



Angular Fundamentals

Korte herhaling dag 1



Peter Kassenaar

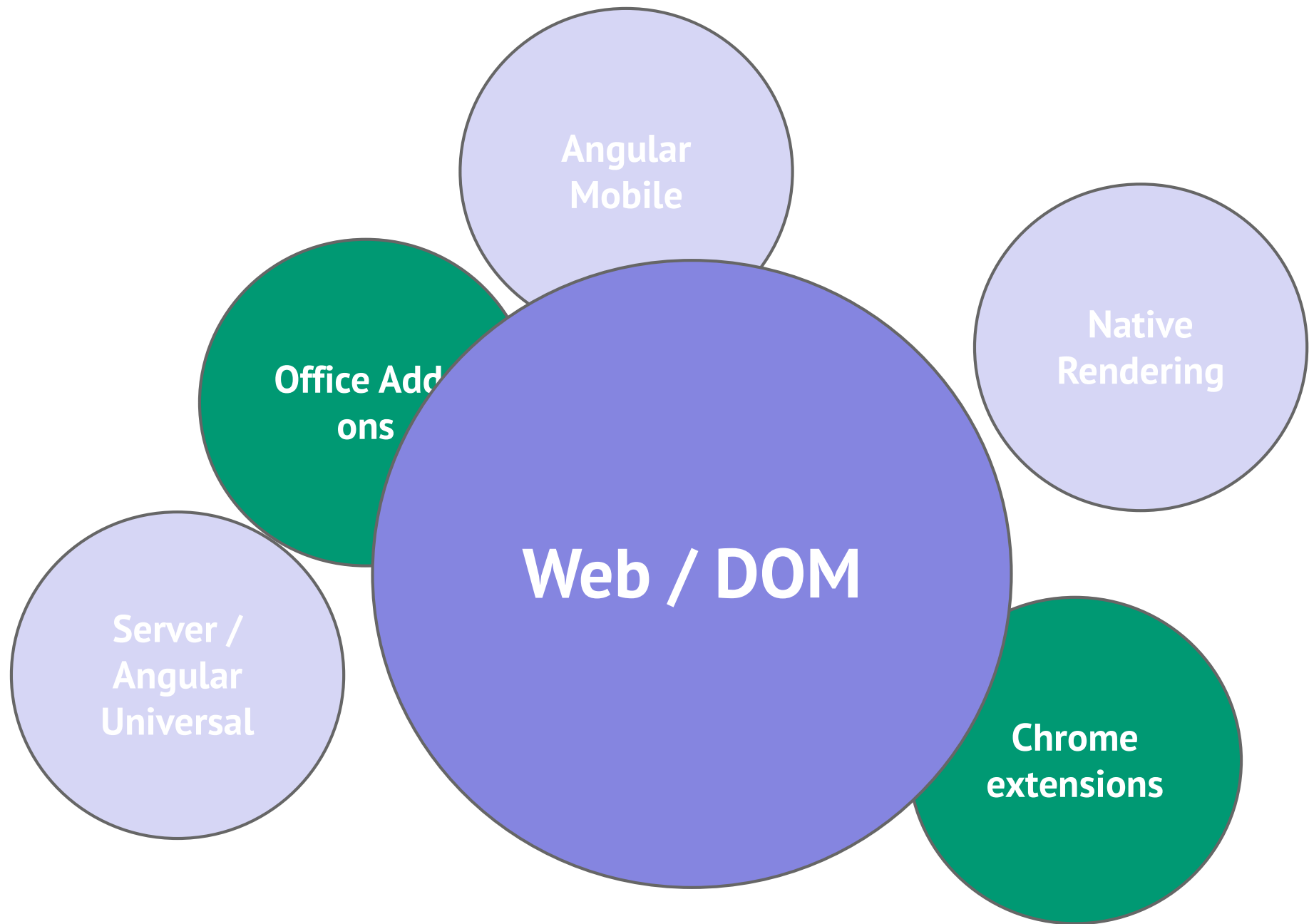
info@kassenaar.com

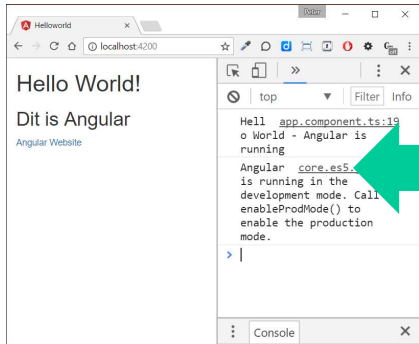
Agenda

- Day 1 – Intro & Data binding
 - Theorie - Introductie & geschiedenis
 - Angular vs Vue, React
 - Hello World in Angular –boilerplate-code
 - Concepts, context & architecture
 - Angular CLI
 - Components
 - Data binding

