

# Going to Production

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# Agenda

Linting

Tuning RxJS Requests

Enabling Production Mode

Basic Deployment

AOT Compiler

Tree Shaking & Bundling

Webpack

Optimistic Bundle Download



# Preparation Levels

## Minimal

Tune RxJS Requests  
Enable Prod Mode

## Full

Use AOT  
Bundle  
Minify  
Tree Shake

## Lazy Loading

Use Lazy Loaded  
Modules



# How Many Modules Should I Create?

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# Minification, Bundling, Code Splitting, and Tree Shaking

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# Minification

Source

```
export class orderService {  
  addOrder(order) {  
    ...  
  }  
  
  findOrder(id) {  
    ...  
  }  
}
```



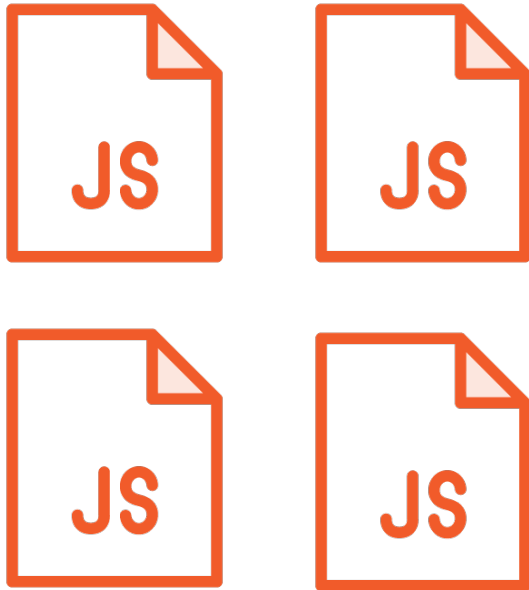
Service

```
export class orderService{add  
Order(order){...}findOrder(id){  
...}}
```



