



# ANGULAR 2 FUNDAMENTALS

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*December 13, 2017*

# PART 18

# SUMMARY

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- We learned how frontend and backend works
- We learned 2 ways of building forms
- When creating a user for example what do we need?
  - User model
  - User service
  - User components
  - User forms
  - User crud
  - Backend services to accept and reply

# WE STILL HAVE A LONG WAY TO GO

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- For the more advance discussions:
  - Authentication front/end, backend
  - Local storage / sqlite (mobile)
  - Ionic

# AUTHENTICATION

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- Laravel has a quick guide for configuring authentication:
- The command is:

```
php artisan make:controller AuthController
```

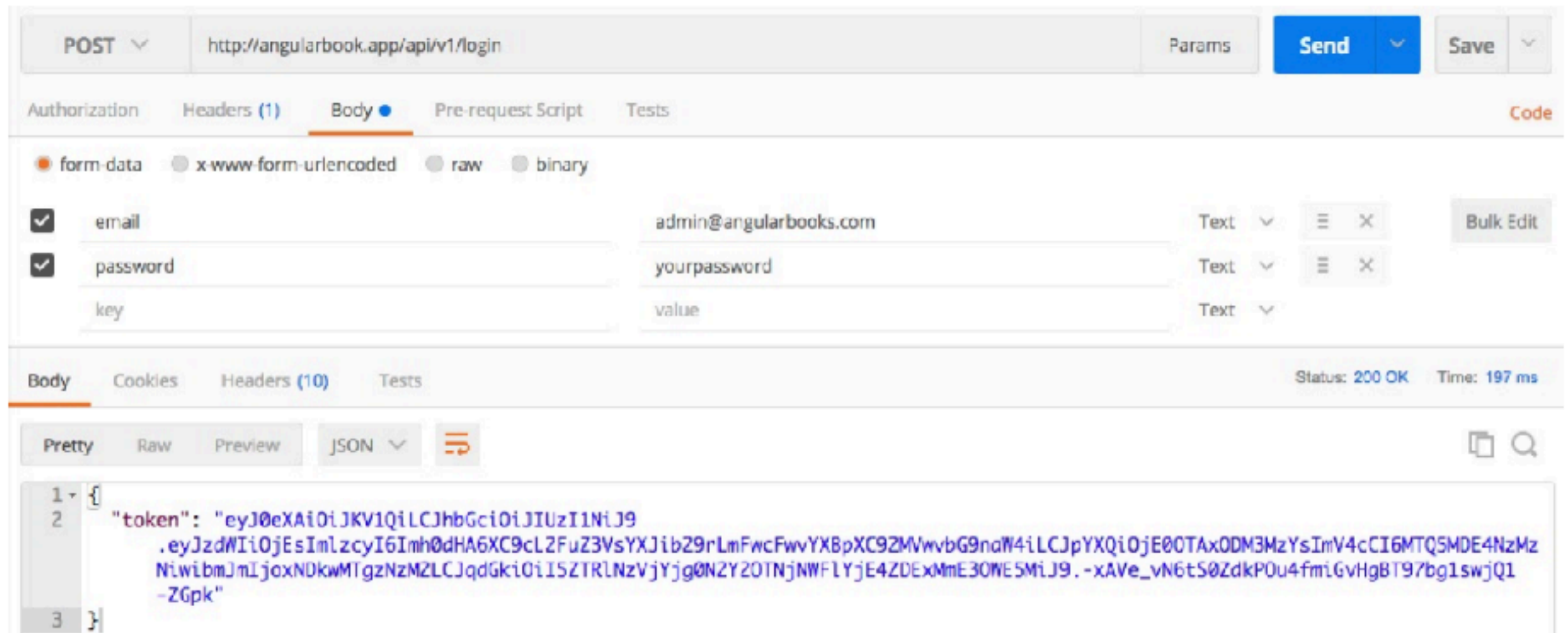
- <https://laravel.com/docs/5.5/authentication>



# TOKEN AUTHENTICATION IN LARAVEL

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- <https://github.com/tymondesigns/jwt-auth>
- After making this work you may test this in postman



# HANDLING IT IN ANGULAR

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- Create a login component
- Create an AuthService (sample code for guide purposes)

