INDIVIDUAL HEALTH RECORD (IHR)

GEORGIA TECH CS6440 IHI

TEAM AWESOME 2018

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CREATING THE NEXT®

Agenda

1. Why is an IHR Needed?
2. Project Implementation
3. Timeline

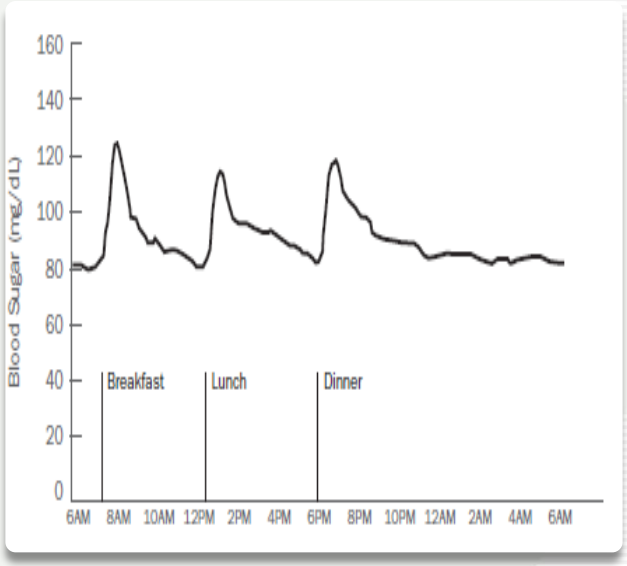
Presentation Link:
https://www.youtube.com/watch?v=RK906atQAuo&feature=youtu.be

Why is an IHR needed?

What are some of the benefits of an IHR?

- REDUCED PATIENT BURDEN
- REDUCED PROVIDER BURDEN
- STREAMLINED INFORMATION FLOW
- BETTER DATA TRACKING -> LEADS TO BETTER INSIGHTS AND DECISION MAKING
  - E.G. DIABETIC'S GLUCOSE LEVELS AFTER MEALS
- SINGLE POINT OF ACCESS FOR MONITORING INFORMATION

Patients need access their health data outside doctors' office



Diabetic patient need to track the glucose level thorough day

Pills from different doctors, they might INTERACT each other

Health data in different places: Better usage when combined

What are some of the problems with IHR?

- CURRENT SYSTEMS SUCH AS BLUEBUTTON 2.0 ARE USED FOR MEDICAID ONLY
- MEDICAL PERSONNEL MAY LEAK INFORMATION
- MISUSE OF ACCESS
- OUTSIDE INTRUSION

Project Implementation

Project Introduction

Our focus will be pulling individual/ personal health data from different health care providers.

With that data, UHC and our team has a vision to create a more personalized experience.

