

CODECAMP_ CLUJ-NAPOCA

/ 13 April 2019
/ Grand Hotel Italia

Global partners



Diamond partners



Platinum partners



Gold partners



Entrepreneurship



Media partners



Wellness partners



Travel partners



RomaniaTransfers.eu
operated by travis

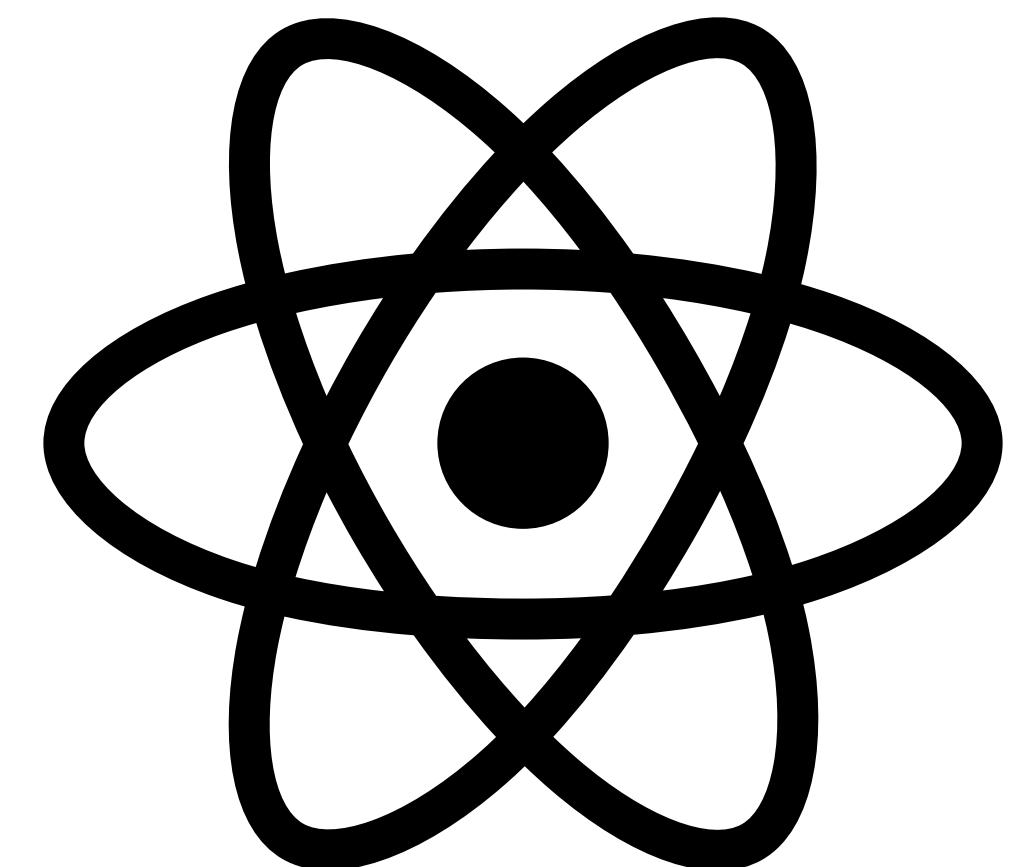
Liked by



Build, release and chill:
a one-liner deploy to App Store

hello 

around 25

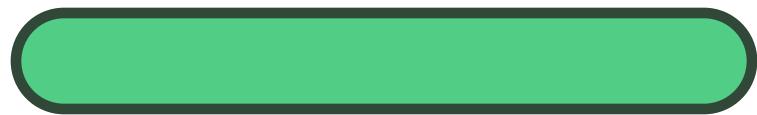


e-commerce app

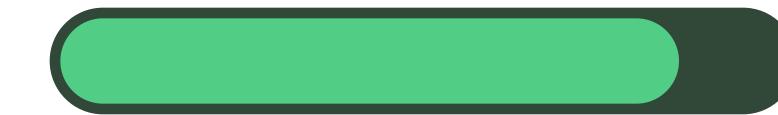
Fun



Repetitive



Annoying





```
$ fastlane ios beta --env=production
```

```
$ fastlane ios beta --env=production
```



