

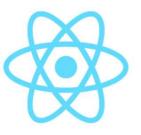
## UROUD NERDS

# React Native Short recap – day #1



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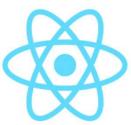
#### What is React Native?

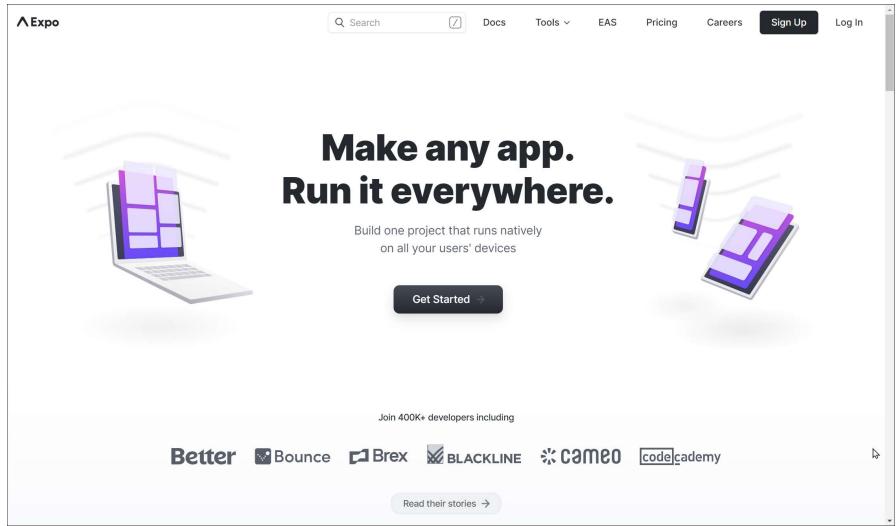


- Framework for building cross platform mobile apps.
- Cross platform: Android, iOS, Web
- Features:
  - React concepts like components, state, props, hooks, etc.
  - Device API's like GPS, Camera, contacts, etc.

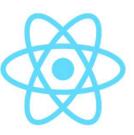


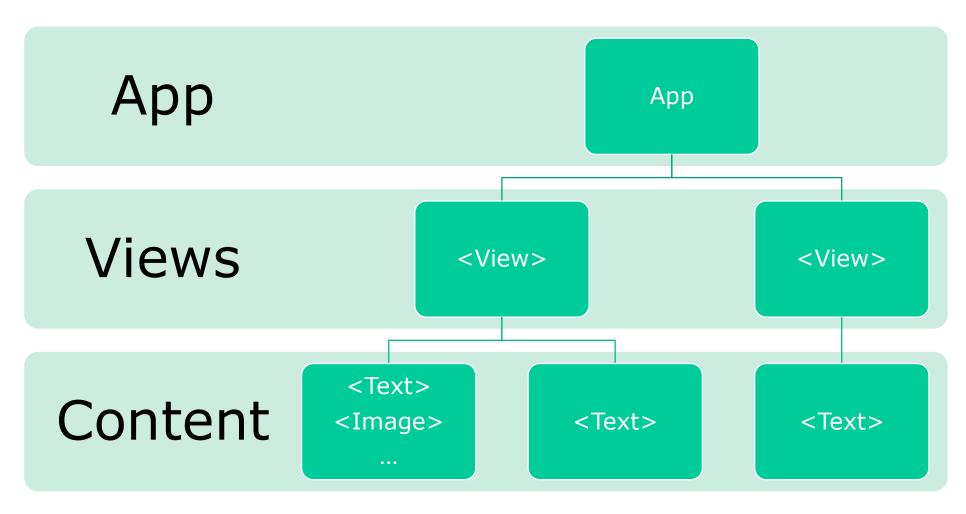
#### **Our choice: Expo**

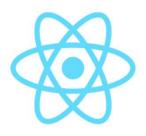




### **Apps, just like React: Component Trees**



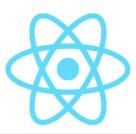




| REACT NATIVE UI<br>COMPONENT | ANDROID VIEW            | IOS VIEW          | WEB ANALOG                         | DESCRIPTION  |
|------------------------------|-------------------------|-------------------|------------------------------------|--|
| <view></view>                | <viewgroup></viewgroup> | <uiview></uiview> | A non-<br>scrolling<br><div></div> | A container that supports<br>layout with flexbox, style,<br>some touch handling, and<br>accessibility controls |
|                              |                         |                   |                                    |  |

| <text></text> | .TextView> | <uitextview></uitextview> | < | Displays, styles, and nests strings of text and even |
|---------------|------------|---------------------------|---|--|
|               |            |                           |   | handles touch events                                 |