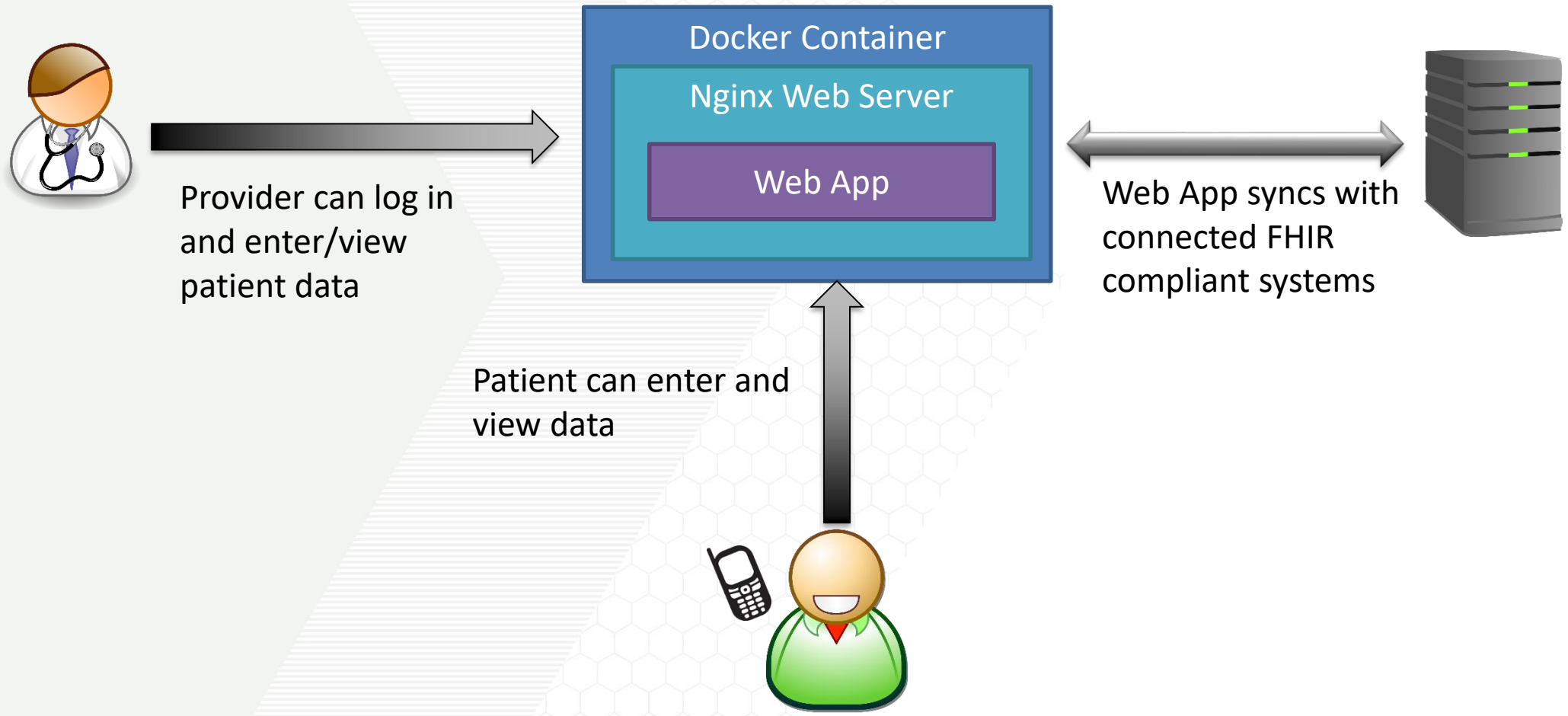
The task includes analyzing huge and complicated datasets and translate/ present it in a more user friendly manner.

For example, having blood pressure readings presented in a web app to remind our client to take medicine, or providing high/low reading which will be very easy for the user to understand.