**Manual build
& config**

**Add
environment
files**

**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**

**Manual build
& config**

**Add
environment
files**



**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**

**Manual build
& config**

**Add
environment
files**

**Setup for
automated
builds**



**Add
Fastlane**

**Final
thoughts**

**Manual build
& config**

**Add
environment
files**

**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**



**Manual build
& config**

**Add
environment
files**

**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**



**If I have to manually
make a build ...**

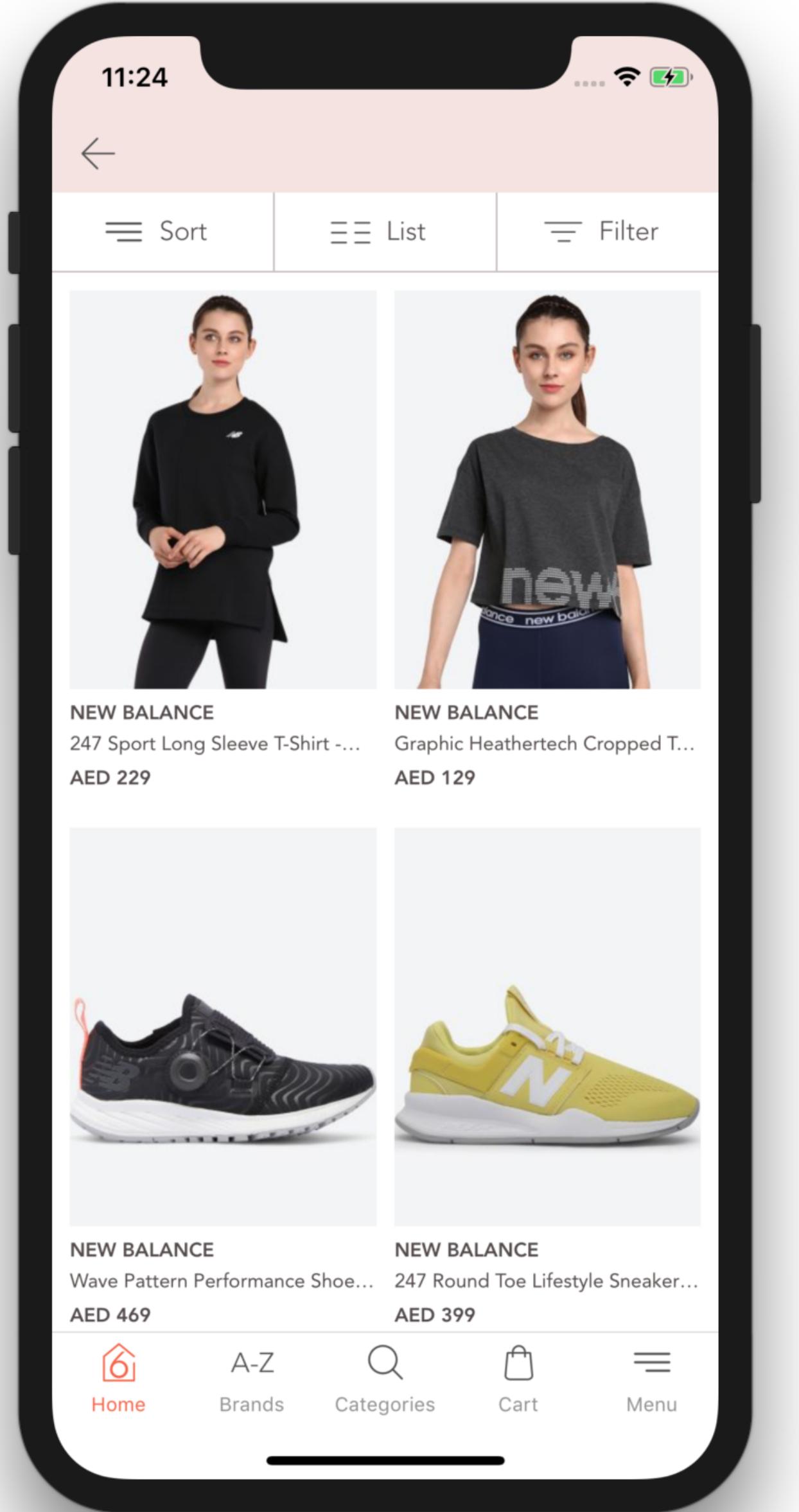
Once a month 😊

Once a week 😊

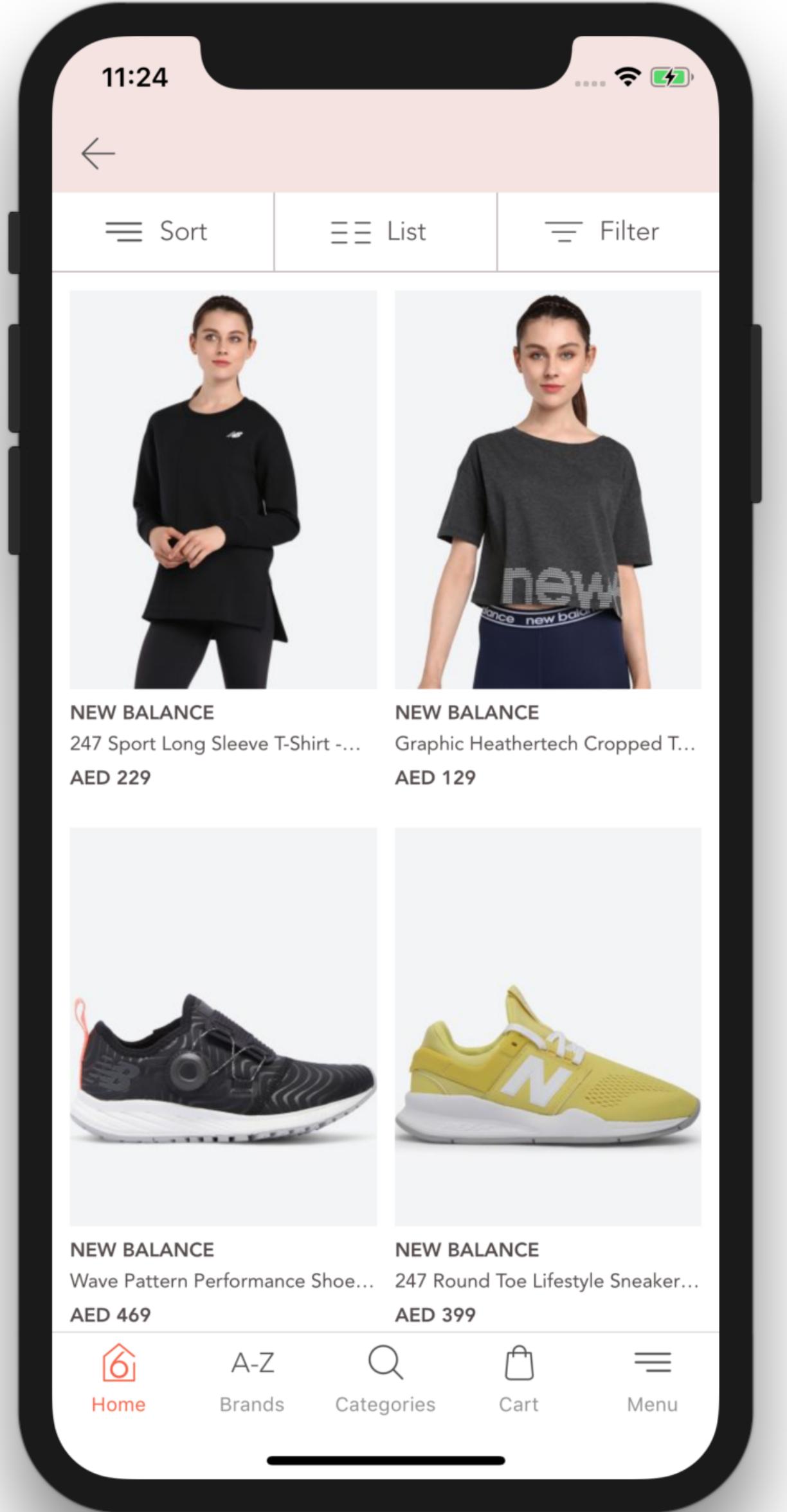
Once a day... well 😕

Multiple times a day ... 😞



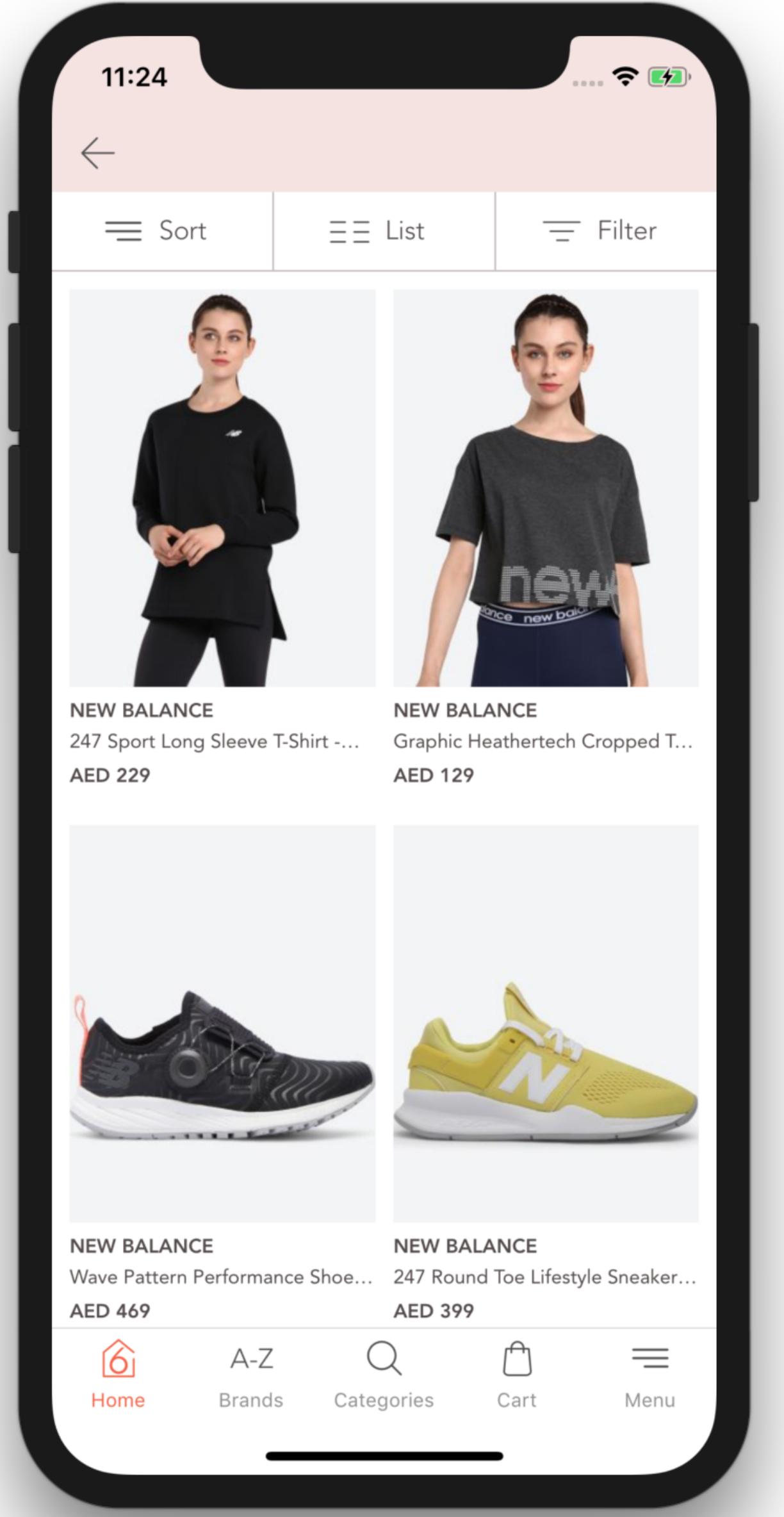


iPhone X - 12.1



iPhone X - 12.1

RESTful API



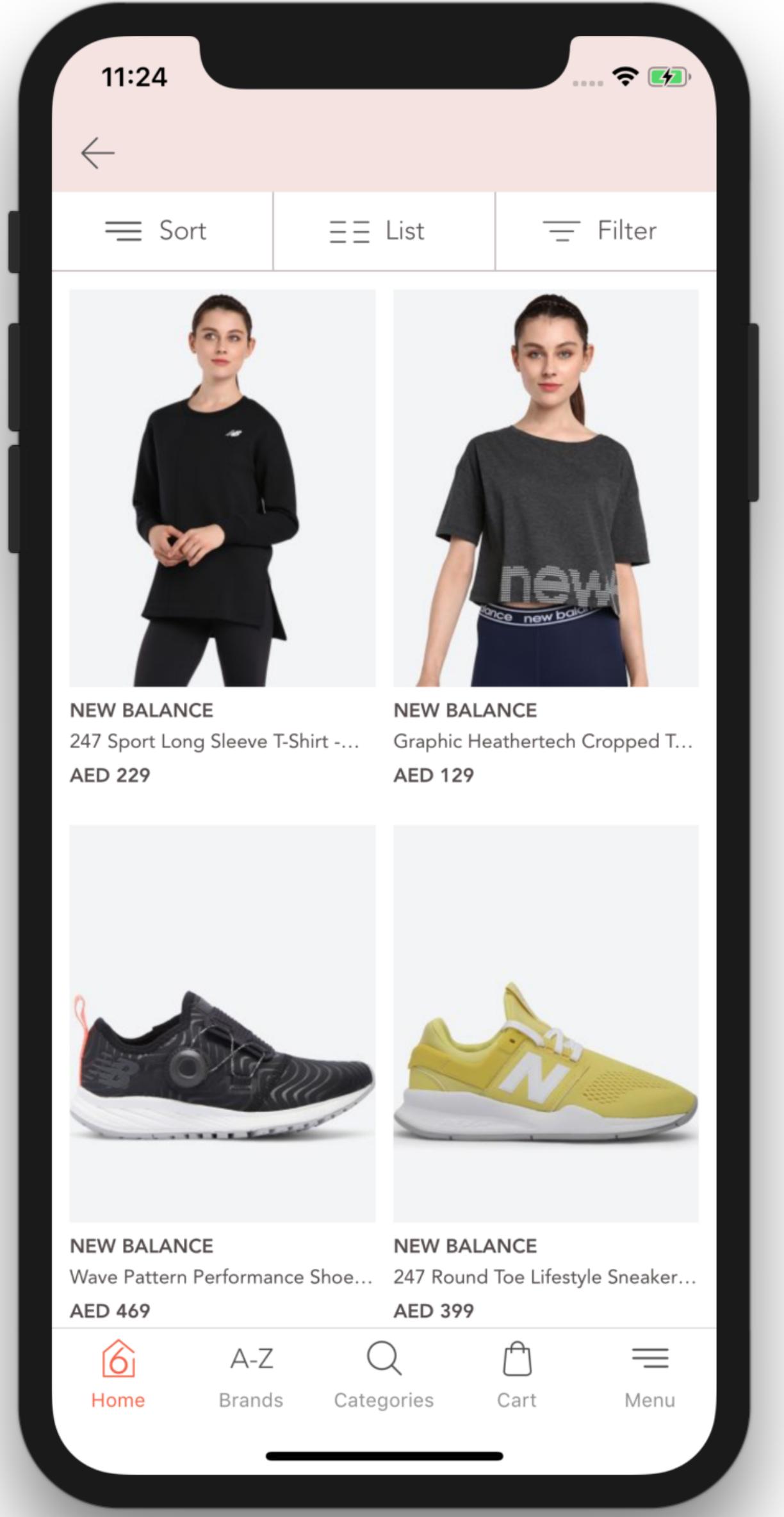
RESTful API

branch

New Relic®

Firebase

checkout.com



RESTful API

3 environments

.dev

.staging

.production



**Manual build
& config**

**Add
environment
files**

**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**

```
const config = {
  API_HOST: 'http://localhost:3000'
}

export default config
```

```
const config = {
  API_HOST: 'http://localhost:3000',
  PAYMENT_HOST: 'https://sandbox.checkout.com/api2/v2',
  PAYMENT_KEY: 'pk_test_ppp4yprals-15vc2s5uap-e2c07asg2k'
}

export default config
```

```
const config = {
  API_HOST: 'http://localhost:3000',
