



THE 4W'S : WHO, WHERE, WHEN & WHY TO USE ANGULAR

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Hi! I'm Lena!

- **I'm a Designer**
- **Head of Web @SAE Athens**
- **Co-Organizer of Angular Athens Meetup **newly added** :)**
- **Organizer of Athens Gamification**

@lenalekkou



Hi! I'm Lena!

I study Angular in a more Theoretical Approach.

“Should my students develop Web Apps in Angular? Is it important to add Angular in our Study Path?”

@lenalekkou

Hi! I'm Lena

I studied
Theoretic
Should m
in Angular

Angular lessons in our Study Path?


The answer is **YES!**

BUT... Don't start with Angular.


**Start with Web Fundamentals and end
with Angular in an Awesome Dramatic
Way. :)**



αθηνς



**#1 Lovers of
the Angular
Power!**



In comparison with other frameworks, Angular is deeply Opinionated Framework. In Big Complex Projects with many different Developers working together, Angular makes the project maintainable and helps containing the code's consistency in the end. (thanks Stefanos :)

#1 WHO

#2 Mobile-First Focused

Developers who want to build Web and Mobile Applications and target a wide variety of devices. (web, mobile web, native mobile and native desktop)

#1 WHO


#3 FrontEnders with a spicy Twist

FrontEnders who want to build more complex Web Applications and want to experiment with this Framework. Give it a go!

#1 WHO



#4 Google Material Lovers




Angular Material is for you! By simply installing and adding these components to your modules, you've got a Material-looking App that is based on Google Design Guidelines.

#1 WHO



#5 Design Pattern Explorers



With the use of Angular, you can experiment with different Design Patterns and explore new ways to develop more complex Applications.

#1 WHO

@lenalekkou


#6 "Progressive" Developers

Good choice for developing Progressive Web Apps. Work for every user, regardless of browser choice. (Stay tuned for Giorgos Kalpakas' talk :)

#1 WHO



At Home



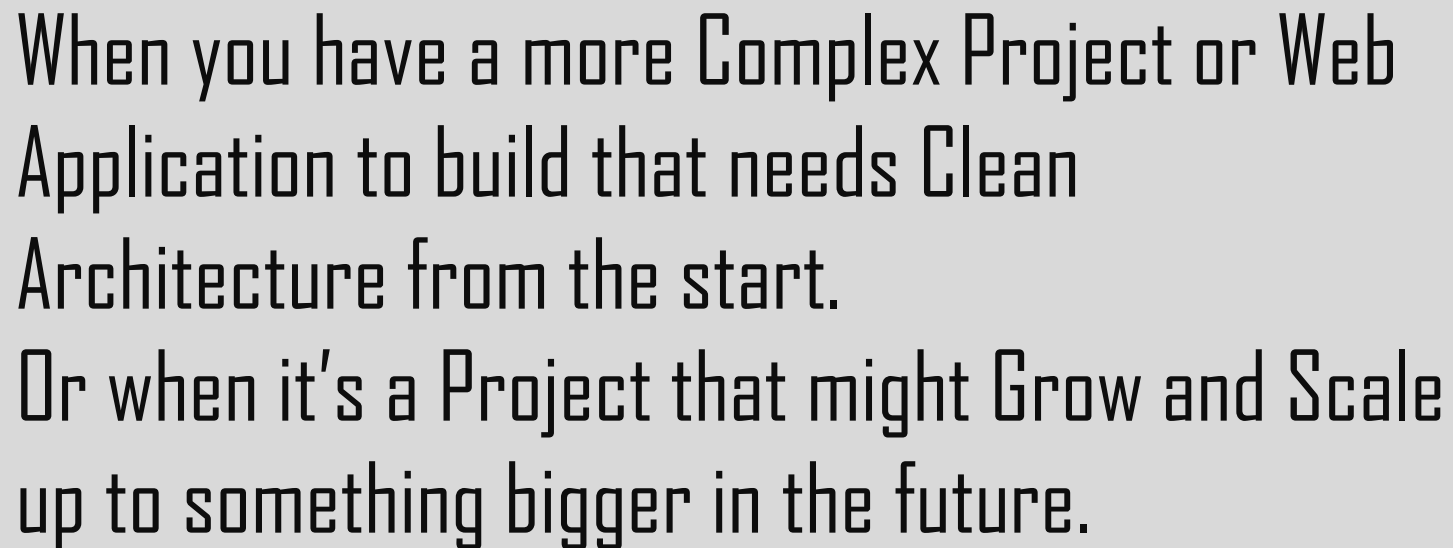
Invest in your free time at home and build some Web Apps and Reusable Components that you will probably use in the future.