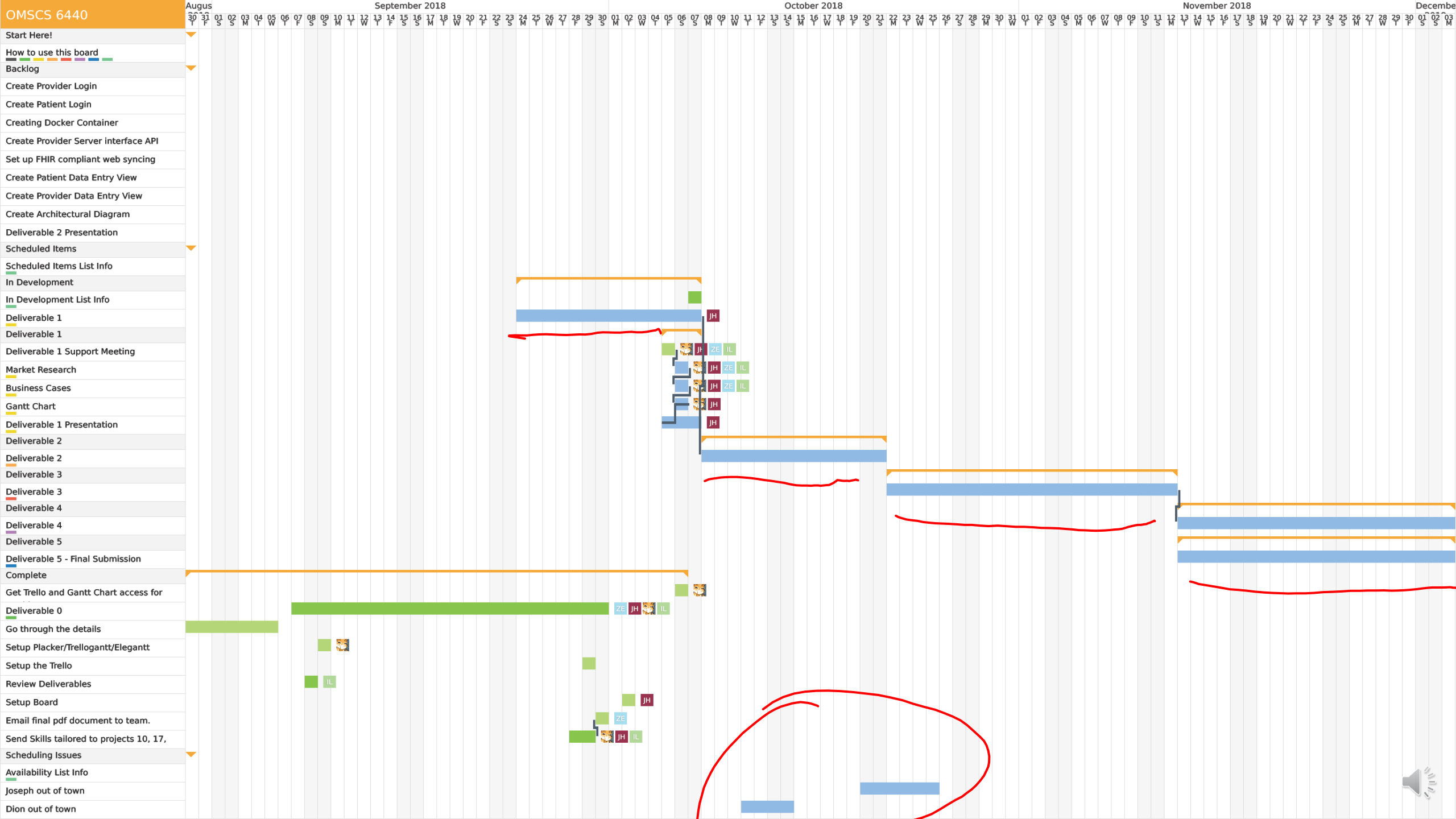
Implementation Details

- Creating Application as a Web App
  - Mobile Friendly
  - Simple
  - Implemented in Docker with embedded Nginx for portability and easy deployment
- Will be utilizing following modern library to accomplish our task:
  - Typescript - to keep HTML/ Javascript strongly typed and prevent namespace overwrite.
  - AngularJS/ React - Library to keep data presentation simple and speed up the GUI and data analysis development time.
  - HTML5/Javascrip - Will target only ECMAS6 or above standard to support modern day browser.
  - Boostrap - Library to make responsive browser look and feel for all platform/ devices.
  - NodeJS - Backend support such as data storing/retrieve mechanism.
  - Nginx Server - Proven better server than APACHE.
  - MongoDB/ MySQL - Database for handling read/ write of personal data.
  - LinuxOS - Discuss with team on this one for docker deployment.
  - Docker - Will be used to support different platform utilizing docker containerization.
  - Linter - linter plugins such as eslint-plugin-security will be helpful if data security became a concern with data we retrieved from provider.
- Security
  - System log-in will be handled via Google, Microsoft, and/or Facebook OAuth.

High Level Design



Project Timeline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How to use this board
Backlog
Create Provider Login
Create Patient Login
Creating Docker Container
Create Provider Server interface API
Set up FHIR compliant web syncing
Create Patient Data Entry View
Create Provider Data Entry View
Create Architectural Diagram
Deliverable 2 Presentation
Scheduled Items
Scheduled Items List Info
In Development
In Development List Info
Deliverable 1
Deliverable 1
Deliverable 1 Support Meeting
Market Research
Business Cases
Gantt Chart
Deliverable 1 Presentation
Deliverable 2
Deliverable 2
Deliverable 3
Deliverable 3
Deliverable 4
Deliverable 4
Deliverable 5
Deliverable 5 - Final Submission
Complete
Get Trello and Gantt Chart access for
Deliverable 0
Go through the details
Setup Placker/Trellogantt/Elegantt
Setup the Trello
Review Deliverables
Setup Board
Email final pdf document to team.
Send Skills tailored to projects 10, 17,
Scheduling Issues
Availability List Info
Joseph out of town
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