  PAYMENT_HOST: 'https://sandbox.checkout.com/api2/v2',
  PAYMENT_KEY: 'pk_test_ppp4yprals-15vc2s5uap-e2c07asg2k',
  FIREBASE_SENDER_ID: 1552448509
}

export default config
```

```
const config = {
  API_HOST: 'http://localhost:3000',
  PAYMENT_HOST: 'https://sandbox.checkout.com/api2/v2',
  PAYMENT_KEY: 'pk_test_ppp4yprals-15vc2s5uap-e2c07asg2k',
  FIREBASE_SENDER_ID: 1552448509,
  BRANCH_KEY: 'key_live_DZlhm3Hd9686pnQwEMUauKzb7h0Dzg',
  NEW_RELIC_TOKEN: 'AA0hh7ifNT1HfIwNJR5TlyM6o3WlViKz4Cn0wGuv0Z'
}

export default config
```

QA needs a
.staging build

```
const config = {
  API_HOST: 'http://localhost:3000',
  PAYMENT_HOST: 'https://sandbox.checkout.com/api2/v2',
  PAYMENT_KEY: 'pk_test_ppp4yprals-15vc2s5uap-e2c07asg2k',
  FIREBASE_SENDER_ID: 1552448509,
  BRANCH_KEY: 'key_live_DZlhm3Hd9686pnQwEMUauKzb7h0Dzg',
  NEW_RELIC_TOKEN: 'AA0hh7ifNT1HfIwNJR5TlyM6o3WlViKz4Cn0wGuv0Z'
}

export default config
```

archive



**upload to
TestFlight**



set changelog

`cd android`



`./gradlew
assembleRelease`



`upload to
Google Play
Console`

done! 





**Manual build
& config**

**Add
environment
files**

**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**

**Manual build
& config**

**Add
environment
files**



**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**

```
$ yarn add react-native-config
```

.dev

.staging

.production

// .env

IS_PRODUCTION=false

API_HOST='http://localhost:3000'

PAYMENT_HOST='https://sandbox.checkout.com/api2/v2'

PAYMENT_KEY='pk_test_ppp4yprals-15vc2s5uap-e2c07asg2k'