# LOGIN.COMPONENT.TS

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```
import { Component, OnInit } from '@angular/core';
import { FormBuilder, Validators, FormControl, FormGroup } from '@angular/forms';
import { AuthService } from '../services/auth.service';
import { Router } from '@angular/router';

@Component({
  selector: 'ng-login',
  templateUrl: './login.component.html',
  styleUrls: ['./login.component.css']
})
export class LoginComponent implements OnInit {
  userForm: FormGroup;
  passwordControl: FormControl;
  emailControl: FormControl;
  token: string;
```



# LOGIN.COMPONENT.TS

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```
status: string;
message: string;

static isValidEmail(control: FormControl) {
  const email_regexp = /^[a-z0-9!#$%&'*+\./=?^_`{|}~.-]+@[a-z0-9]([a-z0-9-]*[a-z0-9])?(\.[a-z0-9]([a-z0-9-]*[a-z0-9]))?$/i;

  return email_regexp.test(control.value) ? null : {
    invalidEmail: true
  };
}

constructor(fb: FormBuilder, private authService: AuthService, private router: Router) {
  this.passwordControl = fb.control('', [Validators.required, Validators.minLength(6)]);
  this.emailControl = fb.control('', [Validators.required, LoginComponent.isValidEmail]);

  this.userForm = fb.group({
    email: this.emailControl,
    password: this.passwordControl
  });
}
```

# LOGIN.COMPONENT.TS

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```
ngOnInit() {  
}  
  
login() {  
  this.authService.login(this.userForm.value)  
    .subscribe(  
    response => {  
      console.log(response);  
      if (response === true) {  
        this.router.navigate(['/admin']);  
      } else {  
        this.status = "error";  
        this.message = "Username or password is incorrect";  
      }  
    },  
    error => {  
      console.log(<any>error);  
      this.status = "error";  
      this.message = error['message'];  
    }  
  );  
}  
}
```

# STORING THE TOKEN

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- Using local storage

```
localStorage.setItem('token', this.token);
```

- Check out Angular JWT package to communicate and handle tokens in the frontend
- Sample using postman:
- Get <https://postman-echo.com/get?test=123>

# SAMPLE OF TOKEN IMPLEMENTATION (EMBEDDED IN HEADERS)

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Any DG Product over Nepal

POST ▾ | https://geobigdata.io/catalog/v1/search

Authorization | **Headers (2)** | Body | Pre-request script | Tests

<input checked="" type="checkbox"/>	Content-Type	application/json
<input checked="" type="checkbox"/>	Authorization	Bearer {{AccessToken}}
	Header	Value

← Add token here

# SAMPLE OF TOKEN IMPLEMENTATION (IN URL)

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The screenshot displays a REST client interface for a POST request to `https://api-qa.ucsd.edu:8243/token`. The request is configured with the `x-www-form-urlencoded` body type. The body contains two fields: `grant_type` (checked) and `client_credentials`. The response status is `200 OK` with a response time of `248 ms`. The response body is shown in JSON format, containing the following fields:

```
{
  "scope": "am_application_scope default",
  "token_type": "bearer",
  "expires_in": 3600,
  "access_token": "7d2704a91ecc439a830e4cfa859539"
}
```

The `access_token` value, `"7d2704a91ecc439a830e4cfa859539"`, is highlighted with a red oval.

# DEPLOYING ANGULAR APPLICATION

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- Run `ng build --prod`
- The source project will be inside the `dist` folder which can be pushed to your web server



# IONIC FRAMEWORK

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- Install required modules
- `npm install -g ionic cordova`
- `ionic start MyIonicProject tutorial`

```
✓ Downloading and extracting tutorial starter - done!

? Would you like to integrate your new app with Cordova to target native iOS and Android? Yes
✓ Personalizing ionic.config.json and package.json - done!
> ionic integrations enable cordova --quiet
✓ Downloading integration cordova - done!
✓ Copying integrations files to project - done!
[OK] Added cordova integration!

Installing dependencies may take several minutes.

