



### Look at all you have learned!

### The Browser

- HTML
- CSS
- JavaScript
- jQuery
- Bootstrap

#### **API Interaction**

- APIs
- JSON
- AJAX
- Real Time Cloud Database via Firebase

### **Cutting Edge Development**

• React.js

### **Dev Tools**

- Heroku
- Git
- GitHub

#### **Databases**

- MySQL
- MongoDB

#### **Server Side**

- Templating Engines
- Sessions
- Writing tests
- Node.js
- Express.js
- Creating APIs
- MVC
- User Authentication
- ORM (Sequelize)

### **CS Fundamentals**

- Algorithms
- Data Structures

### Your Goals Re-examined

And why do you want a new career?



To pursue a dream



To escape a dead-end job



To be able to create



To follow a fascination



To attain financial stability



To obtain financial freedom

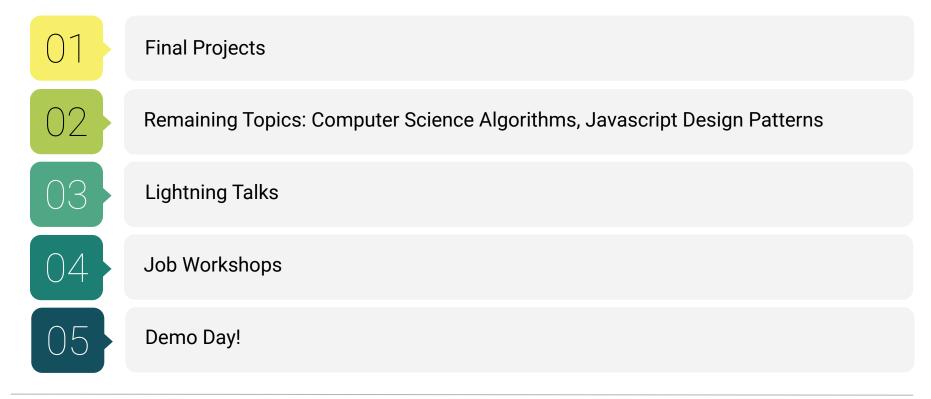


To challenge yourself



To be a **role model** to kids

### What's Left



### **Never Stop Learning!**

01

The key to hireability and relevance is to constantly be learning.

02

The field is always changing and there is never a point where you can call it quits.

03

Stick with it! It's a craft that you continue to hone with time.

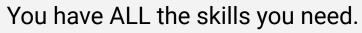


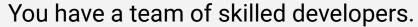
# **Your Challenge**

### Your Challenge



You have plenty of time to work on this.







No excuses. Time to prove yourself.

# **Expectations**

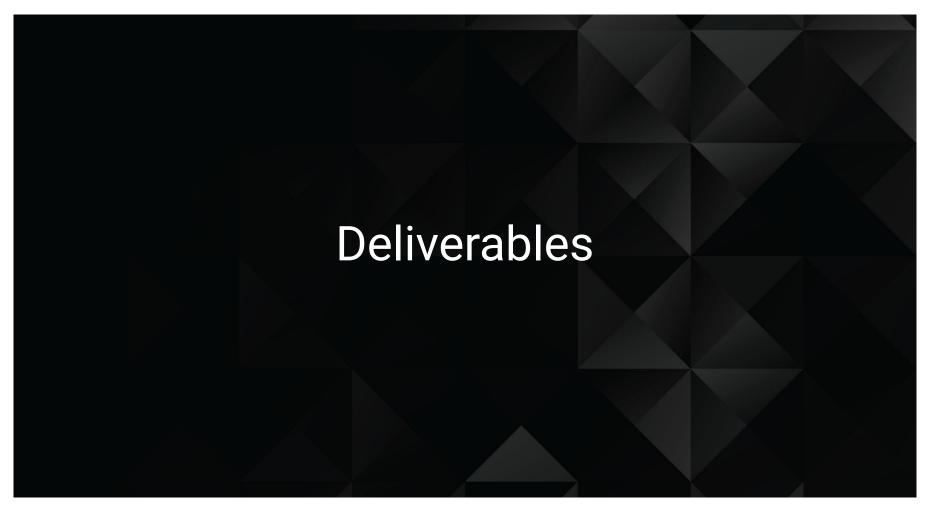
### **Expectations**

- We expect whatever you build to have utility.
- 2. We expect you to have market or real-world research that evidences your idea has REAL value to people.
- 3. We expect you to have done research on other web/mobile applications in your domain.
- 4. We expect you to put serious time and thought into this.
- 5. We expect you to report problems you are facing along the way.
- 6. We expect you to utilize some form of project management system.
- 7. We expect you to dig deep into documentation and external resources to learn what you need.

# Requirements

### **Coding Requirements**

- Must use ReactJS in some way (even if minimal)
- Must use a Node and Express Web Server
- Must be backed by a MySQL or MongoDB Database with a Sequelize or Mongoose ORM
- Must have both GET and POST routes for retrieving and adding new data
- Must be deployed using Heroku (with Data)
- Must utilize at least two libraries, packages, or technologies that we haven't discussed
- Must allow for or involve the authentication of users in some way
- Must have a polished frontend/UI
- Must have folder structure that meets MVC Paradigm
- Must meet good quality coding standards (indentation, scoping, naming)
- Must not expose sensitive API key information on the server



### **Deliverables**

Instead of homework, you will be required to submit four Project Deliverables.

01

Plan, Design, and Research

02

Ready MVP (Working App!), Mini-Presentation



Project Polish, Functionality Push, Final Plan



**Presentation Time!** 

# **Deliverables 1:**Plan, Design, and Research

# Deliverables 1: Plan, Design, and Research

### In this plan, you will include:



An overview of the intended application and WHY you feel it's valuable.

02

A set of DETAILED screen-by-screen design layouts with annotations describing all UI/UX components and all data relevant to the screen.

03

A breakdown of roles by group member.

 $\left(04\right)$ 

A schedule for completion of various tasks.

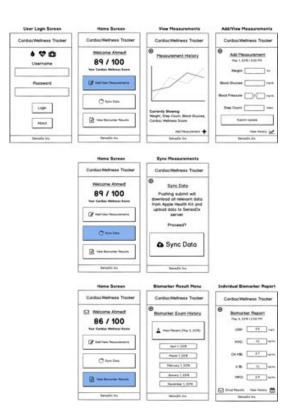
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A screenshot of your Project Management Board that shows breakdown of tasks, assigned to group members with a schedule.

# **Example UI/UX Flow**

### Screen Map

This is intended to show you the order in which users would see screens. The three branches correlate with the three button options from the main menu.



# **Example Data Flow**

### User View—Clinical Trial App