FIREBASE_SENDER_ID=1552448509

BRANCH_KEY='key_live_DZlhm3Hd9686pnQwEMUauKzb7h0Dzg'

NEW_RELIC_TOKEN='AA0hh7ifNT1HfIwNJR5TlyM6o3WlViKz4Cn0wGuv0Z'

```
// .env
```

```
IS_PRODUCTION=false
```

```
API_HOST='http://localhost:3000'
```

```
PAYMENT_HOST='https://sandbox.checkout.com/api2/v2'
```

```
PAYMENT_KEY='pk_test_ppp4yprals-15vc2s5uap-e2c07asg2k'
```

```
FIREBASE_SENDER_ID=1552448509
```

```
BRANCH_KEY='key_live_DZlhm3Hd9686pnQwEMUauKzb7h0Dzg'
```

```
NEW_RELIC_TOKEN='AA0hh7ifNT1HfIwNJR5TlyM6o3WlViKz4Cn0wGuv0Z'
```

```
// .env
```

```
IS_PRODUCTION=false
```

```
API_HOST='http://localhost:3000'
```

```
PAYMENT_HOST='https://sandbox.checkout.com/api2/v2'
```

```
PAYMENT_KEY='pk_test_ppp4yprals-15vc2s5uap-e2c07asg2k'
```

```
FIREBASE_SENDER_ID=1552448509
```

```
BRANCH_KEY='key_live_DZlhm3Hd9686pnQwEMUauKzb7h0Dzg'
```

```
NEW_RELIC_TOKEN='AA0hh7ifNT1HfIwNJR5TlyM6o3WlViKz4Cn0wGuv0Z'
```

```
// .env.staging
```

```
IS_PRODUCTION=false
```

```
API_HOST='http://api.staging.foobar.com'
```

```
( . . . )
```

```
// .env.production
```

```
IS_PRODUCTION=true
```

```
API_HOST='https://api.foobar.com'
```

```
( . . . )
```

```
import env from 'react-native-config'

const config = {
  API_HOST: env.API_HOST,
  PAYMENT_HOST: env.PAYMENT_HOST,
  PAYMENT_KEY: env.PAYMENT_KEY,
  FIREBASE_SENDER_ID: env.FIREBASE_SENDER_ID,
  BRANCH_KEY: env.BRANCH_KEY,
  NEW_RELIC_TOKEN: env.NEW_RELIC_TOKEN
}

export default config
```

```
$ ENVFILE=.env.staging react-native run-ios
```