Framework to Platform

	Scaffolding	Code completion & Refactoring	Debugging
Tooling	Angular CLI	Language Services	DevTools
Libraries	Material 2	Mobile	Universal
	Compile	Change Detection	Renderer
Core	Components & Dependency Injection	Decorators	Zones





main.ts / bootstrapper

ngModule / root module

AppComponent

Services

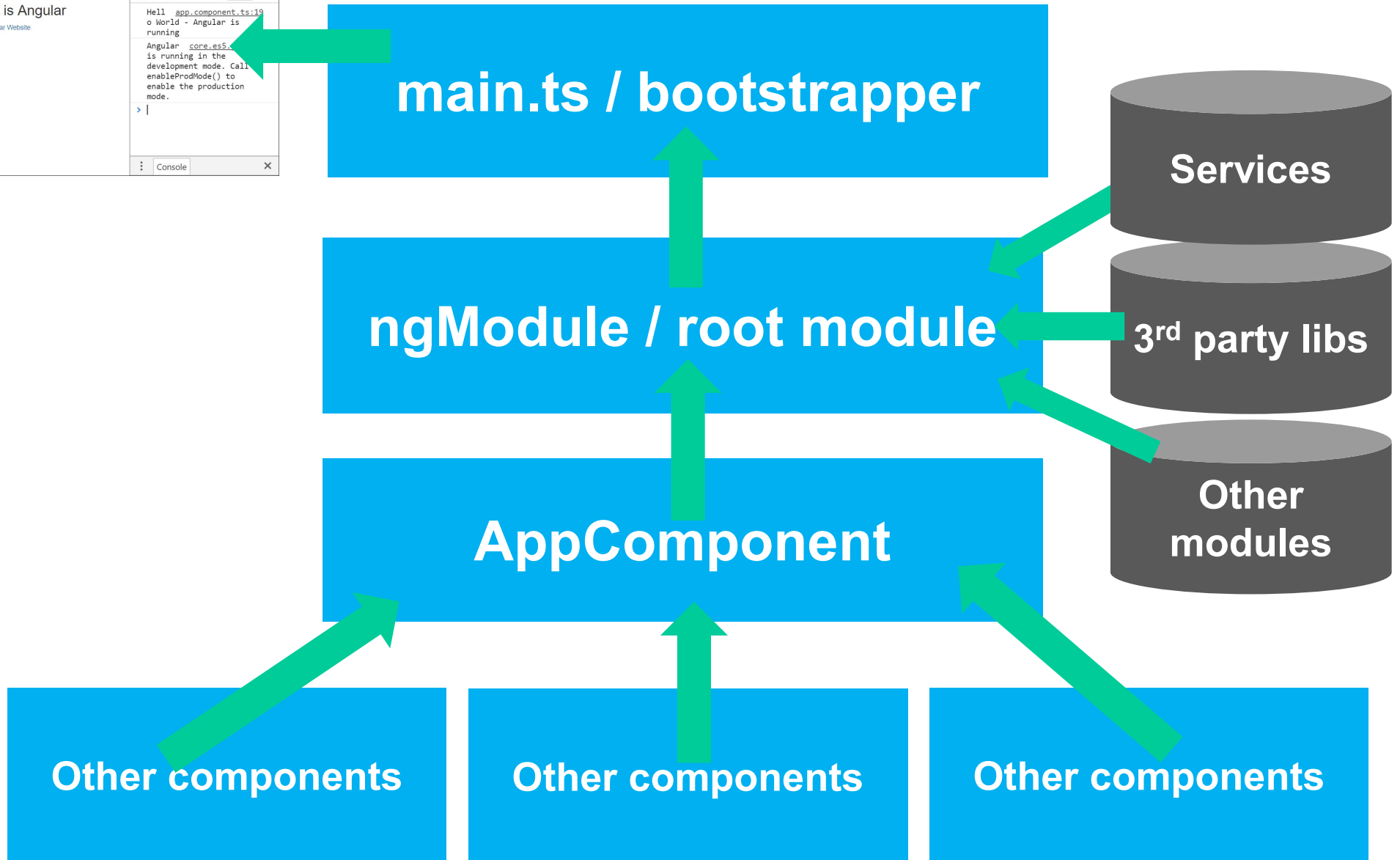
3rd party libs

**Other
modules**

Other components

Other components

Other components





A Venn diagram consisting of three concentric circles. The outermost circle is dark green and contains the text 'TypeScript'. Inside it is a medium-sized teal circle containing the text 'ES6'. Inside the teal circle is a small light green circle containing the text 'ES5'. This visualizes that TypeScript includes all features of ES6, which in turn includes all features of ES5.