Invest your free time and Practice , Practice, Practice and have fun (as Aris wanted me to add :)

#2 WHERE



At Work



When you have a more Complex Project or Web Application to build that needs Clean Architecture from the start.
Or when it's a Project that might Grow and Scale up to something bigger in the future.

#2 WHERE

First Things First

First you need to have a good knowledge of HTML/ CSS , JavaScript & some basic knowledge of Typescript. Angular is written in TypeScript. It implements core and optional functionality as a set of TypeScript libraries that you import into your apps.

#3 WHEN



Wait for it..



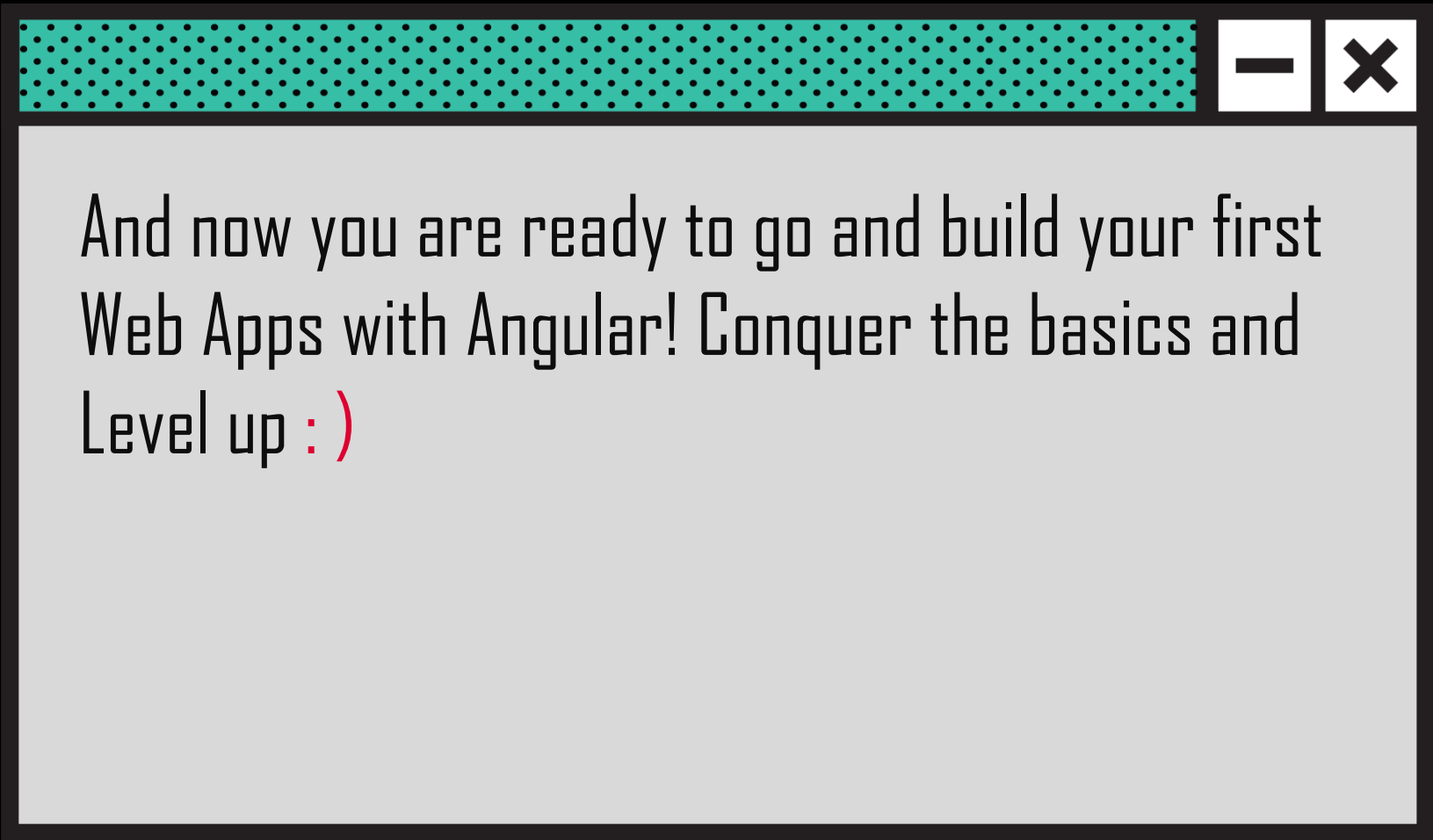
Then Get Comfortable with the basics of terminal commands and npm.

