

Team H2O

CS6440 - Introduction to Health Informatics - Fall 2017
Team Final Presentation

Video URL: [YouTube](#)



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DIABETES

DIABETES IS
ON THE RISE



422 MILLION
adults have diabetes

3.7 MILLION
deaths due to diabetes
and high blood glucose

1.5 MILLION
deaths caused
by diabetes

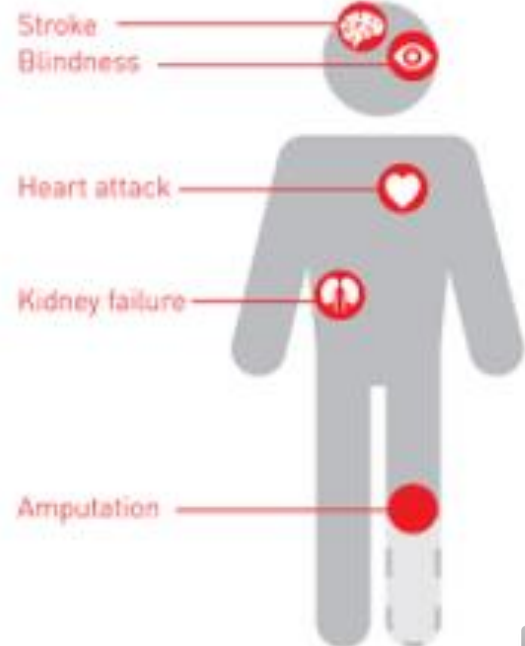


THAT'S 1 PERSON IN 11



Consequences

Diabetes can lead to complications in many parts of the body and increase the risk of dying prematurely.



Research

Needfinding:

Existing Apps



User Base:

Google Trends Data

Interest by region

Region ▼



Design Improvements:

User & Editorial Reviews Data



Clinical Effectiveness	● ● ● ● ● ● ● ●	3
Functionality	● ● ● ● ● ● ● ●	5
Usability	● ● ● ● ● ● ● ●	5



- “Data input cannot be edited after saving and requires deletion and re-entering”
- “Data must be emailed separately with no direct in-app support”
- “Although the app allows adding other conditions, they can't be tracked”



Our Project Goals

- ☐ Allow food entry tracking
- ☐ Allow health entry tracking
- ☐ See status over time
- ☐ Keep user informed through alerts
- ☐ Easy to use