**Manual build
& config**

**Add
environment
files**



**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**

**Manual build
& config**

**Add
environment
files**

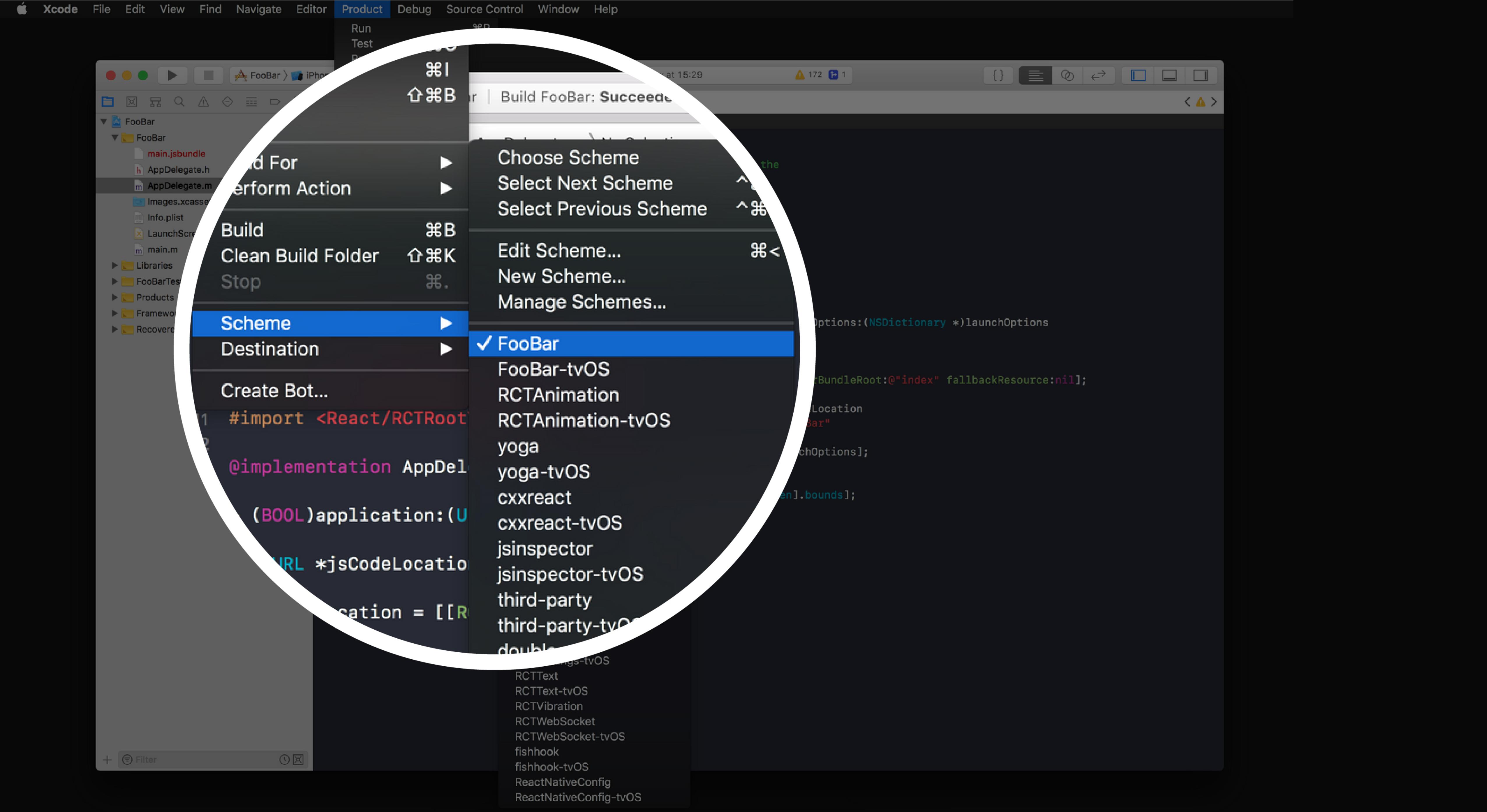
**Setup for
automated
builds**



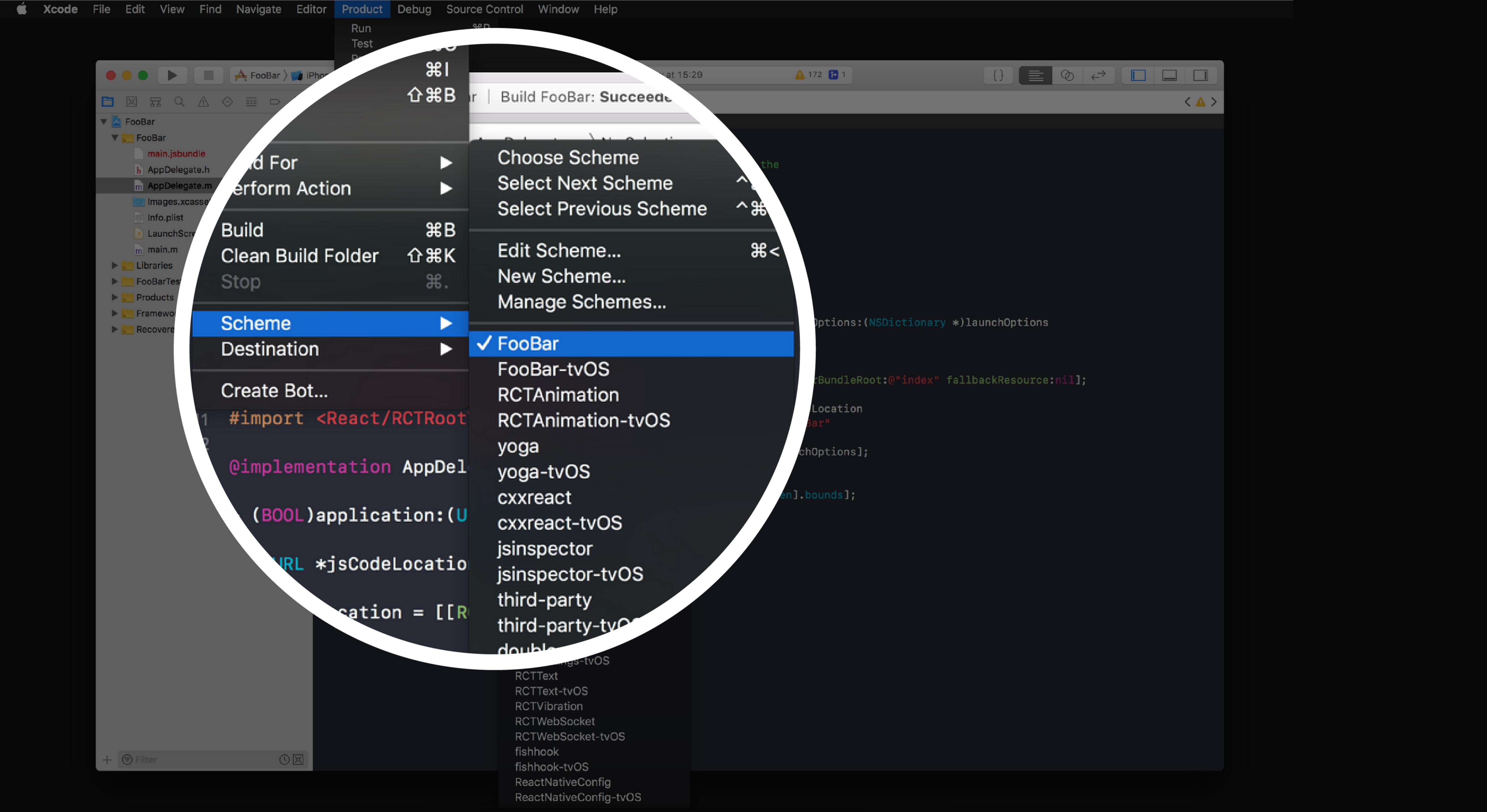
**Add
Fastlane**

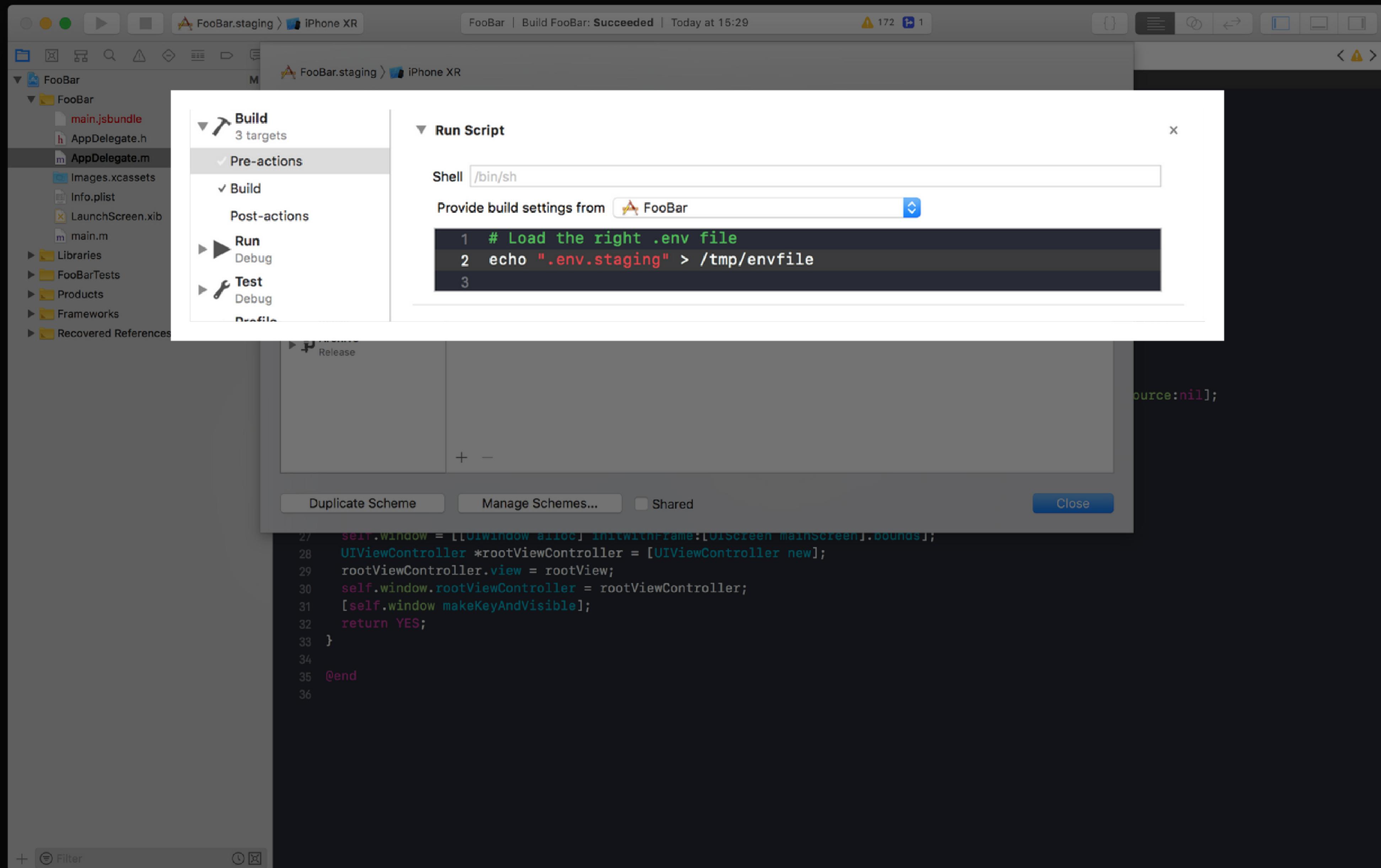
**Final
thoughts**

iOS setup



foo, bar
metasyntactic variables





Android setup

```
// android/app/build.gradle

buildTypes {
    release {
        minifyEnabled enableProguardInReleaseBuilds
        proguardFiles getDefaultProguardFile("proguard-android.txt"), "proguard-rules.pro"
        signingConfig signingConfigs.release
    }
    debug {
        debuggable true
    }
}
```

```
// android/app/build.gradle

buildTypes {
    release {
        minifyEnabled enableProguardInReleaseBuilds
        proguardFiles getDefaultProguardFile("proguard-android.txt"), "proguard-rules.pro"
        signingConfig signingConfigs.release
    }
    debug {
        debuggable true
    }
}
```

```
// android/app/build.gradle

buildTypes {
    release {
        minifyEnabled enableProguardInReleaseBuilds
        proguardFiles getDefaultProguardFile("proguard-android.txt"), "proguard-rules.pro"
        signingConfig signingConfigs.release
    }
    debug {
        debuggable true
    }
}
```

```
// android/app/build.gradle

buildTypes {
    release {
        minifyEnabled enableProguardInReleaseBuilds
        proguardFiles getDefaultProguardFile("proguard-android.txt"), "proguard-rules.pro"
        signingConfig signingConfigs.release
    }
    debug {
        debuggable true
    }
    stagingrelease {
        initWith release
    }
    productionrelease {
        initWith release
    }
}
```

```
// android/app/build.gradle

project.ext.envConfigFiles = [
    debug: ".env",
    release: ".env",
    stagingrelease: ".env.staging",
    productionrelease: ".env.production"
]

apply from: project(':react-native-config').projectDir.getPath() + "/dotenv.gradle"
```

```
// android/app/build.gradle

project.ext.envConfigFiles = [
    debug: ".env",
    release: ".env",
    stagingrelease: ".env.staging",
    productionrelease: ".env.production"
]

apply from: project(':react-native-config').projectDir.getPath() + "/dotenv.gradle"
```

```
// android/app/build.gradle

project.ext.envConfigFiles = [
    debug: ".env",
    release: ".env",
    stagingrelease: ".env.staging",
    productionrelease: ".env.production"
]

apply from: project(':react-native-config').projectDir.getPath() + "/dotenv.gradle"
```

done! 

one-liner script?



**Manual build
& config**

**Add
environment
files**

**Setup for
automated
builds**



**Add
Fastlane**

**Final
thoughts**

**Manual build
& config**

**Add
environment
files**

**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**



fastlane - App automation done right

https://fastlane.tools

Paused

fastlane

USE FASTLANE INTEGRATIONS HOW IT WORKS CONTRIBUTE DOCS

App automation done right

