

Intro to Angular

Why angular

Angular is a way to allow for fast highly responsive full featured single page apps

```
<body>
Name: <input id="name" type="text">
Age: <input id="age" type="text">
  <script>
    Person = function(){
      this.name = document.getElementById( 'name' ).value;
      this.age = document.getElementById( 'age' ).value;
    }
    function logPerson() {
      var person = new Person();
      console.log(person);
    }
    window.setInterval(logPerson, 100);
  </script>
</body>
```

Angular isn't doing anything magical,
it just abstracts away some of the
complexity for us

Angular Basics

- Different Mindset
- Let Data drive your app
- Data is the single source of truth, all changes flow from there
- MVC
- Compilation (looks at the HTML for special words and turns that into html with javascript)
- Runtime (when things start running)

Compilation

- Looks for directives
- Sets up watchers, creates event listeners based on these directives.

What is a controller?

Chunk of code that explains how the data relates to each other.

- handler for how the data changes and responds to user actions
- let us manipulate and augment the `$rootScope`
- bind things as properties in a controller and then access them in the view

- if angular sees an `ng-controller` directive
- new up the constructor functions
- controllers have their own individual scope
- controllers are reconstructed on every view change

Lets see how that original HTML snippet looks converted to angular

```
<body ng-controller="PersonController as ctrl">
Name: <input id="name" ng-model="ctrl.person.name" >
Age: <input id="age" ng-model="ctrl.person.age">
  <script>
    function PersonController() {
      this.person = {};
      function logPerson() {
        console.log(this.person);
      }.bind(this)
      // we would probably want to use angulars $timeout service here though
      $interval(logPerson, 100);
    }
  </script>
</body>
```

Why should I care now?

Angular allows us to do more with less code

Angular allows us to do things without generating dynamic HTML
and concatenating strings

Why should I care later?