Nutrient Health Analysis

Email

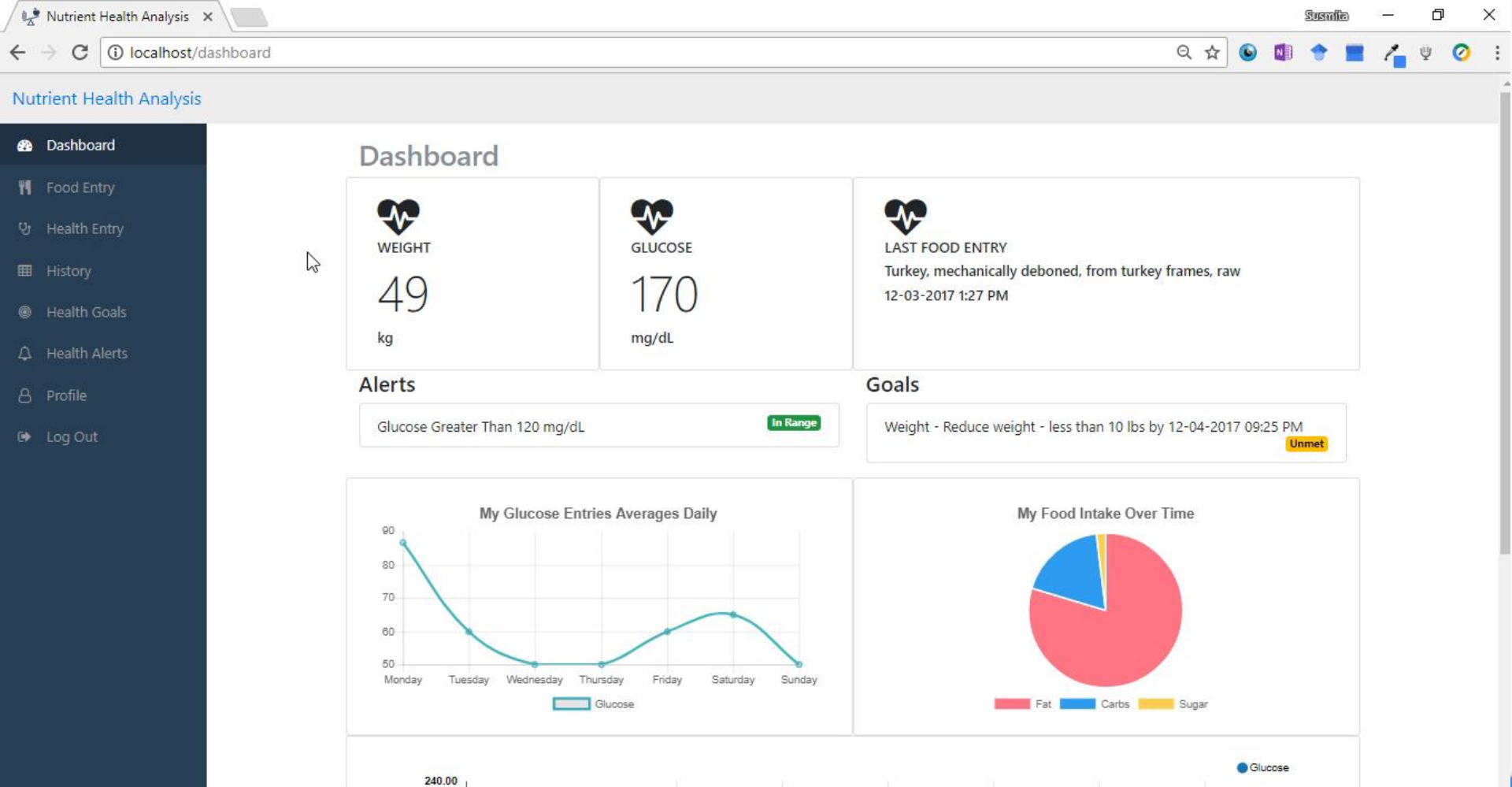
Password

Login

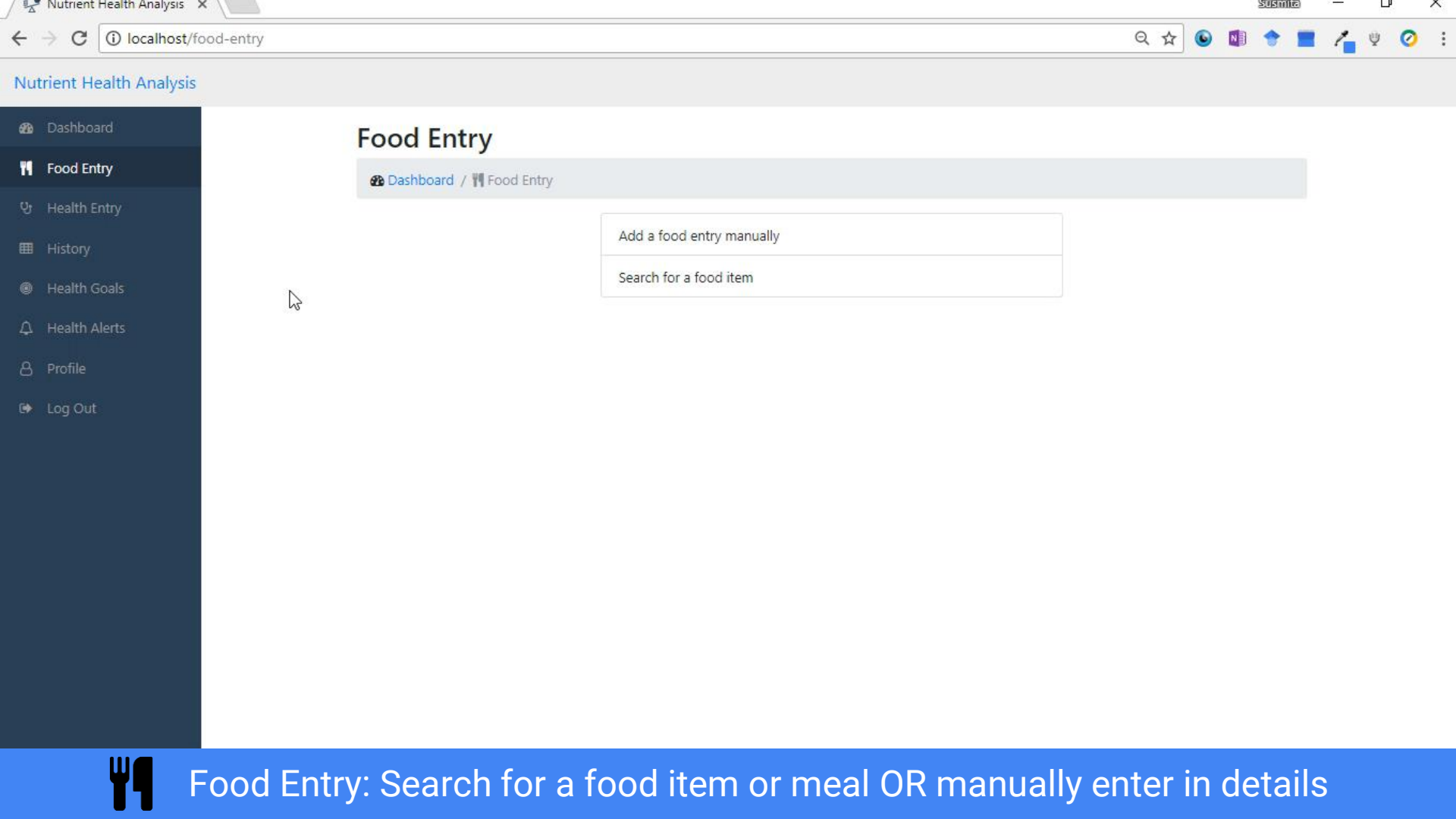
[Don't have an account? Register!](#)



