MICHIGAN STATE UNIVERSITY Beta Presentation Symptom Checker

### The Capstone Experience

### **Team Spectrum Health**

Jose Hernandez Chris McGrath Morgan Muyskens Josh Miles Silas Brumwell

Department of Computer Science and Engineering Michigan State University

Fall 2017



From Students... ...to Professionals

### **Project Overview**

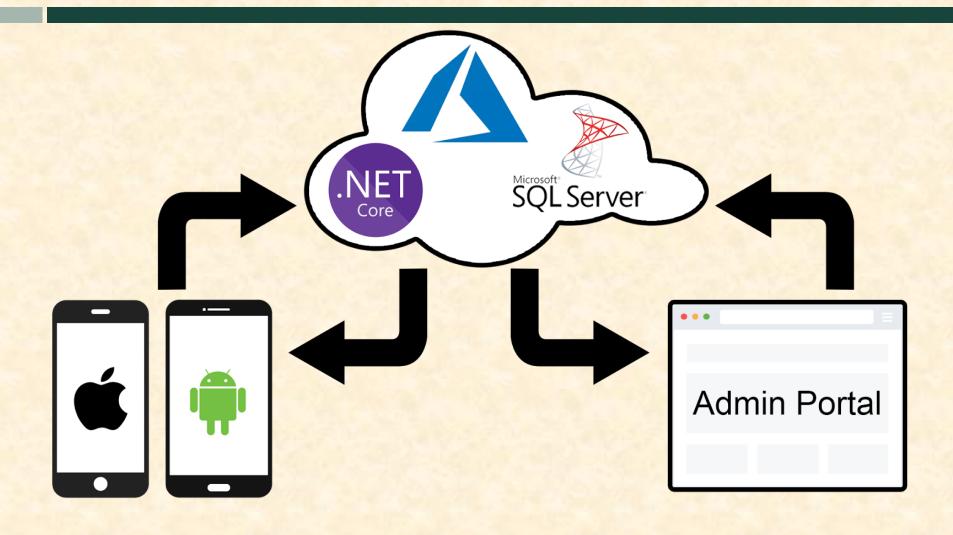
- Symptom Checker
  - Users describe how they are feeling
    - o "I have been coughing a lot lately."
  - User input is matched with chief complaints or synonyms of those complaints and is presented a ranked list of conditions to pick from
  - When a user taps on a condition that sounds similar to what they're experiencing, they are recommended a service
    - E.g. MedNow, Emergency Department, Urgent Care

### **Project Overview**

### Home screen

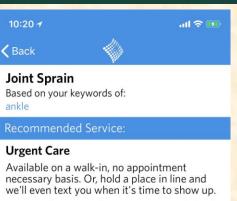
- Provides quick access to frequently used features
- Allows users to quickly learn more about Spectrum Health
- Urgent Care appointment scheduling
  - Enables users to schedule appointments once they're recommended an Urgent Care visit
- Pay My Bill, Careers, Contact Us
  - Users can quickly access the web portals for these Spectrum Health services

# System Architecture



## **iOS** Application

10:20 7	all 🗢 💽	
Q My ankle is swollen	8	
Here are some relevant condition Joint Sprain Based on your symptoms of: ankle	ons:	
Q Image: Constraint of the	••• More	



Urgent Care is not for emergencies. Dial 911 or go to the nearest ER for sudden symptoms

#### Nearest Location:

#### Alpine Emergency

Address: 100 Michigan St NE Grand Rapids, MI 49503

Phone:

616-391-6220

Hours: M-F: 8:00am - 8:00pm

Hold a spot in line

#### Team < Company Name > Beta Presentation



The Capstone Experience

# **Android Application**

The Capstone Experience

100	● ① ③ ▼ ▲ 74% ¥ 10:21		〕 ⓒ ▼⊿ 74% 2 10:21
	≡ Home		
		SPECTRUM HEALTH	
	SPECTRUM HEALTH	A Home	
	Spectrum Health offers a full continuum of care through Spectrum Health Hospital Group, Spectrum Health Medical Group and Priority Health.	<b>Q</b> Symptom Checker	of care through rum Health
	Find more information at: http://www.spectrumhealth.org	Education Checker	100
	Quick links	Classes and Events	
		Locations	
	Symptom Locations Find a Doctor Contact Us Checker	<b>Q</b> Find a Doctor	tor Contact Us
	Social media	Pay My Bill	
		Contact Us	
	Facebook Twitter Instagram Pinterest	Careers	m Pinterest

## **Android Application**

#### 🕕 🛈 💙 🖌 74% 🖬 10:22

 $\bigcirc$ 

≡ Symptom Checker

Q My ankle is swollen

#### Here are some relevant conditions:

Joint Sprain Based on your keywords of: ankle

### Recommended Service

🕕 🛈 🔽 🖌 75% 💈 10:38

Joint Sprain Synonyms: sprain

←

#### Recommended Service:

#### Urgent Care

Available on a walk-in, no appointment necessary basis. Or, hold a place in line and we'll even text you when it's time to show up.

#### Nearest Location:

#### Alpine Urgent Care

Address 2332 Alpine Ave NW Grand Rapids, MI 49544

Phone 616-391-6220

Hours of Operation 08:00 am - 08:00 pm

HOLD MY SPOT IN LINE

 $\bigcirc$ 

The Capstone Experience

Team < Company Name > Beta Presentation

### **Admin Portal – View Conditions**

Diagnosis Routing Admin Home Conditions

### Conditions

#### Create New

Name	Service	Synonyms	
Allergies	MedNow	hay fever, aversion, hypersensitivity, sensitivity, susceptibility, vulnerability, allergic reaction	Edit   Delete
Back Pain	MedNow	sore back, stiff back, lower back pain	Edit   Delete
Birth Control	MedNow	the pill, contraceptive, morning after pill, estrogen, progesterone	Edit   Delete
Bites and Stings	MedNow	bug bite, bee sting, snake bite	Edit   Delete
Cardiac Arrest	Emergency Department	heart attack, bad ticker, chest pain, heartburn	Edit   Delete
Acne	MedNow	blackheads, pimples, pustules, rosacea, whiteheads, zits, pizza-face, skin inflamation	Edit   Delete
Joint Sprain	Urgent Care	sprain, strain, twisted ankle, strained wrist, sprained wrist	Edit   Delete
Alcohol Problem	Emergency Department	severe diarrhea	Edit   Delete
© 2017 - DiagnosisRouting.Admin			

## Admin Portal – Add/Edit Condition

Diagnosis Routing Admin Home Conditions
Edit Condition
Name
Allergies
Service
MedNow
Synonyms hay fever x aversion x hypersensitivity x sensitivity x susceptibility x vulnerability x allergic reaction x
Save
Back to List
© 2017 - DiagnosisRouting.Admin

### What's left to do?

- User testing
- Documentation
- Remove any/all IDE warnings
- Clean code and prepare to turn in
- Coordinate design specifications with Grand Valley State University team

### **Questions?**

