From Students…
…to Professionals

MICHIGAN STATE UNIVERSITY

Alpha Presentation
Patient Training Tool

The Capstone Experience
Team Spectrum Health

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Spring 2019
Project Overview

• User lists their symptoms to Google Home speaker
• Google Home app explains potential condition to user
• App recommends a Spectrum Health service
• User informs app which service they utilize
• Service weights are adjusted for future recommendations
System Architecture

Diagram showing the integration between Google Home, Dialogflow, JavaScript, Azure, and SQL database.
Allergies

Simulator

Okay, getting the test version of Patient Training Tool. Hello, I am the Patient Training Tool. Could you tell me some symptoms or a condition that you're experiencing?

I have hives

It sounds like you're experiencing the following condition: Allergies. Allergies occur when your immune system reacts to a foreign substance. Based on this condition, you should visit the urgent care.

I would rather use MedNow

I will take that into account. I hope you feel better soon. The new max weight is Urgent Care.

Thank you

Feel better soon

Patient Training Tool left the conversation

Suggested input

Talk to Patient Training Tool

Input

Try typing or saying “Talk to Patient Training Tool”
Upper Respiratory Infection

Simulator

Talk to Patient Training Tool

Okay. Getting the test version of Patient Training Tool. Hello, I am the Patient Training Tool. Could you tell me some symptoms or a condition that you’re experiencing?

I have nasal congestion

It sounds like you’re experiencing the following condition: upper respiratory infections. An upper respiratory infection is a common viral infection that affects the nose, throat, and airways. Based on this condition you should visit the urgent care.

Ok, I will go to urgent care

I will take that into account. I hope you feel better soon. The new max weight is Urgent Care

Thank you

Feel better soon

'Patient Training Tool' left the conversation

Suggested input

Talk to Patient Training Tool

Input

Try typing or saying “Talk to Patient Training Tool”
Sudden Dizziness

Okay. Getting the test version of Patient Training Tool Hello, I am the Patient Training Tool. Could you tell me some symptoms or a condition that you’re experiencing?

I have vertigo

It sounds like you’re experiencing the following condition: sudden dizziness. Common causes of dizziness include a migraine, medications, and alcohol. It can also be caused by a problem in the inner ear, where balance is regulated. Dizziness is often a result of vertigo as well. The most common cause of vertigo and vertigo-related dizziness is benign positional vertigo (BPV). Based on this condition you should visit the emergency room.

It’s not quite bad enough for that. I think I’ll go to the urgent care instead

I will take that into account. I hope you feel better soon. The new max weight is Emergency Room.

Thank you

Feel better soon

Patient Training Tool left the conversation

Suggested input

Talk to Patient Training Tool

Input

Try typing or saying “Talk to Patient Training Tool.”
Severe Asthma Attack

It sounds like you're experiencing the following condition: severe asthma attacks. During an asthma attack, your airways become swollen and inflamed. The muscles around the airways contract and extra mucus is produced, causing your breathing (bronchial) tubes to narrow. During an attack, you may cough, wheeze and have trouble breathing. An asthma attack may be minor, treatable with prompt home treatment, or it may be more serious. A severe asthma attack that doesn't improve with home treatment can become a life-threatening emergency. Based on this condition you should visit the emergency room.
What’s left to do?

• Add support for multiple symptoms
• Provide directions to recommended service
• Choose the best matching condition
• Provide support for Amazon Alexa
• Create separate intents for condition description and service recommendation
• Create more training phrases
Questions?