Login and Registration: Create a new account and log into account



Dashboard: View latest tracking information and see progress and notifications



Food Entry: Search for a food item or meal OR manually enter in details

Nutrient Health Analysis

localhost/health-entry

Nutrient Health Analysis

- Dashboard
- Food Entry
- Health Entry**
- History
- Health Goals
- Health Alerts
- Profile
- Log Out

Health Entry

[Dashboard](#) / [Health Entry](#)

Entry Type
-- Select --

Value Units
 -- Select --

Entry Date

Notes

[Add Entry](#)

 Health Value Entry: Select to track glucose or weight and enter in details

Nutrient Health Analysis x

localhost/history

Nutrient Health Analysis

- Dashboard
- Food Entry
- Health Entry
- History**
- Health Goals
- Health Alerts
- Profile
- Log Out

History

Dashboard / History

Global Filter

My Food History

	Date	Name
🕒	11-27-2017 9:25 PM	ESSENTIAL EVERYDAY, CHUNKY SOUP, GUMBO, GRILLED CHICKEN & SAUSAGE, MADE WITH LEAN CHICKEN MEAT, UPC: 041303017067
🕒	12-03-2017 9:09 PM	Turkey, mechanically deboned, from turkey frames, raw
🕒	12-03-2017 1:27 PM	Turkey, mechanically deboned, from turkey frames, raw

1

Global Filter

My Health History

Date	Type	Value	Units	Notes
11-26-2017 9:28 AM	Glucose	90	mg/dL	
11-26-2017 9:32 AM	Glucose	180	mg/dL	
11-26-2017 9:35 AM	Glucose	100	mg/dL	
11-27-2017 9:20 AM	Glucose	120	mg/dL	Starting glucose
11-27-2017 9:19 PM	Weight	49.94	kg	Starting weight



History: View all entered food and health value entries

Nutrient Health Analysis x

localhost/health-goals

Nutrient Health Analysis

- Dashboard
- Food Entry
- Health Entry
- History
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Health Goals

Dashboard / Health Goals

Add a Goal

Goal Name

Goal Entry Type

-- Select --

Value

Units

-- Select --

Goal Range Type

-- Select --

Goal Time Period

-- Select --

Goal Target Date

Save Goal

Goals

Weight - Reduce weight - less than 10 lbs by 12-04-2017 09:25 PM

Unmet



Health Goals: Select a goal type, enter in details, view status

Nutrient Health Analysis x

localhost/profile

Nutrient Health Analysis

- Dashboard
- Food Entry
- Health Entry
- History
- Health Goals
- Health Alerts
- Profile**
- Log Out

Profile

[Dashboard](#) / [Profile](#)

