Intro to Angular

ACM Learning Webinar

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Stephen Fluin
Developer Advocate

- Help developers be successful with Angular
- Represent real world of development

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1. What is Angular
2. Ecosystem
3. Getting Started
4. Demo
5. The Future
Angular is a **platform** that makes it easy to build **applications** with the **web**.
Values

Apps that users ❤️ to use

Apps that developers ❤️ to build

Community where everyone feels welcome
AngularJS

- Same philosophies
- Simplified
- Designed for scale
- Built on the modern web
<div *ngIf="data$ | async as data">
  <h1>{{data.title}}</h1>
  <p *ngFor="let child of data.children">
    {{child.text}}
  </p>
</div>
@Component({
    templateUrl: 'component.html'
})

export class MyComponent {
    constructor(http: HttpClient) {}
}
Angular empowers you to

- Move fast
- Scale smoothly
- Reach further
Built on the modern web

1. Modules
2. Classes
3. TypeScript
Move fast with integrated tools
Move fast with integrated tools

- CLI
- Router
- HTTP
- Forms
- Animations
- i18n
- Testing
- Language Services
- Universal
- Material & CDK
Angular CLI

Automate & accelerate your workflow
Angular CLI

- `ng new`
- `ng generate`
- `ng serve`
- `ng build`
- `ng add`
- `ng update`
Schematics

Schematics are an open platform for modifying projects
Common Tasks

Router

HTTP

Forms

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Animations
Welcome!

2018 results
Write better code

Protractor & Karma

Language Services

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Universal - Server Side Render

Render machine-readable HTML
Increased perceived performance
Angular Material & CDK

Best practices & behaviors
for component libraries

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Scale smoothly
Maintainability

- Opinionated approach
- TypeScript
- Testing
- Schematics
Collaboration

Architects
Developers
Designers
Reach Further
Reach Further

- PWA
- NativeScript
- Electron
- Elements
Angular Elements

Angular Components packaged as **Custom Elements** in an Angular context
Angular Ecosystem
Docs Traffic

In Fall of 2017, Angular Docs Traffic passed 1 million 30 day active users and passed AngularJS
Angular is Open Source

Every line of code originates as a PR
Each commit validated against 700+ projects
More than Google

Google

Builders

Services

Authors

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Deep Partnerships

NativeScript
Webpack
RxJS
Stackblitz
Why the ecosystem chooses Angular

- Opinionated
- Trustworthy
- Scaled
- Familiar
- Community
Getting Started & Demo
Two Paths

yarn global add @angular/cli
ng new my-app

https://stackblitz.com/

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Demo Goals

1. Build an Angular application
2. Fetch data from the internet
3. Code split & lazy load
4. Try out Material Components
5. More (if we have time)
The Future
Angular For Designers
Ivy

Inverting the Angular rendering pipeline.
Rendering Pipeline Today

Angular Renderer

- Pipes
- Dependency Injection
- Etc

Your code
Rendering Pipeline After Ivy

Angular Renderer

- Pipes
- Dependency Injection
- Etc

Your code
2.7 kb

Hello World, compressed
Stability + Innovation
Smaller, Faster, Easier to Use

You keep writing the same Angular apps.
We'll keep making your apps better and take them further.
Thank You!

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Slides: bit.ly/acm-angular