The easiest way to build and release mobile apps.
fastlane handles tedious tasks so you don't have to.

DEVELOPER HOURS SAVED

17,029,412

Automate your development and release process

fastlane is an open source platform aimed at simplifying Android and iOS deployment.
fastlane lets you automate every aspect of your development and release workflow.

```
// fastlane/Fastfile
```

```
platform :ios do
```

```
end
```

```
end
```

```
// fastlane/Fastfile

platform :ios do
  desc "Test environment files"
  lane :test do
    end
  end
end
```

```
// .env.staging
```

```
IS_PRODUCTION=false
```

```
API_HOST='http://api.staging.foobar.com'
```

```
PAYMENT_HOST='https://sandbox.checkout.com/api2/v2'
```

```
PAYMENT_KEY='pk_test_ppp4yprals-15vc2s5uap-e2c07asg2k'
```

```
FIREBASE_SENDER_ID=1552448509
```

```
BRANCH_KEY='key_live_DZlhm3Hd9686pnQwEMUauKzb7h0Dzg'
```

```
NEW_RELIC_TOKEN='AA0hh7ifNT1HfIwNJR5TlyM6o3WlViKz4Cn0wGuv0Z'
```

```
// fastlane/Fastfile

platform :ios do
  desc "Test environment files"
  lane :test do

    api_environment = "staging"

  end
end
```

```
// fastlane/Fastfile

platform :ios do
  desc "Test environment files"
  lane :test do

    api_environment = "staging"

    if ENV["IS_PRODUCTION"] == "true"
      api_environment = "production"
    end

  end
end
```

```
// fastlane/Fastfile

platform :ios do
  desc "Test environment files"
  lane :test do

    api_environment = "staging"

    if ENV["IS_PRODUCTION"] == "true"
      api_environment = "production"
    end

    ENV["ENVFILE"]=".env.{api_environment}"
  end
end
```

```
// fastlane/Fastfile

platform :ios do
  desc "Test environment files"
  lane :test do

    api_environment = "staging"

    if ENV["IS_PRODUCTION"] == "true"
      api_environment = "production"
    end

    ENV["ENVFILE"]=".env.#{api_environment}"

    puts "API_HOST: #{ENV['API_HOST']}"
    puts "IS_PRODUCTION: #{ENV['IS_PRODUCTION']}"
    puts "ENVFILE: #{ENV['ENVFILE']}"

  end
end
```

```
$ fastlane ios test
```

```
$ fastlane ios test --env=staging
```

```
$ fastlane ios test --env=staging

[16:21:24]: Loading from './.env.staging'
[16:21:24]: Driving the lane 'ios test' 🚶
[16:21:24]: API_HOST: http://api.staging.foobar.com
[16:21:24]: IS_PRODUCTION: false
[16:21:24]: ENVFILE: .env.staging
[16:21:24]: fastlane.tools finished successfully 🎉
```

```
// fastlane/Fastfile

platform :ios do
  desc "Test environment files"
  lane :test do
    ( . . . )
  end
end
```

```
// fastlane/Fastfile

platform :ios do
  desc "Submit a new build to TestFlight"
  lane :beta do
    ( . . . )
  end
end
```

```
// fastlane/Fastfile
// 'beta' lane

increment_version_number(
    xcodeproj: './ios/FooBar.xcodeproj',
    bump_type: "patch",
    # bump_type: "minor",
    # bump_type: "major",
    # version_number: "1.0.0"
)

increment_build_number(
    xcodeproj: './ios/FooBar.xcodeproj',
    # build_number: '74'
)
```

```
// fastlane/Fastfile
// 'beta' lane

increment_version_number(