Profile

First Name

Last Name

Email

Password

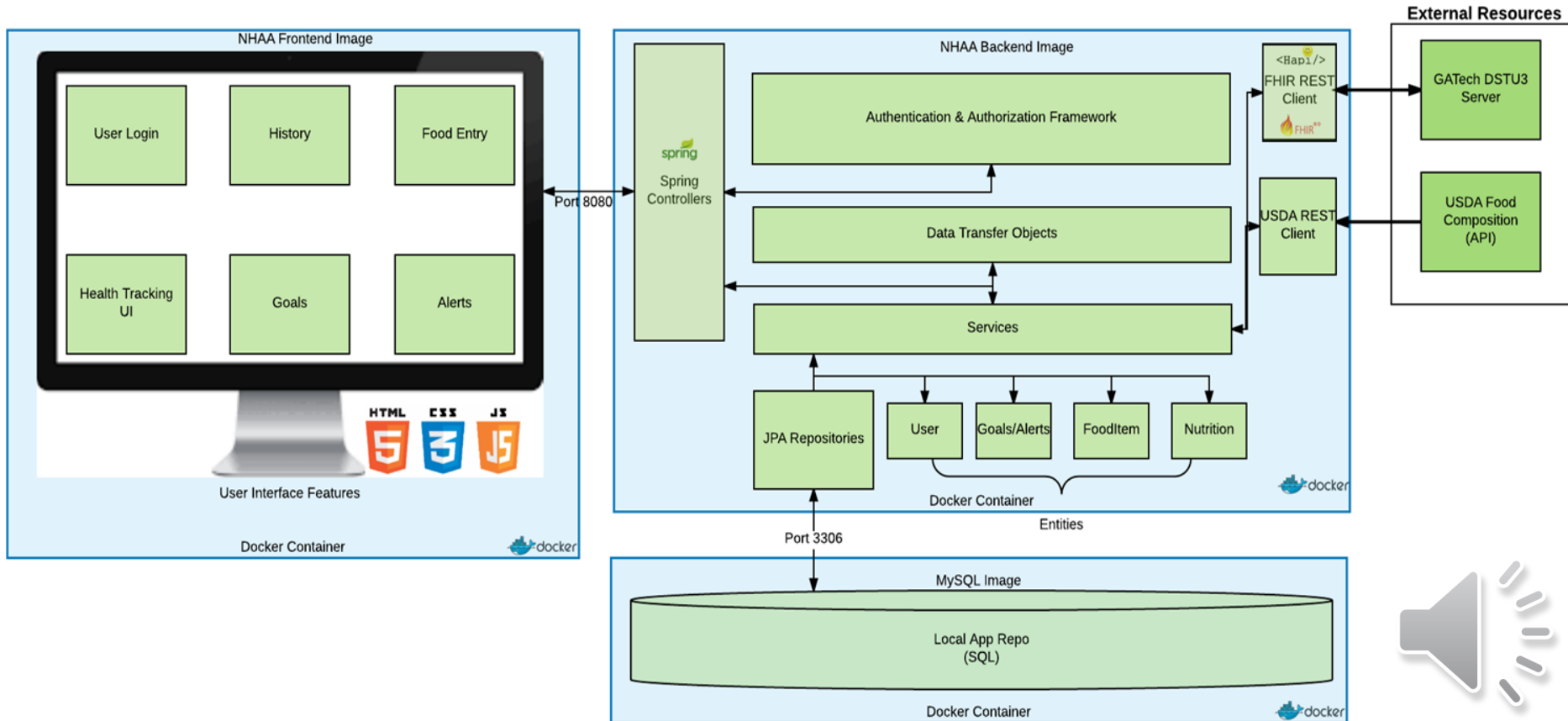
Patient Id

[Save Profile](#)