# Bundling

Development

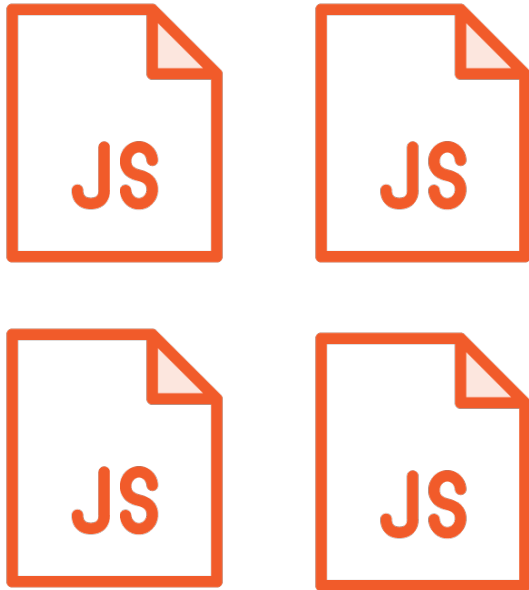


Production



# Code Splitting

Bundled



Split





# Tree Shaking

## Calling Code

```
...  
userService.getUsers()  
...
```



## Service

```
export class UserService {  
  getUsers() {  
    ...  
  }  
  
  getUser(id) {  
    ...  
  }  
}
```



# Bundler Options

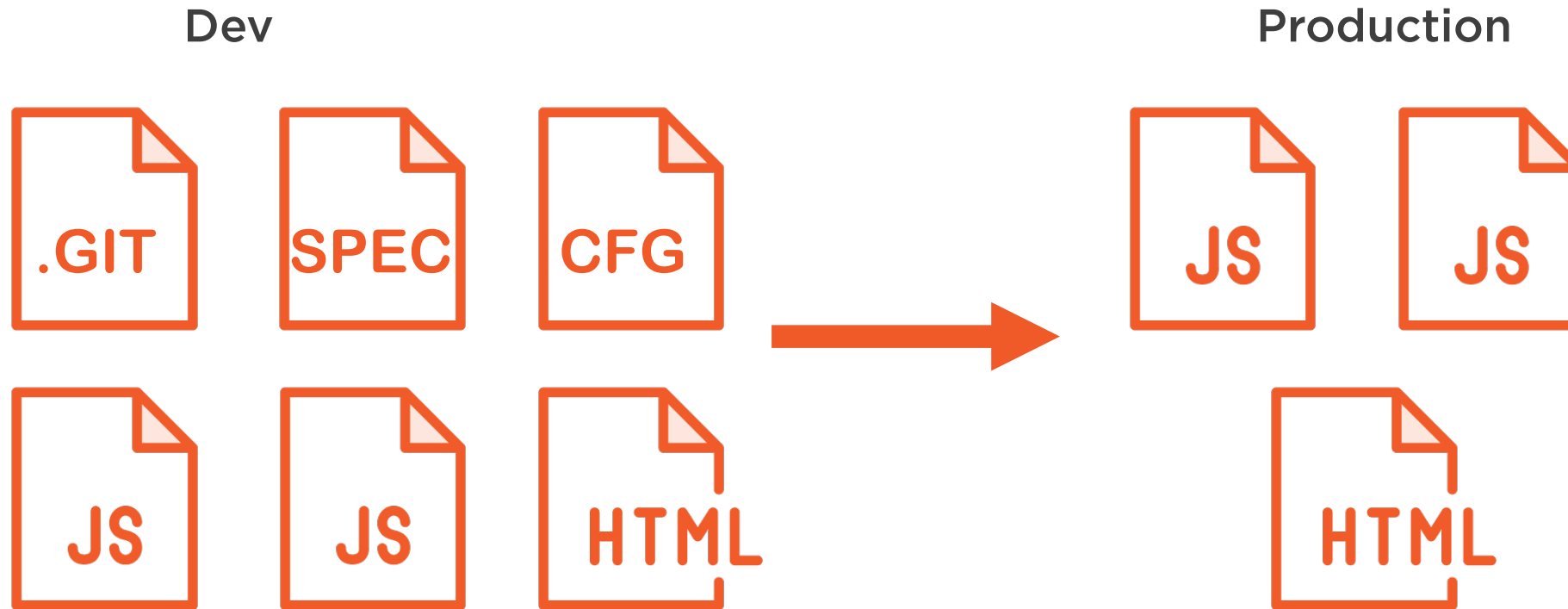
**SystemJS**

**Rollup**

**Webpack**



# Simple Copy Deployment



# AOT Benefits

**Faster Rendering**

**Fewer Requests**

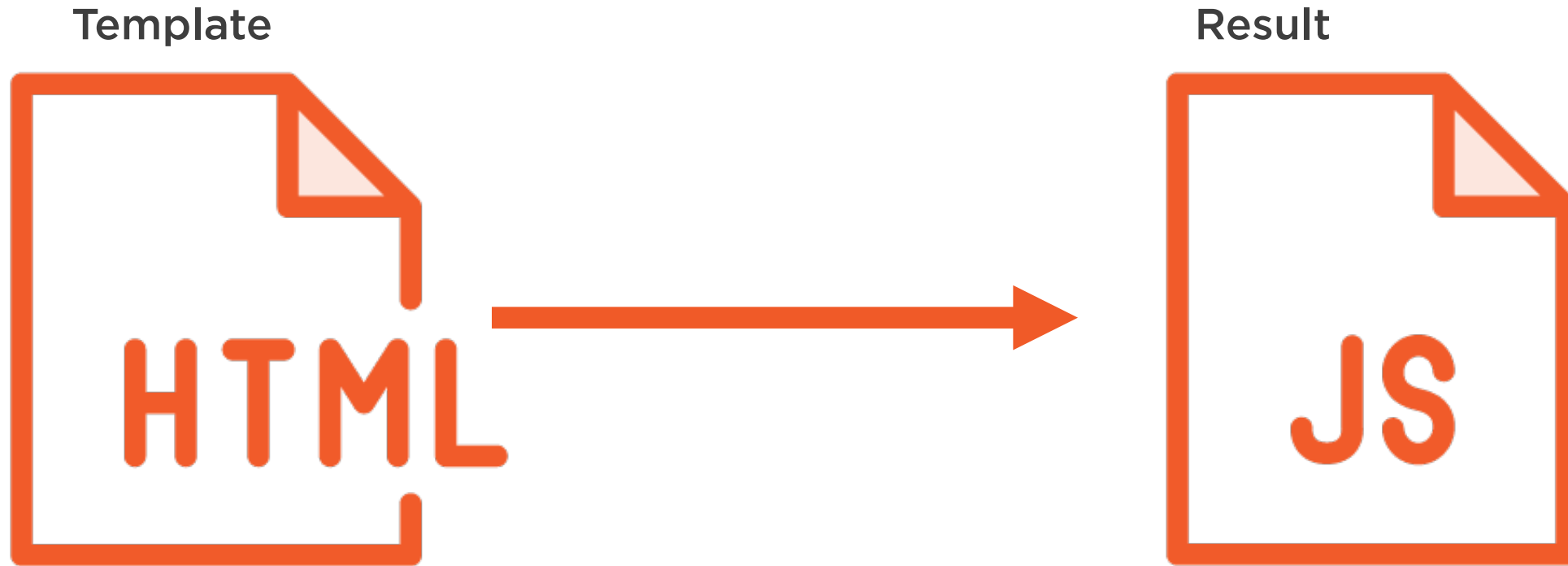
**Smaller Angular Framework Download**

**Detect Template Errors**

**Better Security**



# Compiling Templates



```
<div well-title>
  {{session.name}}
