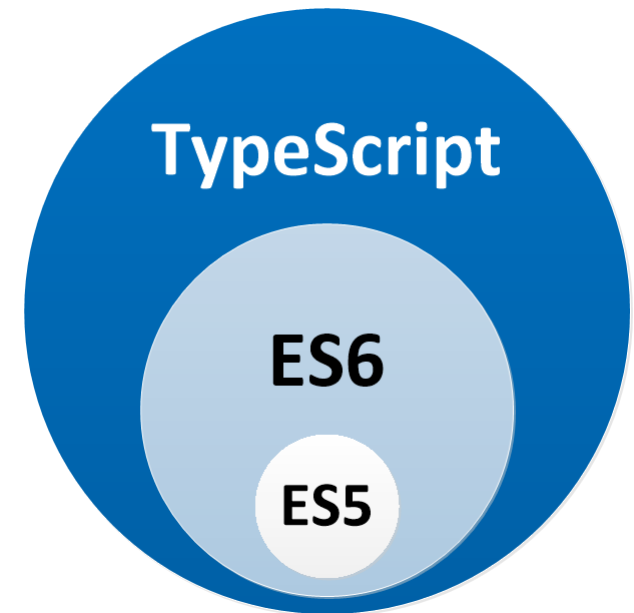# ANGULAR

EVA MARKOVÁ

What is TypeScript?

- Free & open-source programming language developed & maintained by Microsoft

- Strict syntactical superset of JavaScript

- Eases development of large scale applications written in JavaScript

- Extends JavaScript by adding static **types**, classes, modules, interfaces & generics

What is Angular?

▪ TypeScript-based open-source web application framework

▪ Created by the Angular Team at Google

▪ A Complete **rewrite** from the same team that built AngularJS

A structural framework for dynamic web apps

It lets you use HTML as your template language

Data binding and dependency injection eliminate much of the code you would otherwise have to write

Versions

2010 – AngularJS

September 2016 – Angular 2

March 2017 – Angular 4

November 2017 – Angular 5
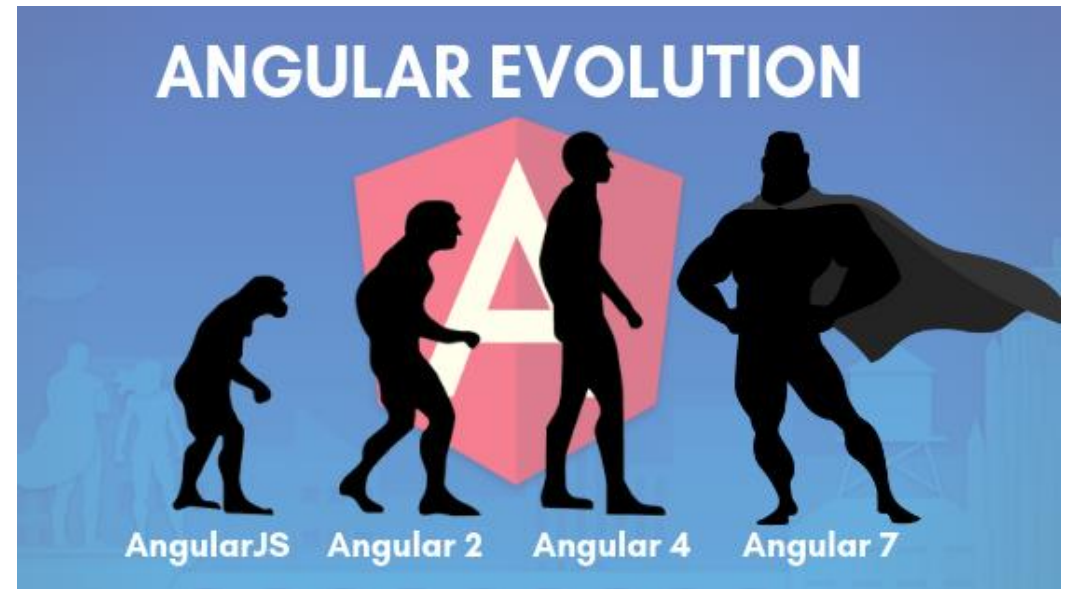
May 2018 – Angular 6

October 2018 – Angular 7

May 2019 – Angular 8

Oct./Nov. 2019 – Angular 9

May 2020 – Angular 10

AngularJS	Angular
Javascript	Typescript
Controllers and scopes	Components

- hierarchical dependency injection system
- faster dynamic loading
- asynchronous template compilation
- reactive programming support
- mobile support

ANGULAR EVOLUTION

AngularJS   Angular 2   Angular 4   Angular 7

Angular 8

TypeScript 3.4 support

Generated code that is easier to read and debug at runtime

Faster re-build time

Improved payload size

Improved template type checking

Backwards compatibility

Architecture

- **Modules**
  - NgModule declares a compilation context for a set of components
  - NgModule can associate its components with related code, such as services
  - NgModules can import functionality from other NgModules, and allow their own functionality to be exported and used by other NgModules

Components

- *root component* connects a component hierarchy with the page document object model (DOM)