    xcodeproj: './ios/FooBar.xcodeproj',
    bump_type: "patch",
    # bump_type: "minor",
    # bump_type: "major",
    # version_number: "1.0.0"
)

increment_build_number(
    xcodeproj: './ios/FooBar.xcodeproj',
    # build_number: '74'
)
```

```
// fastlane/Fastfile
// 'beta' lane

increment_version_number(
    xcodeproj: './ios/FooBar.xcodeproj',
    bump_type: "patch",
    # bump_type: "minor",
    # bump_type: "major",
    # version_number: "1.0.0"
)

increment_build_number(
    xcodeproj: './ios/FooBar.xcodeproj',
    # build_number: '74'
)
```

```
// fastlane/Fastfile
// 'beta' lane

gym(
  project: './ios/FooBar.xcodeproj',
  scheme: "FooBar.{api_environment}"
)
```

```
// fastlane/Fastfile
// 'beta' lane

gym(
  project: './ios/FooBar.xcodeproj',
  scheme: "FooBar.{api_environment}"
)
```

```
// fastlane/Fastfile
// 'beta' lane

pilot(
  app_identifier: "dev.codecamp.foobar",
  email: "calin.tamas@around25.com",
  first_name: "Calin",
  last_name: "Tamas",
  ipa: "./Foobar.ipa",
  skip_submission: true,
  skip_waiting_for_build_processing: false
)
```

```
// fastlane/Fastfile
// 'beta' lane

pilot(
    app_identifier: "dev.codecamp.foobar",
    email: "calin.tamas@around25.com",
    first_name: "Calin",
    last_name: "Tamas",
    ipa: "./Foobar.ipa",
    skip_submission: true,
    skip_waiting_for_build_processing: false
)
```

```
// fastlane/Fastfile
// 'beta' lane

pilot(
    app_identifier: "dev.codecamp.foobar",
    email: "calin.tamas@around25.com",
    first_name: "Calin",
    last_name: "Tamas",
    ipa: "./Foobar.ipa",
    skip_submission: true,
    skip_waiting_for_build_processing: false
)
```

```
// fastlane/Fastfile
// 'beta' lane

pilot(
  app_identifier: "dev.codecamp.foobar",
  email: "calin.tamas@around25.com",
  first_name: "Calin",
  last_name: "Tamas",
  ipa: "./Foobar.ipa",
  skip_submission: true,
  skip_waiting_for_build_processing: false
)
```

```
// fastlane/Fastfile
// 'beta' lane

pilot(
  app_identifier: "dev.codecamp.foobar",
  email: "calin.tamas@around25.com",
  first_name: "Calin",
  last_name: "Tamas",
  ipa: "./FooBar.ipa",
  skip_submission: true,
  skip_waiting_for_build_processing: false
)
```

```
// fastlane/Fastfile
// 'beta' lane

version_number = get_version_number(
  xcodeproj: './ios/FooBar.xcodeproj'
)

build_number = get_build_number(
  xcodeproj: './ios/FooBar.xcodeproj'
)
```

```
// fastlane/Fastfile
// 'beta' lane

version_number = get_version_number(
  xcodeproj: './ios/FooBar.xcodeproj'
)

build_number = get_build_number(
  xcodeproj: './ios/FooBar.xcodeproj'
)
```

```
// fastlane/Fastfile
// 'beta' lane

slack_message = "iOS #{version_number} (#{build_number}) successfully uploaded to iTunesConnect."
```

```
// fastlane/Fastfile
// 'beta' lane

slack(
  message: slack_message,
  slack_url: "https://hooks.slack.com/services/6H9Q0R9QPG",
  default_payloads: [],
  attachment_properties: {
    fields: [
      {
        title: "API",
        value: api_environment
      }
    ]
  }
)
```