Make some experiments with Node.js and RESTful API's basics (GET, POST, PUT)

#3 WHEN




Finally!



And now you are ready to go and build your first
Web Apps with Angular! Conquer the basics and
Level up :)

#3 WHEN



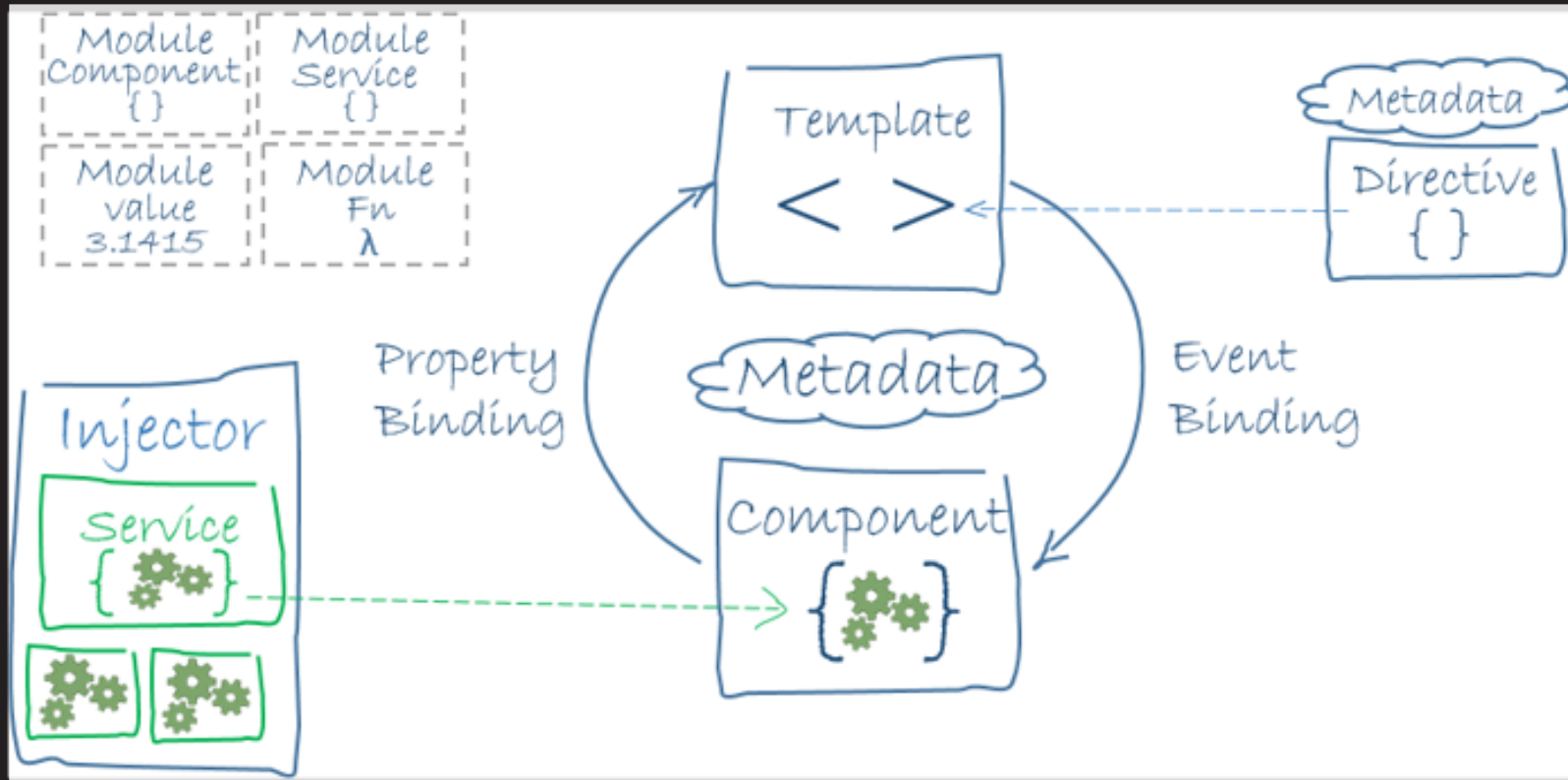
And one
more thing!



