



# Angular

## Introduction

# Angular is...



**A JavaScript framework**

**For building client-side applications**

**Using HTML, CSS and JavaScript**

# Why Angular?



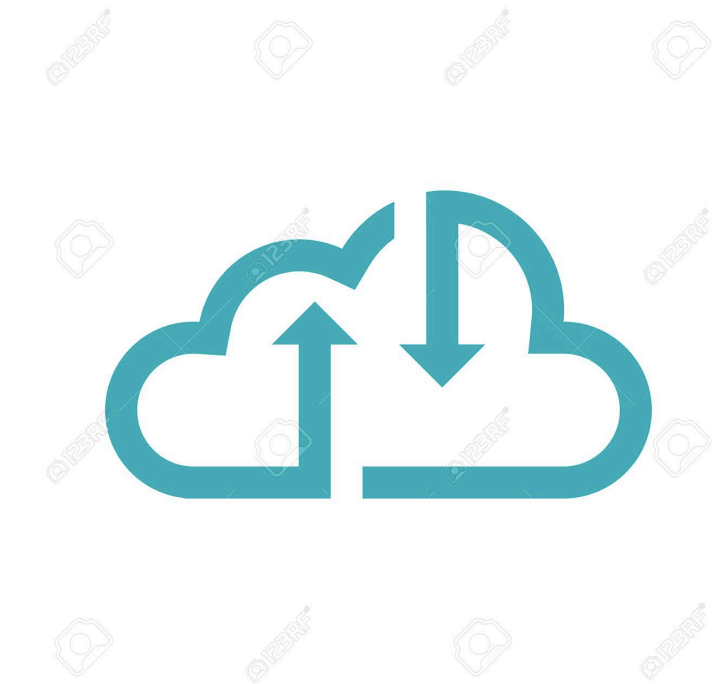
Expressive  
HTML



Powerful  
Data  
Binding



Modular  
By Design



Built-in  
Back-End  
Integration

# Why Angular?



**Detailed documentation**

**Supported by Google**

**Component-based architecture**

**AOT compiler**

**Great CLI Support**

**Angular Elements**

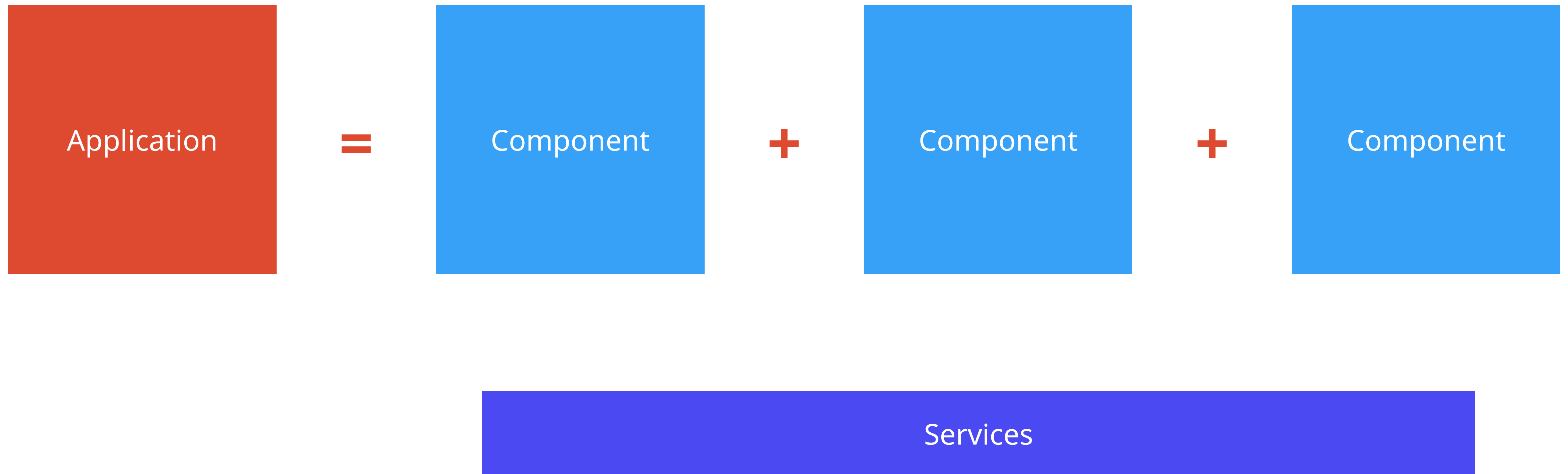
**Ivy Renderer**

**Angular Material**

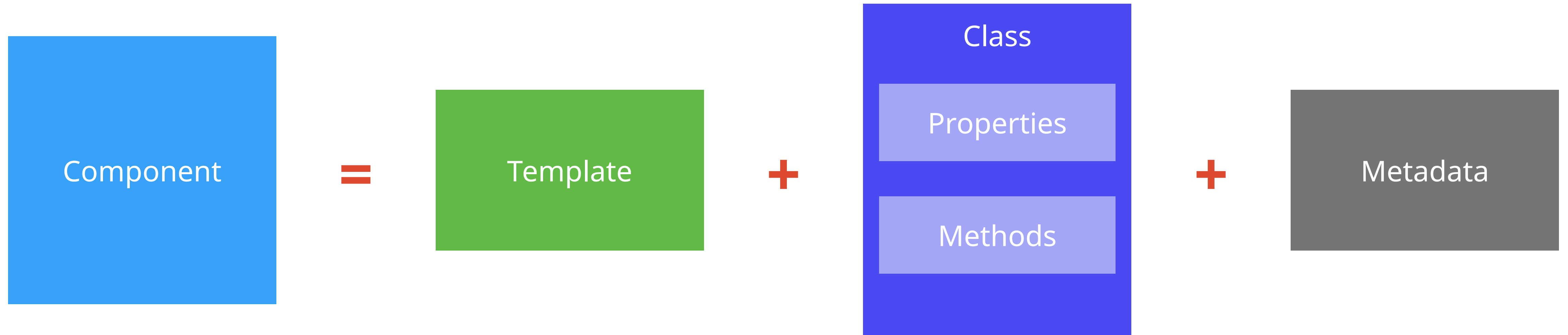
**Mobile/Hybrid Apps support**

**PWAs (Progressive Web Apps)**

# Anatomy of an Angular Application



# Component



# Angular Modules



# Prerequisites

## Required

- HTML
- CSS
- JavaScript

## Helpful


- Object-oriented programming (OOP) concepts
- C++, C#, Java, ...

## Not Required

- Prior knowledge of Angular
- Prior knowledge of Typescript



# JavaScript Language Specification

A yellow square containing the letters 'JS' in a large, bold, black sans-serif font.

JS

**ECMAScript (ES)**

**ES 3 (Supported by older browsers)**

**ES 5 (Supported by modern browsers)**

**ES 2015 (formerly known as ES 6)**

- Modern browsers doesn't fully support ES 6
- So our code must be transpiled to ES 5

# Selecting Language

## ES 5

- Runs in the browser
- No compile required

## ES 2015

- Lots of new features (classes, let, arrow, etc.)

## TypeScript

- Superset of JavaScript
- Strong typing
- Great IDE tooling

# What is TypeScript?



TS

**Open source language**

**Superset of JavaScript**

**Transpiles to plain JavaScript**

**Strongly typed**

**Class-based object-orientation**