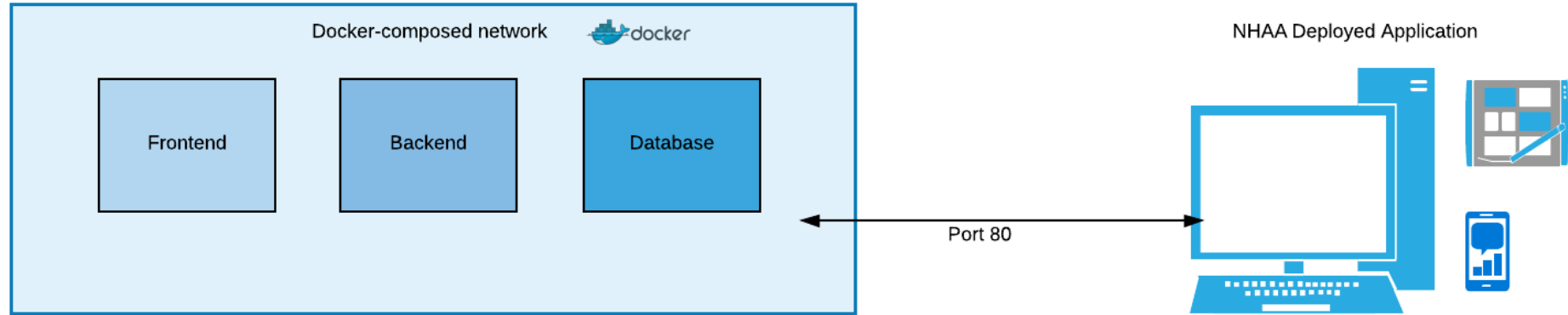


View/update local user account details, FHIR patient id

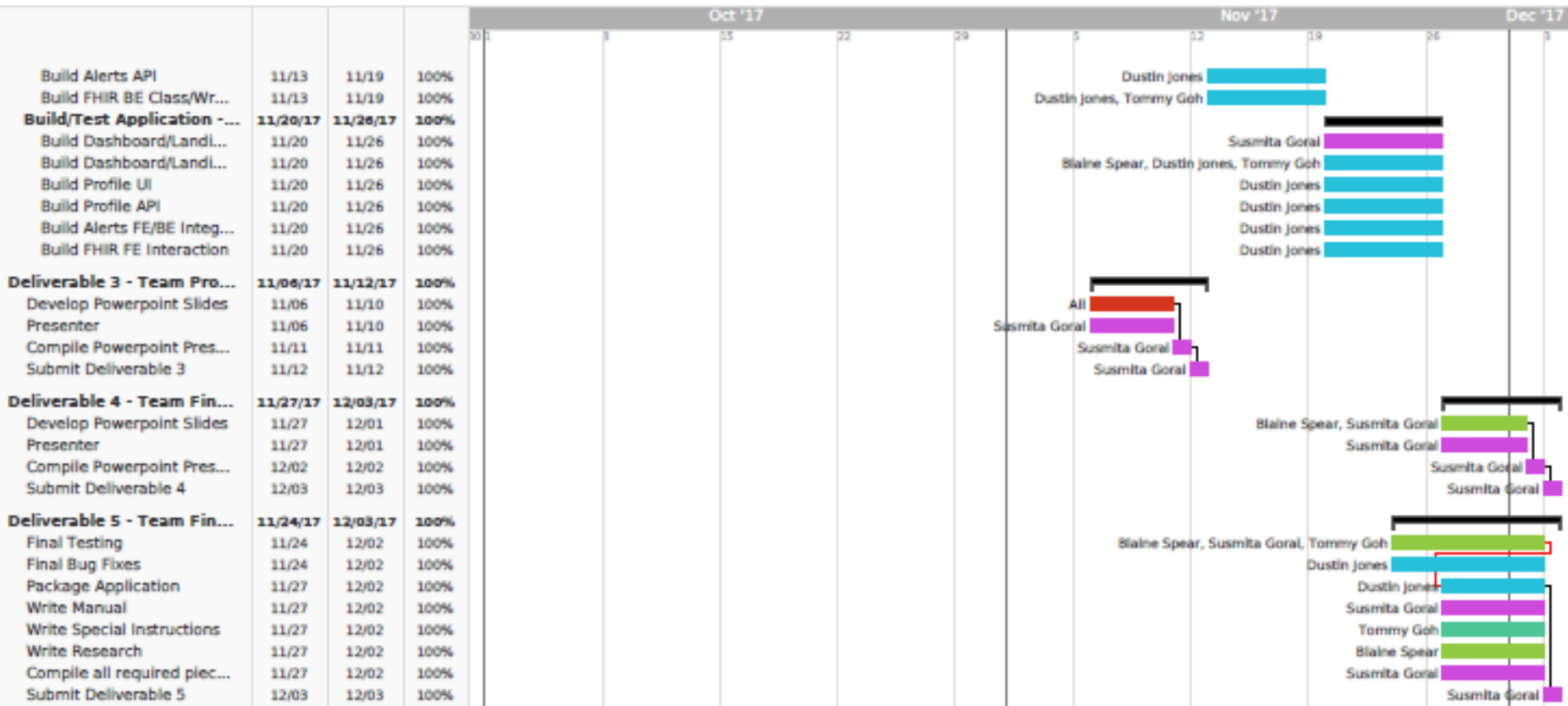
Our Current Status



Our Deployment Strategy



Our Final Gantt Chart Update



Did we meet our goals?

- ✓ Allow food entry tracking
- ✓ Allow health entry tracking
- ✓ See status over time
- ✓ Keep user informed through alerts
- ✓ Easy to use



Future Improvements

- ★ Recommendations
- ★ Machine Learning
- ★ Kid friendly version
- ★ Exercise levels
- ★ Other health values
- ★ oAuth



Our Team Contributions



- PM
- FE Dev
- Test



- FE Dev
- BE Dev
- PM



- BE Dev
- Research
- Test



- BE Dev
- Test
- Docker