Now it's the right time to add some spices.
Get your hands dirty with this Component-based
Architecture (thanks Profanis for the reminder
of the name :), and develop some cool but well
structured Web Apps.

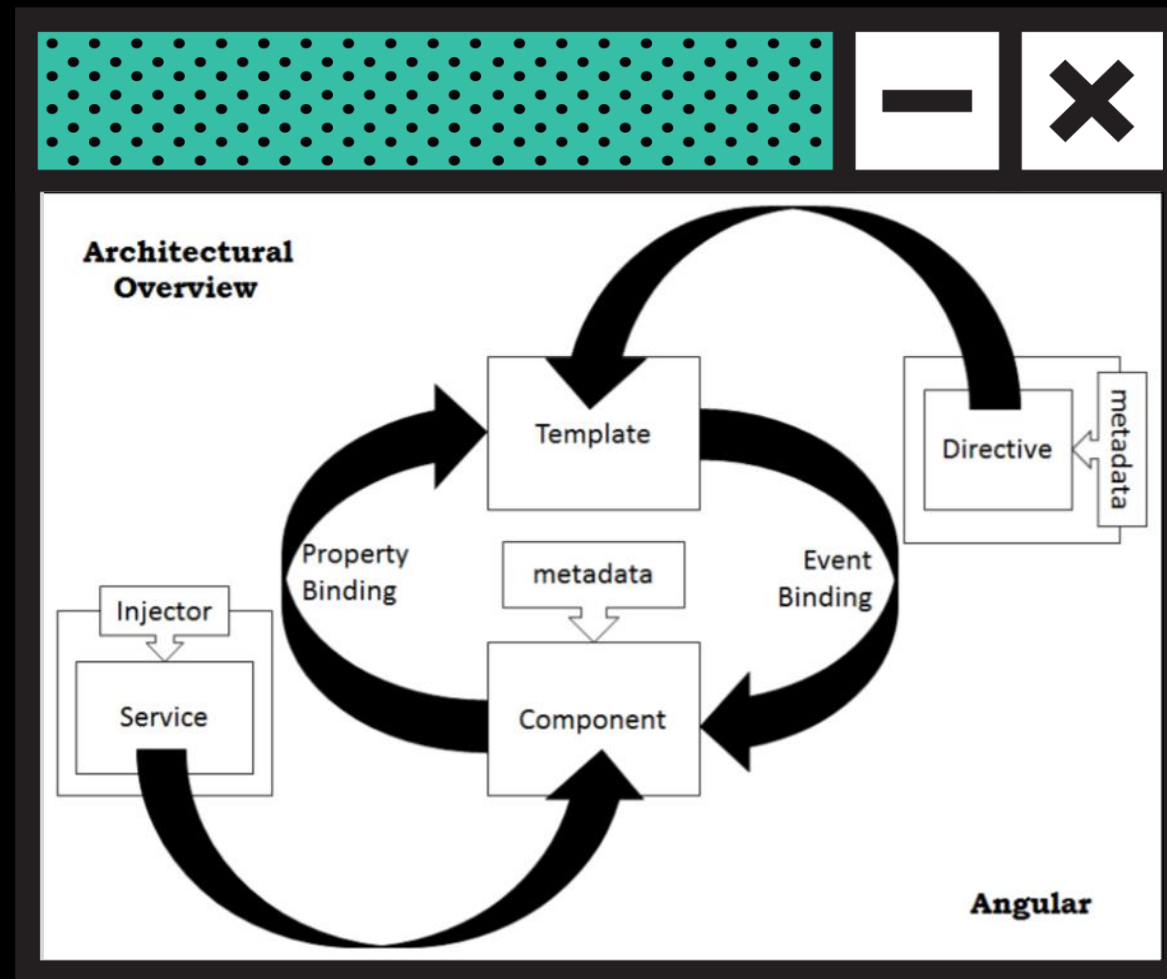
#3 WHEN

And
more



#3 WHEN

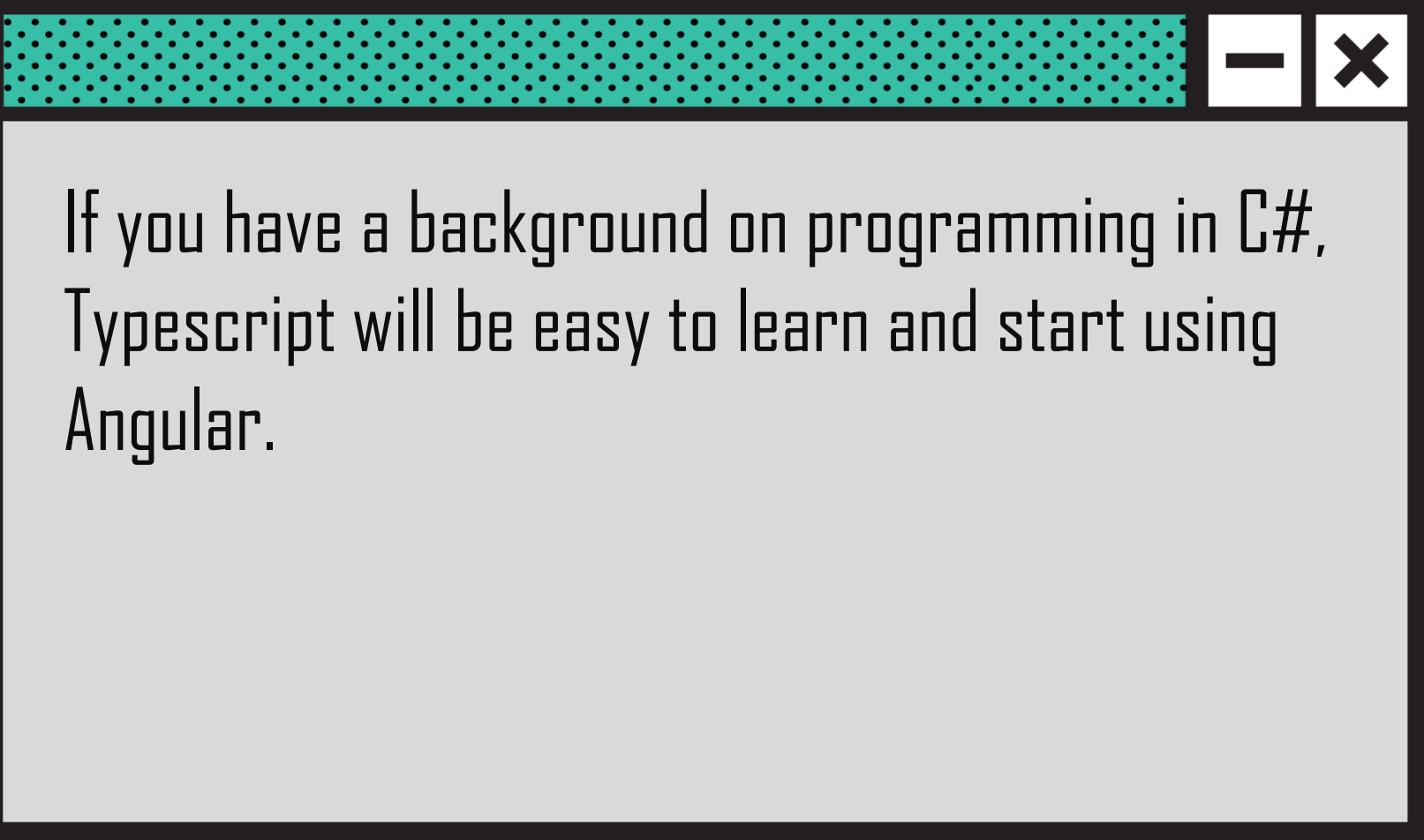
Because of the clean
Architecture of Angular with
Modules, Components,
Templates, Metadata,
Directives and Services.



