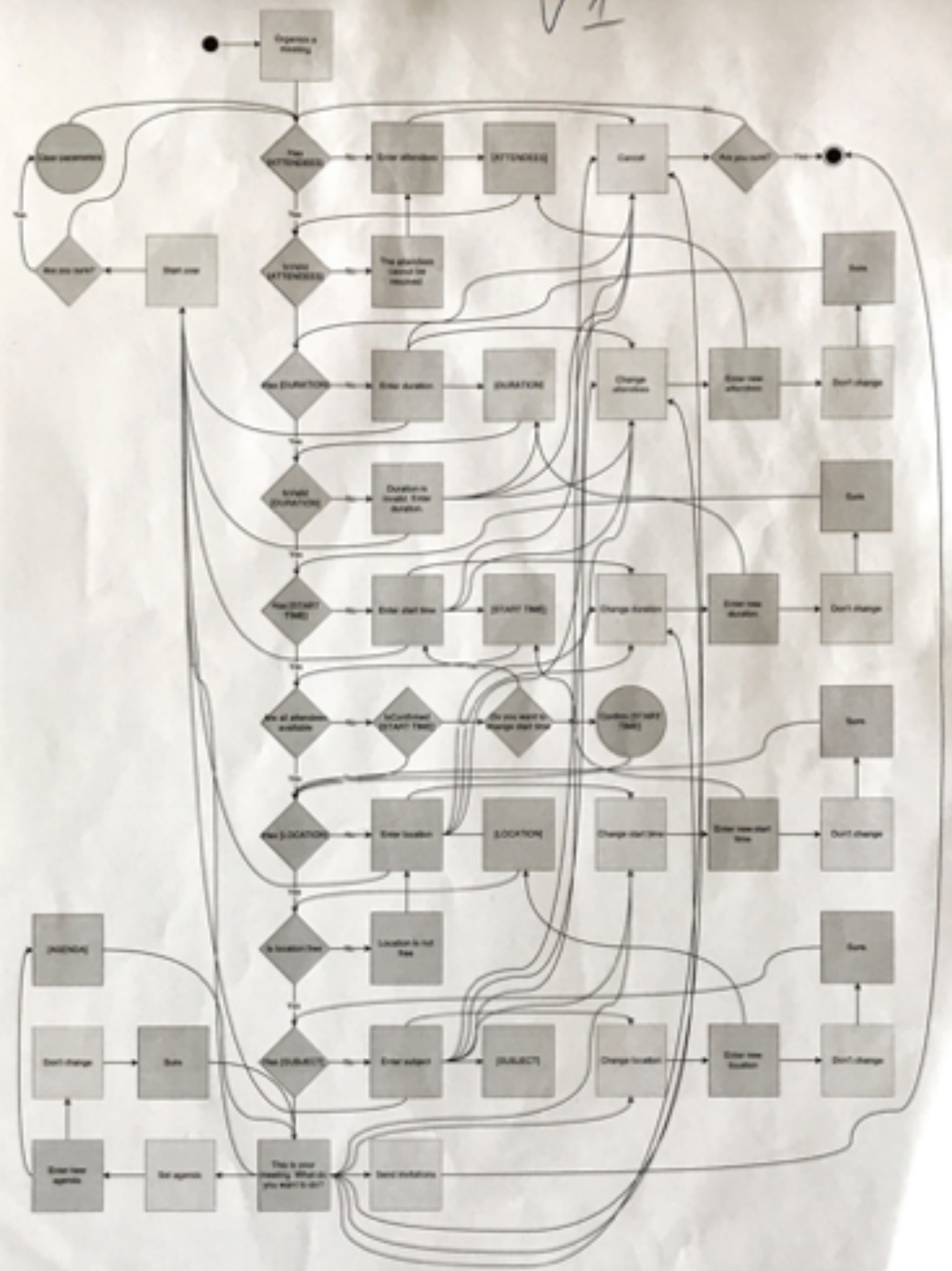
Can you book me an appointment with Dr. Burke on Tuesday?

I understand that you want to meet with Dr. John Burke.

Here are the available times for 2018.10.30:

11:00   15:00   15:30

Easy, right?

Sebastianobot

V1

DEMO

DEMO

What do you think?

@sebawita

Coool

WHERE TO GO NEXT?

‣ Website: www.progress.com/kinvey/chat

‣ Tutorial: www.progress.com/kinvey/chat/chatbot-tutorial

‣ Developers playground: bots.kinvey.com

‣ Docs: docs.nativechat.com

‣ Case Study: www.progress.com/customers/doctor-shterev-hospital

‣ Demo project: github.com/sebawita/master-chef

📸 Take picture **now** 📸

NO ELECTRIC SHEEP WERE HURT IN THE MAKING OF THIS PRESENTATION

Q&A

@SEBAWITA

Thank You