#### **Core Componenents**

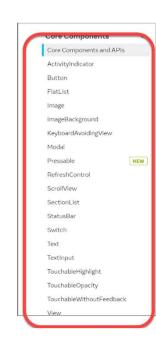


Basic Components

Android Components and A iOS Components and APIs

List Views

- <View>
- <Text>
- <Image>
- <TextInput>
- <ScrollView>
- <FlatList>
- <Touchable...>
- <Pressable>



#### **Core Components and APIs**

React Native provides a number of built-in Core Components ready for you to use in your app. You can find them all in the left sidebar (or menu above, if you are on a narrow screen). If you're not sure where to get started, take a look at the following categories:

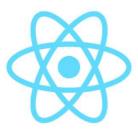
- Basic Components
- User Interface
- List Views
- Android-specific
- iOS-specific
- Others

You're not limited to the components and APIs bundled with React Native. React Native has a community of thousands of developers. If you're looking for a library that does something specific, please refer to this guide about finding libraries.

#### **Basic Components**

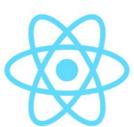
https://reactnative.dev/docs/components-and-apis

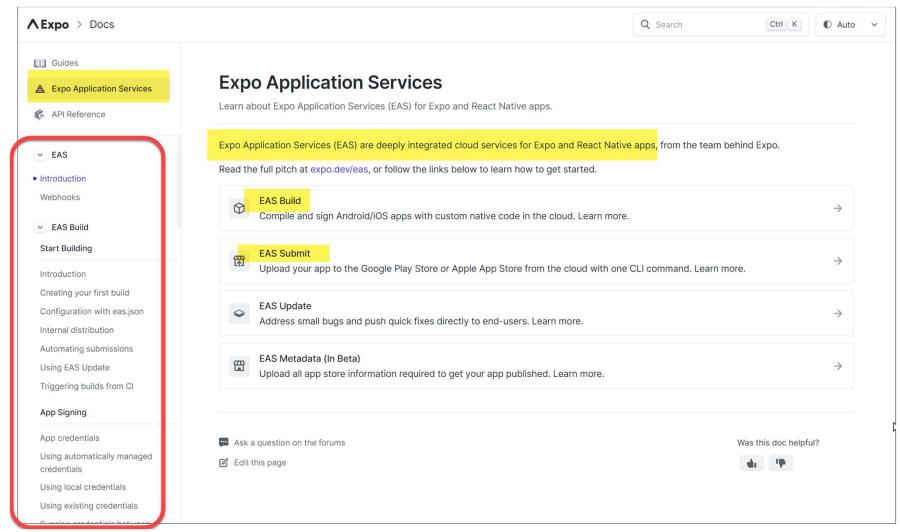
#### Remarks

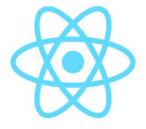


- React Native Looks Like React Web, but is different in some places
  - No HTML / JSX
  - StyleSheets act different
  - No shorthand notation in StyleSheets
  - ...
- Sometimes you need to stop and restart the server,
   while there is no apparent reason to do so...