#4 WHY



From C# to Typescript



If you have a background on programming in C#,
Typescript will be easy to learn and start using
Angular.

#4 WHY

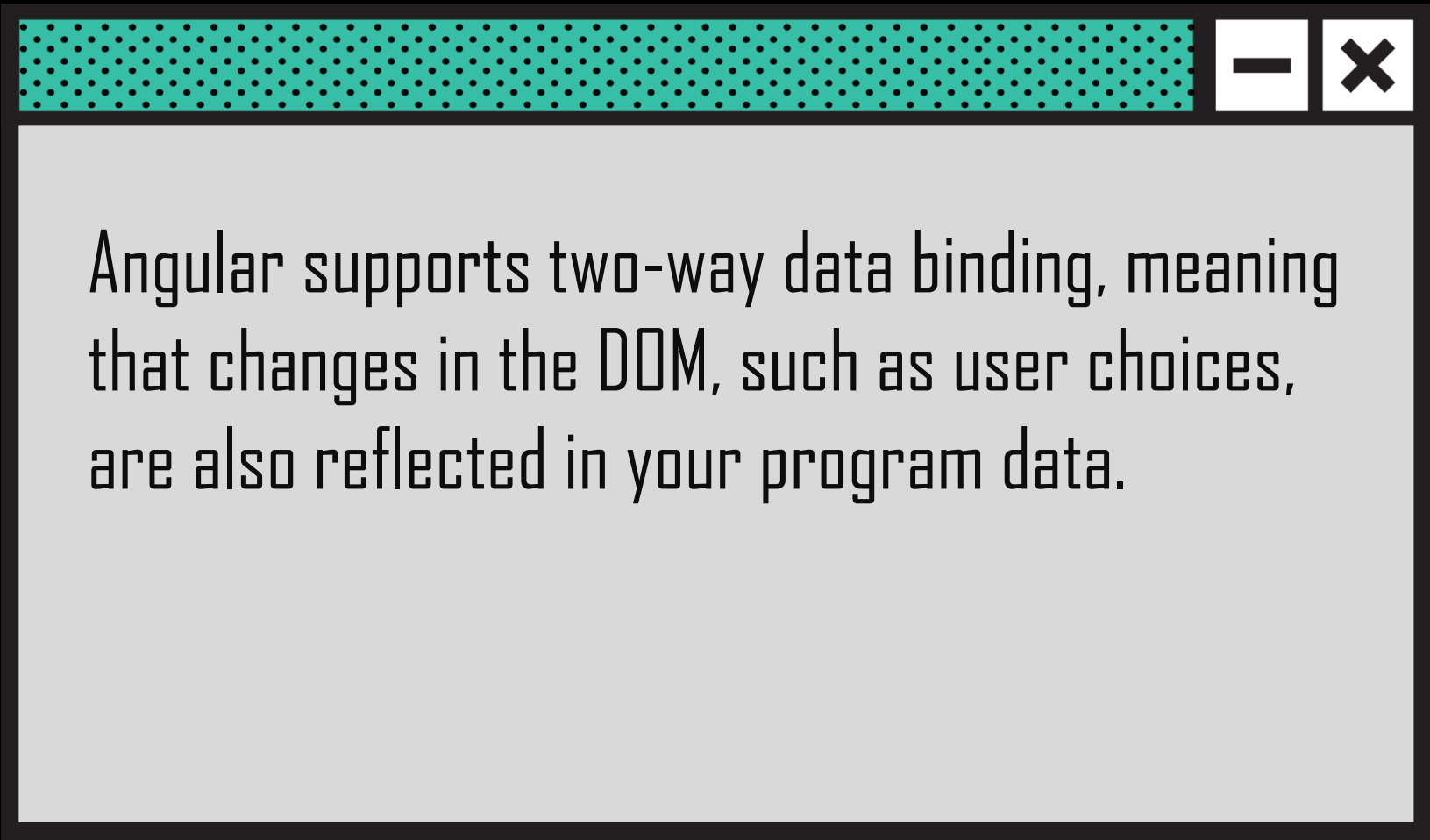
Data Binding

Angular provides a base for building rich client-side applications with a specialization on Data Binding. When your Web App needs to update content in your UI when a user enters or modifies it, you can easily do that with Angular.

#4 WHY



Two-way Data Binding




Angular supports two-way data binding, meaning that changes in the DOM, such as user choices, are also reflected in your program data.

#4 WHY



**Libraries and
Modules is the
new best thing**