TypeScript

ES6

ES5

Boilerplate code - stappenplan

1. Set up environment, boilerplate & libraries

- `npm install`

2. Schrijf Angular Root Component & Module voor de app

3. Bootstrap

4. Schrijf HTML-pagina (`index.html`)

5. Run applicatie

- `npm start`

Components

- @Component decorator
- View
- Controller / Class

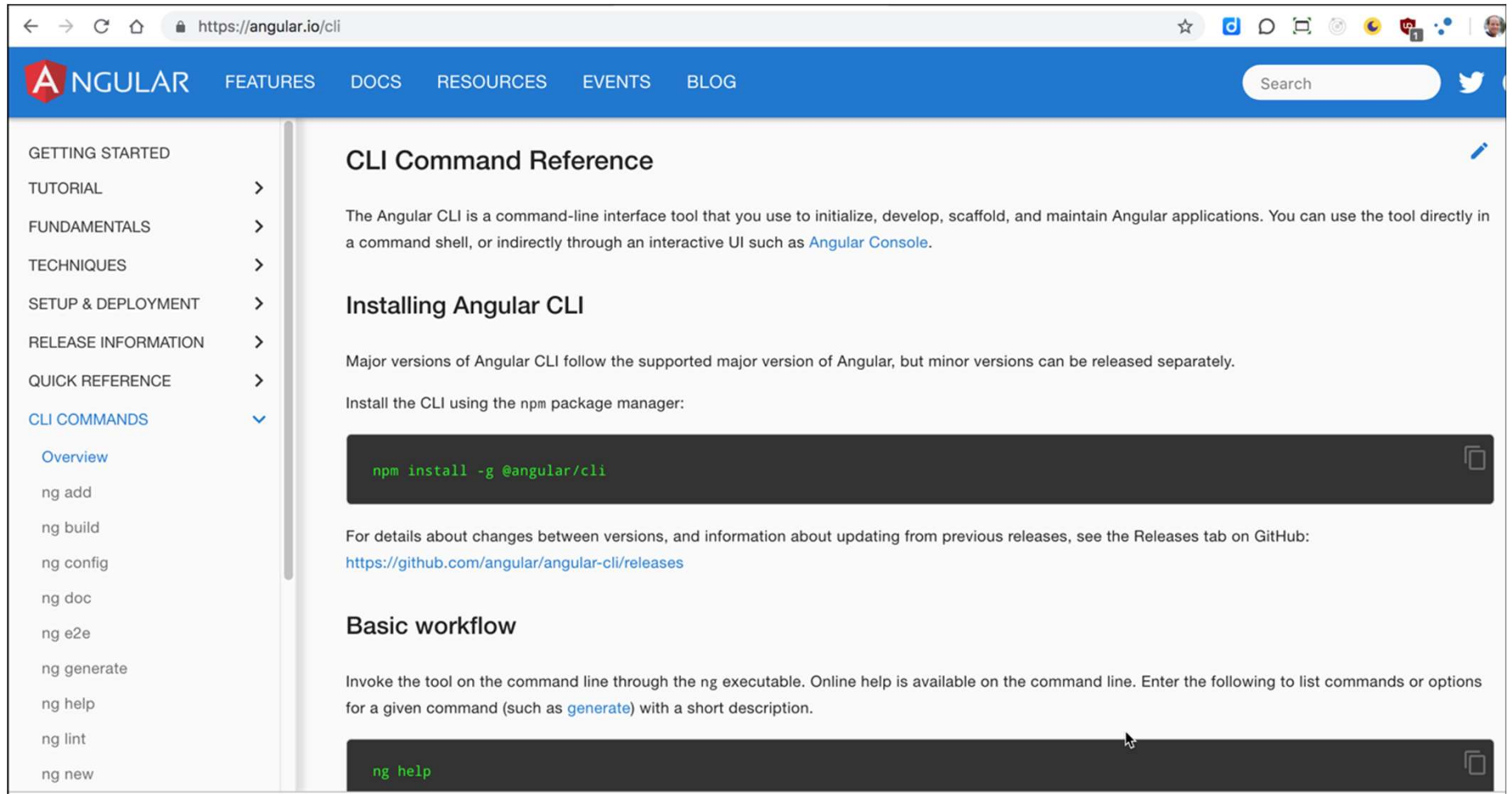
```
import { Component, OnInit } from '@angular/core';

@Component({
  selector: 'app-customer',
  templateUrl: './customer.component.html',
  styleUrls: ['./customer.component.css']
})
export class CustomerComponent implements OnInit {

  constructor() {}

  ngOnInit() {}
}
```


