









### **Document History**

Version No.	Authored/ Modified by	Remarks/ Change History	Date <dd- mon-yy=""></dd->
1.0	Asfiya Khan	First version of Angular 4	13 March 2018



#### **Course Structure**

Target audience	Trainee,SE,SSE
Level	1,2,3
Pre-requisites	Javascript,TypeScript,HTML,CSS
Training methods	Presentation , Demos, Hands-on
Evaluation	Multiple Choice Question



### **Agenda**



Architecture and Components



Data Binding and Pipes



Routing and Navigation



Templates ,Interpolation and Directives



Angular Modules



Services and Dependency Injection



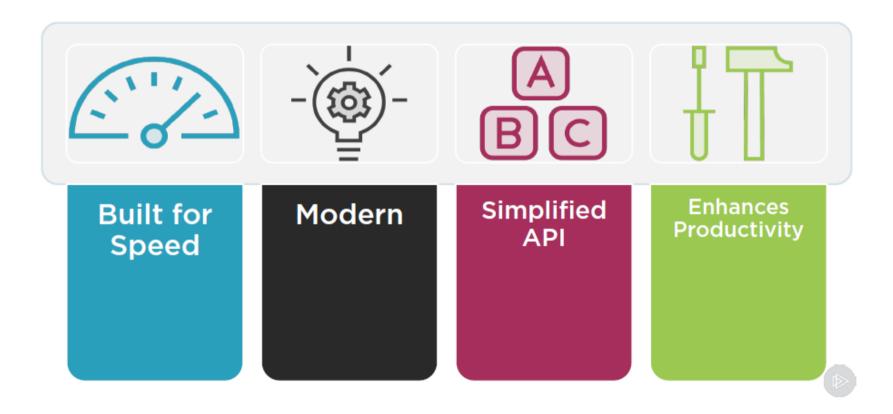
Ng-Forms



Retrieving data using HTTP

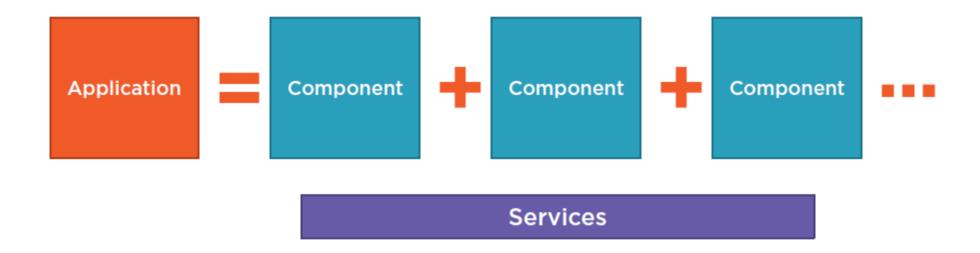


# Why new Angular?



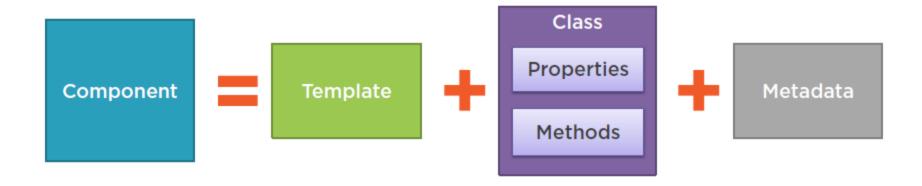


# Angular Building Blocks



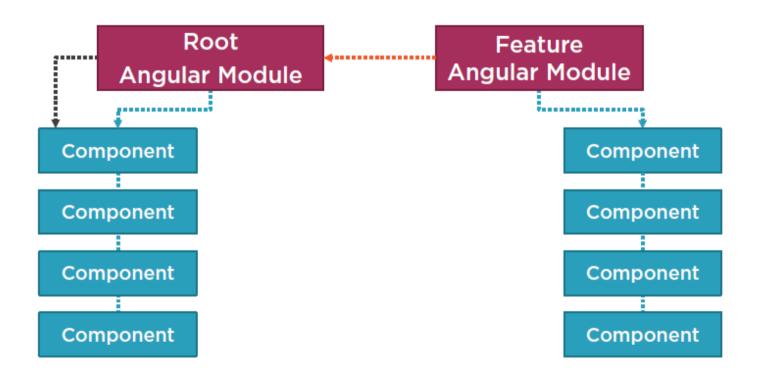


# Components



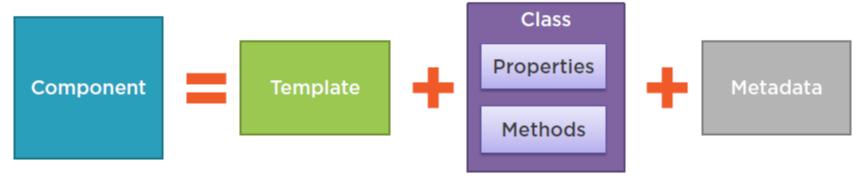


# Angular Modules





# What is Component?



- View layout
- Created with HTML
- Includes binding and directives
- Code supporting the view
- Created with TypeScript
- Properties: data
- Methods: logic