Angular framework has various **Libraries** that are grouped as modules in order to build an application. Angular applications are **Modular in nature** and are constructed by assembling various modules. Modules may have components, services, functions and or values.

#4 WHY

Hierarchical Dependency Injection

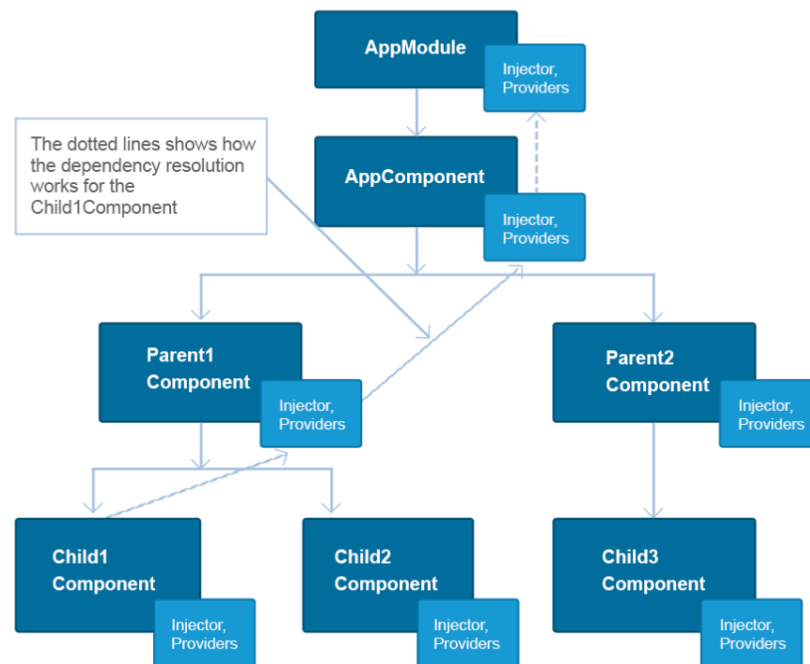
The Angular dependency injection system is hierarchical. There is a tree of injectors that parallel an app's component tree. You can reconfigure the injectors at any level of that component tree.

#4 WHY

Hierarchical Dependency Injection

Angular b
injectors
reconfigu
So, class
themself
external source.