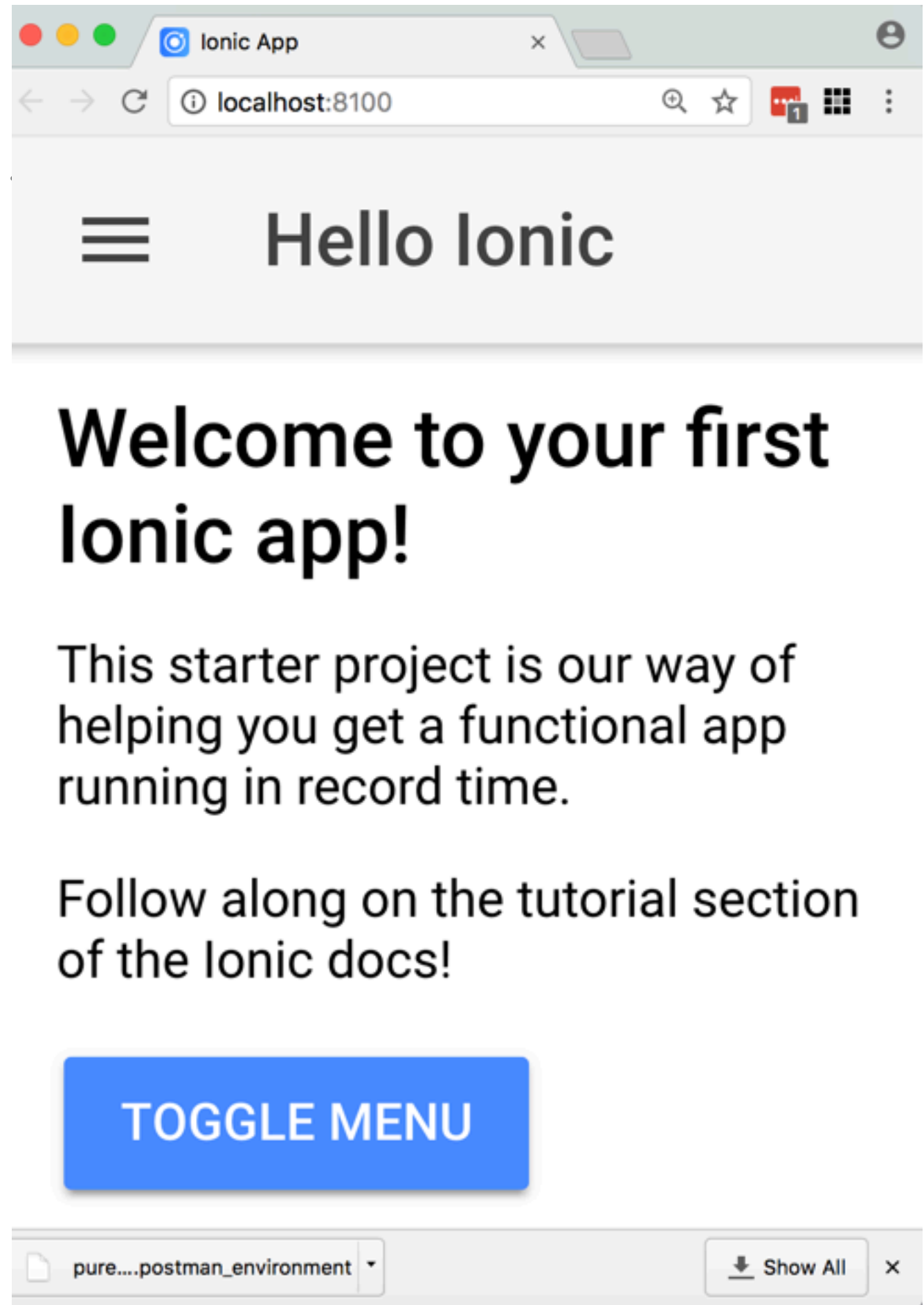
: a layout with a swipeable menu on the side
: a bare starter with a single page
Speed up development with the Ionic DevApp, our fast, on-device testing mobile app
: a guided starter project
- Test on iOS and Android without Native SDKs
- LiveReload for instant style and JS updates
Specify a template by running ionic start MyIonicProject , the tabs
--> Install DevApp: https://bit.ly/ionic-dev-app <--

