#### welcome to...

### USB Labs

#### "What the hell am I doing here?"

-You, right now

1. Sample project (2 weeks)

2. Real-world project (9 weeks)

### The Sample Project

#### **LINK HUNT**

\$\frac{1}{3} \ \text{Link 2}\$

\$\frac{1}{3} \ \text{Link 3}\$

\$\frac{1}{2} \ \text{Link 4}\$

\$\frac{1}{3} \ \text{Link 5}\$

### Ask questions

### Schedule

- Session 1: Angular.JS
- Session 2: Node.JS/Express
- Session 3: Node.JS/Express
- Session 4: MongoDB

# MEAN STACK

### Why Javascript?

- It's the language of the web
- Easy to get started
- It can power entire applications
- It's becoming more and more powerful

# MEAN STACK



- Open-source database management system
- Documents have JSON structure
- Really easy to get started

### JavaScript Object Notation

#### Serialized JavaScript objects

```
name: "Bob",
age: 21,
clubs: ["Purdue Hackers", "USB"]
}
```

```
key
{
   name: "Bob",
   age: 21,
   clubs: ["Purdue Hackers", "USB"]
}
```

```
value

{
  name: "Bob",
  age: 21,
  clubs: ["Purdue Hackers", "USB"]
}
```



- Open-source database management system
- Documents have JSON-like structure
- Really easy to get started

### express

- Simple web framework for Node.JS
- Allows you to skip the overhead of common web development tasks



- HTML designed for web applications
- Data-binding
- Templating!

```
<html>
  <head>
    <title>Website Title</title>
  </head>
  <body>
    <div>Hello World</div>
  </body>
</html>
```



- HTML designed for web applications
- Data-binding

```
<html>
  <head>
     <title>Website Title</title>
     <script src="http://ajax.googleapis.com/ajax/</pre>
     libs/angularjs/1.3.10/angular.min.js">
     script>
     <script src="app.js"></script>
  </head>
  <body ng-app="sample-app" ng-controller="main">
     <div>{{example}}</div>
  </body>
</html>
```



- Wrapper around JavaScript
- Uses JSON (yay!)
- Super fast

### Recap

- MongoDB manages your database
- Express.JS allows you to easily set up servers, routes, etc.
- Angular.JS makes your web application dynamic
- Node.JS lets you run JavaScript outside of the browser

### Questions?

### Let's Dive In