let's run the script 

```
$ fastlane ios beta --env=production
```



fastlane APP 7:14 PM

iOS 2.7.0 (135) successfully uploaded to iTunesConnect.

API

production

```
// fastlane/Fastfile
// 'beta' lane
// for Android

android_set_version_name(
    version_name: "1.0.0",
    gradle_file: gradle_file
)

android_set_version_code(
    gradle_file: gradle_file
)

gradle(
    project_dir: './android',
    task: 'assemble',
    build_type: 'release'
)

supply(
    json_key: 'google_play_console_key',
    track: 'beta',
    apk: './android/app/build/outputs/apk/release/app-release.apk',
    package_name: app_identifier
)
```

```
// fastlane/Fastfile
// 'beta' lane
// for Android

android_set_version_name(
    version_name: "1.0.0",
    gradle_file: gradle_file
)

android_set_version_code(
    gradle_file: gradle_file
)

gradle(
    project_dir: './android',
    task: 'assemble',
    build_type: 'release'
)

supply(
    json_key: 'google_play_console_key',
    track: 'beta',
    apk: './android/app/build/outputs/apk/release/app-release.apk',
    package_name: app_identifier
)
```

```
// fastlane/Fastfile
// 'beta' lane
// for Android

android_set_version_name(
    version_name: "1.0.0",
    gradle_file: gradle_file
)

android_set_version_code(
    gradle_file: gradle_file
)

gradle(
    project_dir: './android',
    task: 'assemble',
    build_type: 'release'
)

supply(
    json_key: 'google_play_console_key',
    track: 'beta',
    apk: './android/app/build/outputs/apk/release/app-release.apk',
    package_name: app_identifier
)
```

```
// fastlane/Fastfile
// 'beta' lane
// for Android

android_set_version_name(
    version_name: "1.0.0",
    gradle_file: gradle_file
)

android_set_version_code(
    gradle_file: gradle_file
)

gradle(
    project_dir: './android',
    task: 'assemble',
    build_type: 'release'
)

supply(
    json_key: 'google_play_console_key',
    track: 'beta',
    apk: './android/app/build/outputs/apk/release/app-release.apk',
    package_name: app_identifier
)
```

```
$ fastlane android beta --env=production
```



fastlane APP 9:08 AM

Android 2.7.0 (135) successfully uploaded to Google Play Console beta track.

API

production

**Manual build
& config**

**Add
environment
files**

**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**



**Manual build
& config**

**Add
environment
files**

**Setup for
automated
builds**

**Add
Fastlane**

**Final
thoughts**



```
// .env
IS_PRODUCTION=false
API_HOST='http://localhost:3000'
( ... )
```

```
// .env.staging
IS_PRODUCTION=false
API_HOST=api_host
( ... )
```

```
// .env.production
IS_PRODUCTION=true
API_HOST=api_host
( ... )
```

```
// .env
IS_PRODUCTION=false
API_HOST='http://localhost:3000'
( ... )
```

```
// .env.staging
IS_PRODUCTION=false
API_HOST=api_host
( ... )
```

```
// .env.production
IS_PRODUCTION=true
API_HOST=api_host
( ... )
```

```
// .env
IS_PRODUCTION=false
API_HOST='http://localhost:3000'
( ... )
```

```
// .env.staging
IS_PRODUCTION=false
API_HOST=api_host
( ... )
```

```
// .env.production
IS_PRODUCTION=true
API_HOST=api_host
( ... )
```

bit.ly/one-liner-script

thank you! 🌲

calin.tamas@around25.com

CODECAMP_ ❤ FEEDBACK



codecamp.ro/feedback