Angular CLI



The screenshot shows the Angular CLI documentation page. The browser address bar displays `https://angular.io/cli`. The page has a blue header with the Angular logo and navigation links: FEATURES, DOCS, RESOURCES, EVENTS, and BLOG. A search bar is located on the right side of the header. On the left, a sidebar lists various sections: GETTING STARTED, TUTORIAL, FUNDAMENTALS, TECHNIQUES, SETUP & DEPLOYMENT, RELEASE INFORMATION, QUICK REFERENCE, and CLI COMMANDS (which is expanded). Under CLI COMMANDS, there is an 'Overview' link and a list of commands: ng add, ng build, ng config, ng doc, ng e2e, ng generate, ng help, ng lint, and ng new. The main content area is titled 'CLI Command Reference' and includes a description of the Angular CLI, a section for 'Installing Angular CLI' with a code block for `npm install -g @angular/cli`, and a 'Basic workflow' section with a code block for `ng help`.

← → ↻ 🏠 `https://angular.io/cli` ☆ 🔍 📄 🖨️ ⌚ 🌙 🛡️ 🌐 👤

ANGULAR FEATURES DOCS RESOURCES EVENTS BLOG 🔍

GETTING STARTED
TUTORIAL >
FUNDAMENTALS >
TECHNIQUES >
SETUP & DEPLOYMENT >
RELEASE INFORMATION >
QUICK REFERENCE >
CLI COMMANDS ▾

Overview
ng add
ng build
ng config
ng doc
ng e2e
ng generate
ng help
ng lint
ng new

CLI Command Reference

The Angular CLI is a command-line interface tool that you use to initialize, develop, scaffold, and maintain Angular applications. You can use the tool directly in a command shell, or indirectly through an interactive UI such as [Angular Console](#).

Installing Angular CLI

Major versions of Angular CLI follow the supported major version of Angular, but minor versions can be released separately.

Install the CLI using the npm package manager:

```
npm install -g @angular/cli
```

For details about changes between versions, and information about updating from previous releases, see the Releases tab on GitHub:
<https://github.com/angular/angular-cli/releases>

Basic workflow

Invoke the tool on the command line through the ng executable. Online help is available on the command line. Enter the following to list commands or options for a given command (such as [generate](#)) with a short description.

```
ng help
```

<https://angular.io/cli>

Ng serve

- Vervult verschillende rollen (*kan* ook handmatig)
 1. TypeScript compilation
 2. (SASS compilation)
 3. Fire up webserver on <http://localhost:4200>
 4. Fire up Live Reload
 5. Analyzing and bundling of application by firing up WebPack
 6. Watch for changes and recompile, rebundle, etc.

Data binding

- Notatiewijze in HTML-views/templates

1. Simple data binding `{{ ... }}`

2. Event binding `(...)="..."`

3. One-way data binding `[...]="..."`

4. Two-way data binding `[(ngModel)] = "..."`

Vragen?

Vandaag

- data binding – one way-, two-way binding
- Services
 - Static Services
 - Dependency Injection / `@Injectable()`
 - `HttpClientModule`,
 - RxJS / **Observables**, Live API's
- Component Communication
 - `@Input()`
 - `@Output()`

Morgen

- Component Communication, `@Input()`, `@Output()`
 - Custom event bus
- Routing
 - Basic routing
 - Routing parameters
- (Forms
 - Template Driven Forms
 - Reactive Forms)



Tomorrow

09:00 hr