> npm i
└ Running command
```

# RUN APP

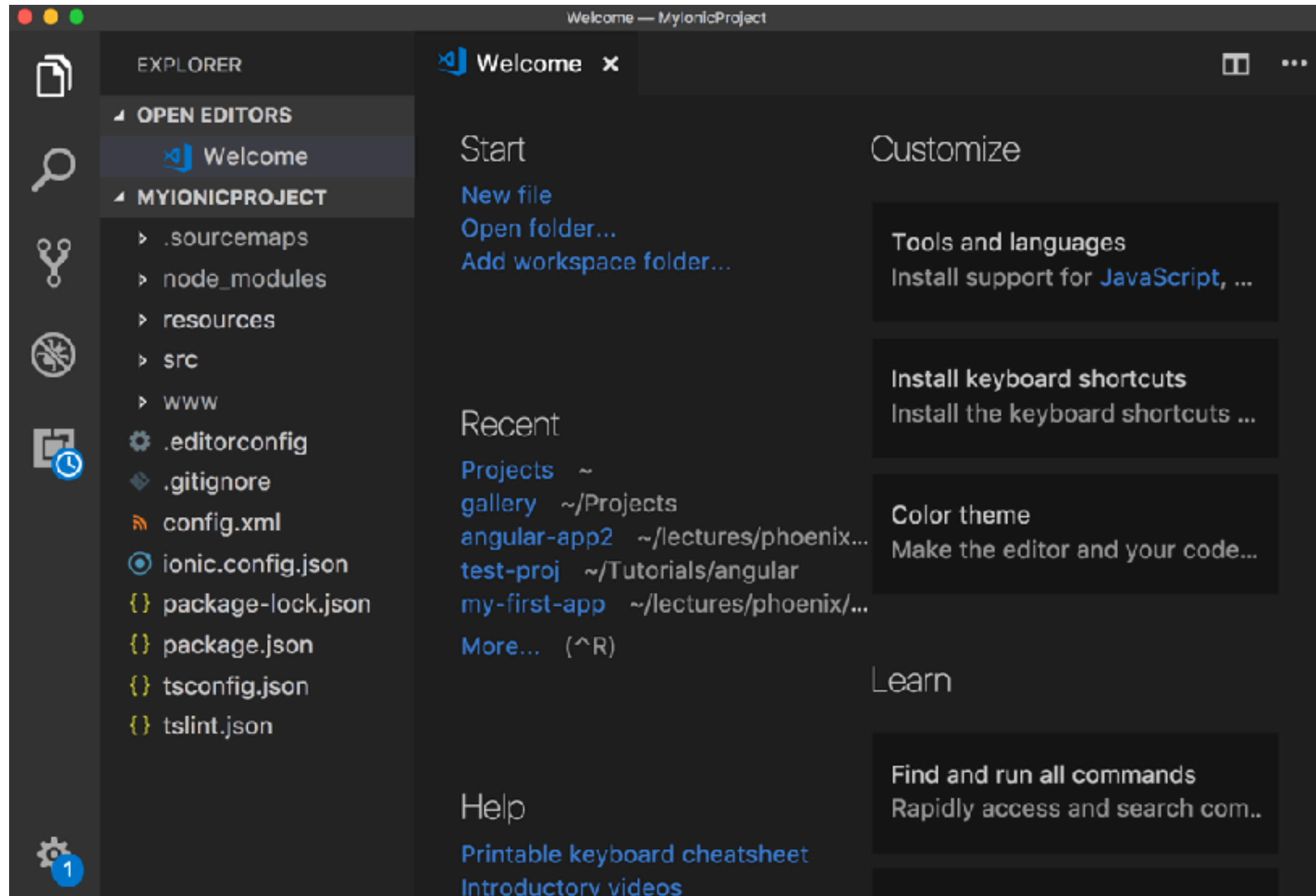
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- `cd MyIonicProject`
- `ionic serve`



# ITS ALSO ANGULAR INSIDE

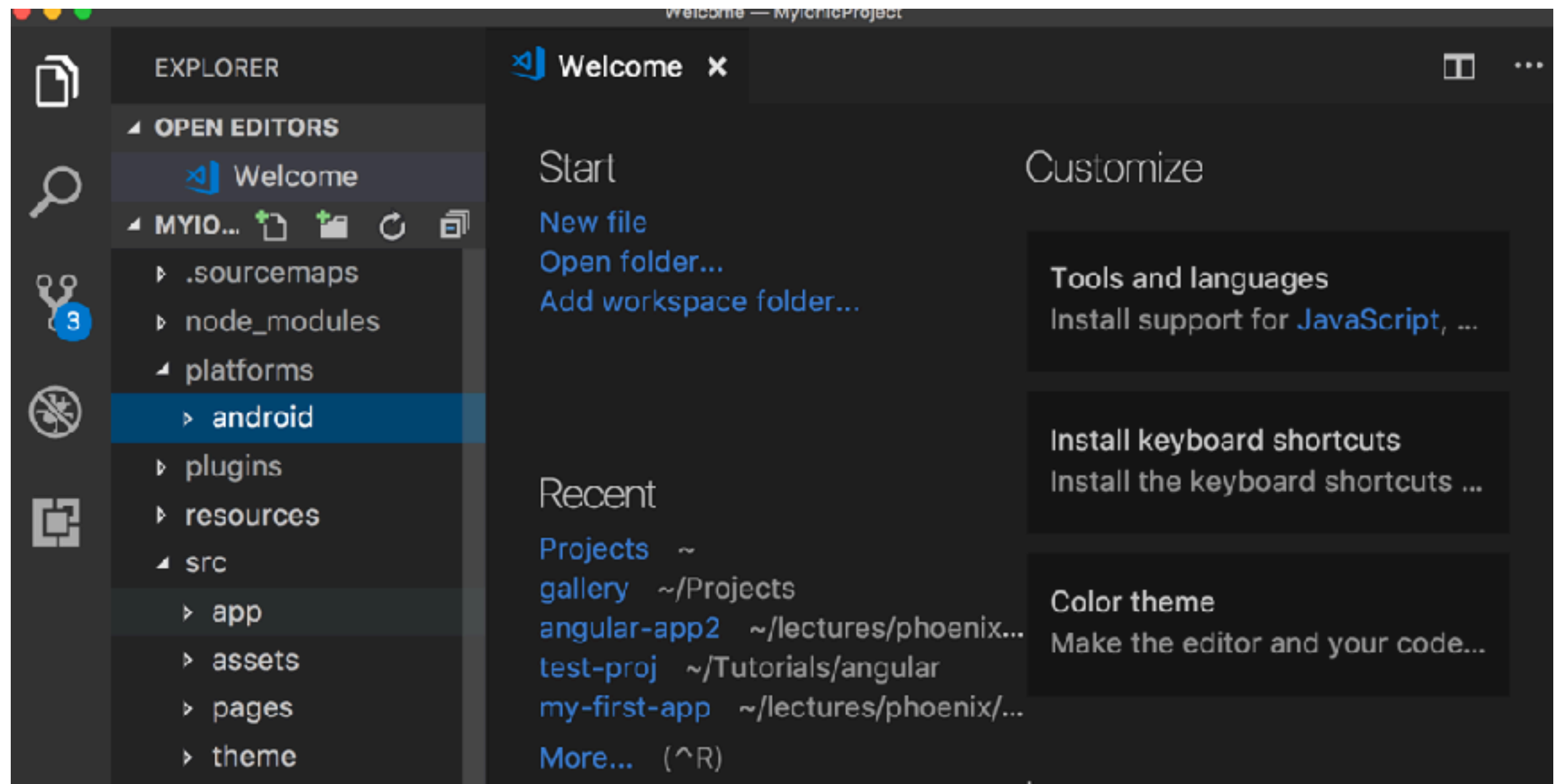
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# GET ANDROID

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- cordova platform add android



# IONIC BUILD TO BUILD AND ANDROID PROGRAM

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- ionic cordova build --release android

```
Running app scripts...
[12:28:18] build dev started ...
[12:28:18] clean started ...
[12:28:18] clean finished in 2 ms
[12:28:18] copy started ...
[12:28:18] deeplinks started ...
[12:28:18] deeplinks finished in 19 ms
[12:28:18] transpile started ...
[12:28:21] transpile finished in 2.86 s
[12:28:21] preprocess started ...
[12:28:21] preprocess finished in less than 1 ms
[12:28:21] webpack started ...
[12:28:21] copy finished in 3.00 s
[12:28:26] webpack finished in 5.10 s
[12:28:26] sass started ...
```

# YOUR APK IS READY!

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- Send it to app store
- Or send ask to your friends



# IT WAS A PLEASURE GUYS!

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- You may reach me at for your questions
  - [james.to@torgph.com](mailto:james.to@torgph.com)
  - [james.to@nextbank.ph](mailto:james.to@nextbank.ph)
  - 09188980708
- Good luck and keep on upgrading your skills

**END OF PART 18**