  <i *ngIf="session.voters.length > 3"
    class="glyphicon glyphicon-fire"
    style="color:red"></i>
</div>
```

Development = Just In Time Compiler

Much of Angular Needed in Browser is the Compiler

Takes Time to Compile Templates

Production = Ahead of Time Compiler



## AOT No-No's

`form.controls.controlName`

`control.errors?.someError`

Default exports

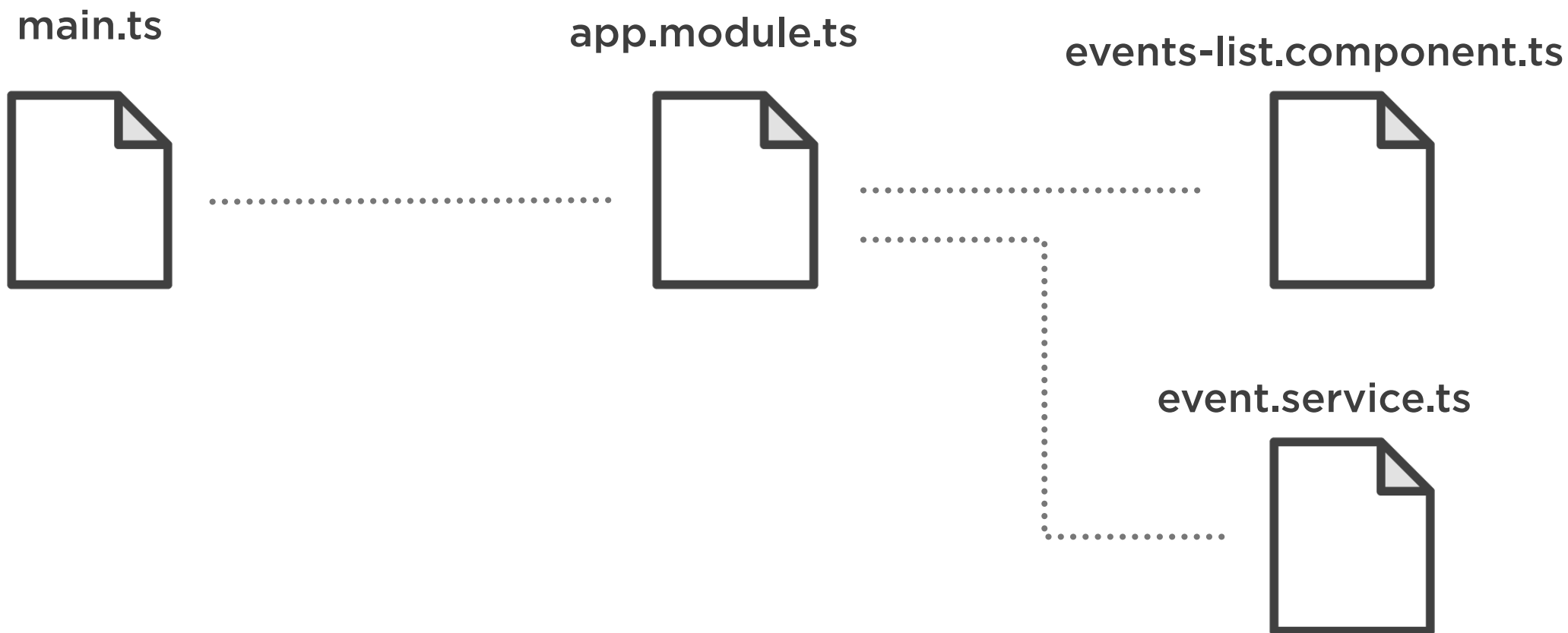
Functions in providers, routes or declarations of a module

Any field used in a template, including inputs, must be public

declare var for globals



# ES6 Module Tree





# Summary



Linting

RxJS Requests

Prod Mode

AOT

Bundling & Tree Shaking

Webpack

Optimistic Bundle Download



Thank You