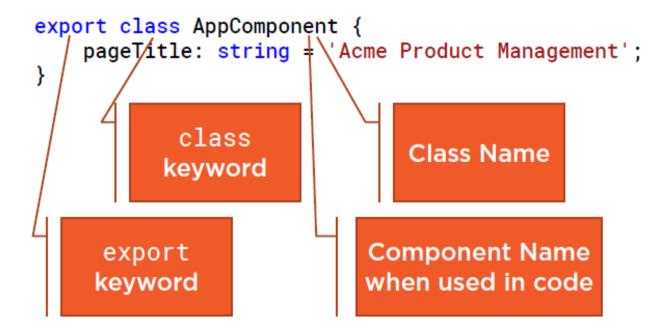
- Extra data for Angular
- Defined with a decorator



```
Component
 app.component.ts
                                                            Import
import { Component } from '@angular/core';
@Component({
    selector: 'pm-root',
    template:
                                                         Metadata &
    <div><h1>{{pageTitle}}</h1>
       <div>My First Component</div>
                                                          Template
    </div>
})
export class AppComponent {
                                                            Class
pageTitle: string = 'Acme Product Management';
```



### Creating the Component Class





### Creating the Component Class

```
export class AppComponent {
   pageTitle: string = 'Acme Product Management';
        Property
                                          Default
                        Data Type
          Name
                                           Value
     Methods
```



### Defining the Metadata



# Decorator

A function that adds metadata to a class, its members, or its method arguments.

Prefixed with an @.

Angular provides built-in decorators.

@Component()



### Defining the Metadata

```
app.component.ts
                                                         Component
                                                          decorator
@Component(-{
             'pm-root'—
    selector:
                                                       Directive Name
    template:
    <div><h1>{{pageTitle}}</h1>
                                                        used in HTML
        <div>My First Component/div>
    </div>
                                                        View Layout
export class AppComponent {
 pageTitle: string = 'Acme Product Management';
                                                           Binding
```



## Angular Is Modular

@angular/ core @angular/ animate

@angular/ http

@angular/ router

https://www.npmjs.com/~angular



### Importing What We Need



## Importing What We Need

```
app.component.ts
import { Component } from '@angular/core';
@Component({
    selector: 'pm-root',
    template: `
    <div><h1>{{pageTitle}}</h1>
        <div>My First Component</div>
    </div>
export class AppComponent {
 pageTitle: string = 'Acme Product Management';
```

import keyword

Angular library module name

Member name



## Completed Component

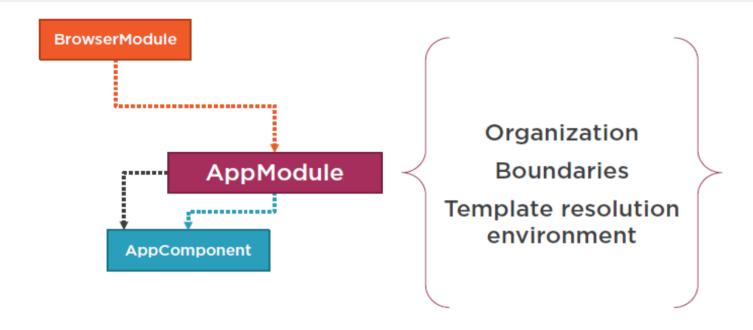
```
import { Component } from '@angular/core';
@Component({
    selector: 'pm-root',
    template:
    <div><h1>{{pageTitle}}</h1>
        <div>My First Component</div>
    </div>
})
export class AppComponent {
 pageTitle: string = 'Acme Product Management';
```



### Hosting the Application

```
index.html
                                        app.component.ts
<body>
                                      import { Component } from '@angular/core';
<pm-root>
</body>
                                      @Component({
                                          selector. 'pm-root',
                                          template:
                                          <div><h1>{{pageTitle}}</h1>
                                              <div>My First Component</div>
                                          </div>
                                      export class AppComponent {
                                       pageTitle: string = 'Acme Product Management';
```





Exports
Declarations
Providers
Bootstrap





## Defining the Angular Module

### app.module.ts

```
import { NgModule } from '@angular/core';
import { BrowserModule } from '@angular/platform-browser';
import { AppComponent } from './app.component';
@NgModule({
  imports: [ BrowserModule ],
  declarations: [ AppComponent ],
  bootstrap: [ AppComponent ]
export class AppModule { }
```



## DEMO