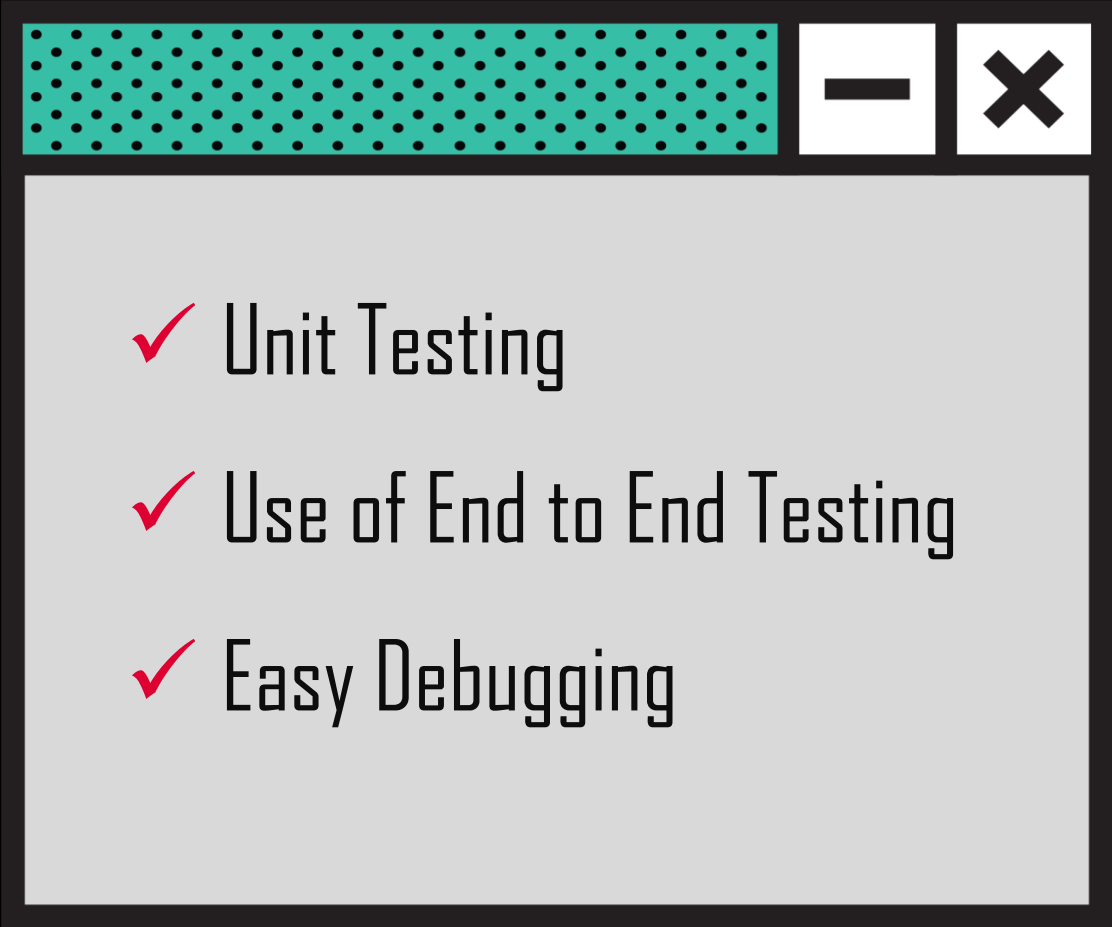
THE APPLICATION COMPONENT TREE



#4 WHY



Testing & Debugging

- 
- ✓ Unit Testing
 - ✓ Use of End to End Testing
 - ✓ Easy Debugging

#4 WHY



Support by
Google

- 
- ✓ Long-Term Support By Google
 - ✓ Big Community Worldwide

#4 WHY

4 reasons why all together

- ✓ Reusability
- ✓ Readability
- ✓ Unit-test Friendly
- ✓ Maintainability

#4 WHY


Versions Compatibility

"Which version am I using?" Angular is continuously being developed. It's not always backwards compatible and you might spend some time updating content or versions.

REMEMBER THAT



Up to date
Learning
Material



You can't always find updated Books, Tutorials
or other useful stuff for the current version.
But you can easily find useful blogs, videos etc
from the Community.

REMEMBER THAT

Update
Learn
Mate

But don't be disappointed so quickly!
Angular is still a very good choice to
invest time and start using it and
create Awesome Stuff! :)

s a bit
d Books,

REMEMBER THAT

THANK YOU!

- <https://www.madewithangular.com/>
- <https://www.wappalyzer.com/technologies/angular>
- <https://material.angular.io/>
- <https://material.angular.io/cdk/categories>
- <https://www.oreilly.com/library/view/angular-design-patterns/9781786461728/>
- <https://medium.com/ngx-rocket/the-missing-introduction-to-angular-and-modern-design-patterns-43e8815c2801>
- <https://www.smashingmagazine.com/2018/09/pwa-angular-6/>
- <https://angular.io/guide/architecture>
- <https://www.protractortest.org/#/>

USEFUL LINKS