- Each component defines a class that contains application data and logic, and is associated with an HTML *template*
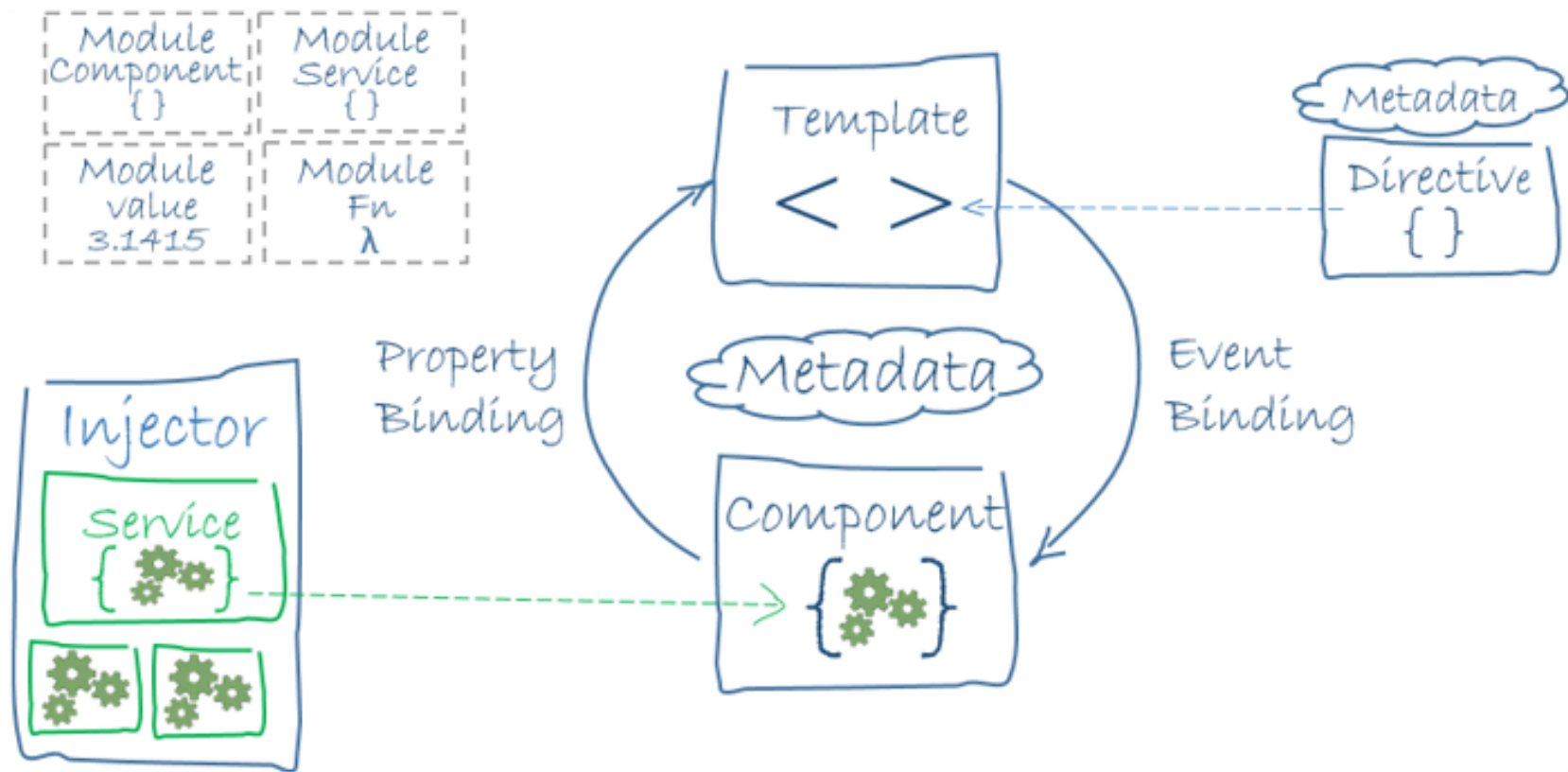
Templates

- a template combines HTML with Angular markup that can modify HTML elements before they are displayed

Data binding

- *binding markup* connects your application data and the DOM
  - *Event binding* lets app respond to user input in the target environment by updating your application data
  - *Property binding* lets put values that are computed from your application data into the HTML

Services

- for data or logic that isn't associated with a specific view and need to be shared across components, you create a *service* class

Important files

angular.json - CLI configuration defaults for all projects in the workspace

package.json - Configures npm package dependencies available to all projects in the workspace

package-lock.json - Provides version information for all packages installed into node_modules

src/app/app.module.ts - Defines the root module, named AppModule, that tells Angular how to assemble the application

src/app/app-routing.module.ts - Defines paths

New Issue

Title

Example

Add description templates to help your contributors communicate effectively!

Description

Write Preview

B *I* "" </> 🔗 ⊟ ⊟ ☑ ▦ ⤢

create project

Markdown and quick actions are supported

🖼 Attach a file

☐ This issue is confidential and should only be visible to team members with at least Reporter access.

Assignee

Eva Marková ⌄

Milestone

Milestone ⌄

Labels

angular +1 more ⌄

Weight

Enter a number

Due date

Select due date

Submit issue

Open 2   Closed 0   All 2

📶 📅 ⬆ ⬇ Edit issues **New issue**

Recent searches ⌄   Search or filter results...

Created date ⌄ ⇟

Example2
#2 · opened just now by Eva Marková python

💬 0
updated just now

Example
#1 · opened 2 minutes ago by Eva Marková angular react

💬 0
updated 2 minutes ago

Let's create new project

npm install -g @angular/cli

ng new hello-world

cd hello-world

code .