#### Extra - building Expo apps - use EAS

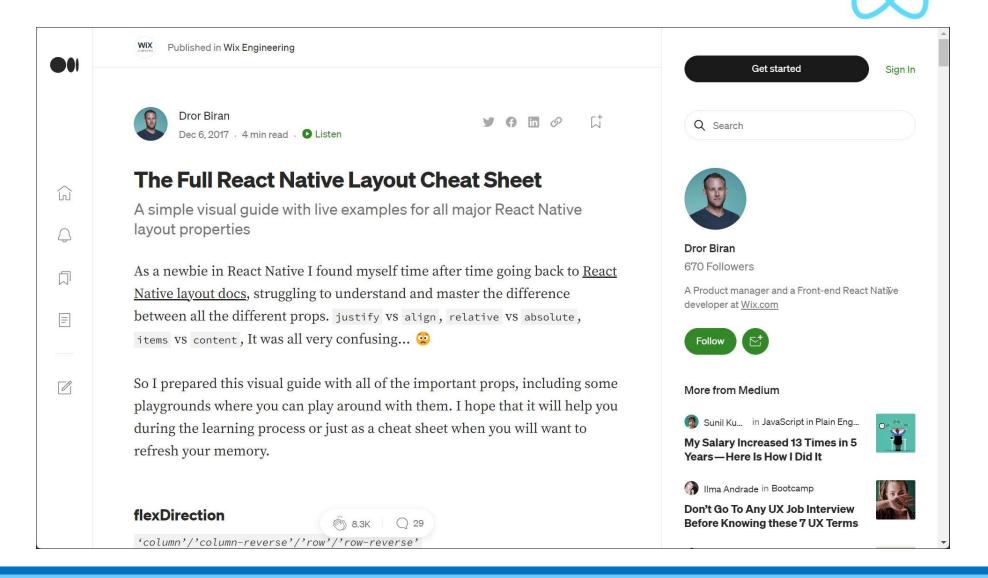




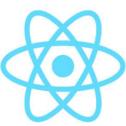


# Questions?

### The Full React Native Layout Cheat Sheet

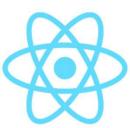


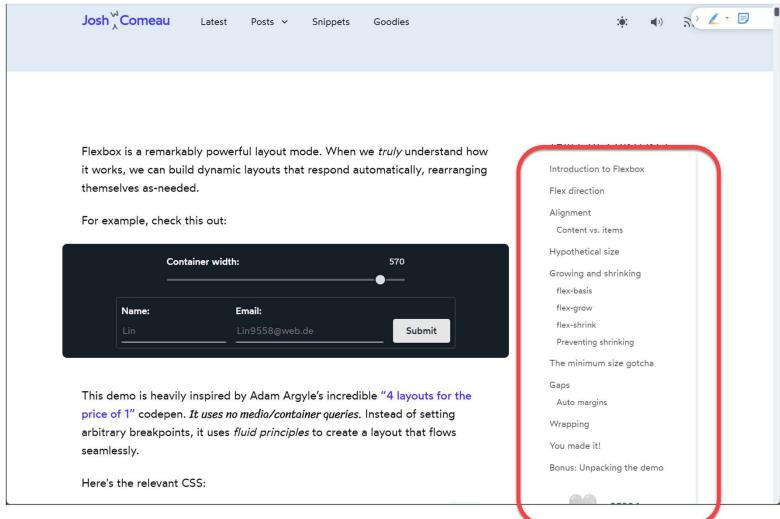
## **Yogalayout – build interfaces**

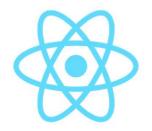


| ayouts  any platform with a highly optimize ine designed with speed, size, and |          |                 |
|--|----------|-----------------|
| 20   | Get Code | Open Playground |

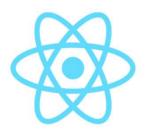
#### An interactive guide to Flexbox



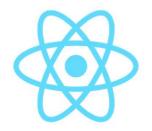




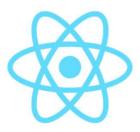
#### **Today**



- Navigation in React Native
  - Passing data between screens
- Working with external (REST) API's
- Working with Device API's
- Cases / 'hackathon'-like
- Next steps...



#### Cases



- Case / 'Hackathon'
- Put your learned knowledge into practice
- Topics
  - Case 1 Country Picker
  - Case 2 Movie Finder App
  - Case 3 Camera Picker

#### OROUD NERDS

#### REACT NATIVE CASE 01 - PROUD NERDS

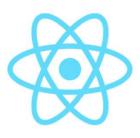
#### 01 - Country Picker

Bouw een React Native applicatie waarmee gebruikers informatie over landen kunnen opzoeken. Je gebruikt hiervoor de (open) RestCountries API. Met de applicatie kunnen mensen zoeken op (een deel van de) naam van een land zoals Bel (resultaat: Belgium, Belize, etc) en zien ze een lijst met landen die met de betreffende letters beginnen. Vervolgens kunnen gedetailleerde gegevens over het betreffende land worden getoond.

De applicatie heeft de volgende requirements:

- De app is gemaakt in React Native en draait op een Android of iOS emulator en/of device via de Expo Go-app.
- Naar keuze mag een aanvullend Ul-component framework zoals React Native UI Lib, React Native
  Elements of anders worden gebruikt. De applicatie mag echter ook gebruik maken van de standaard
  React Native Core Components zoals <View>, <Text>, <Image> enzovoort.
- $\circ\quad$  De app bevat een zoekvak en een knop en voldoende aanwijzingen in de userinterface.
  - Als de bezoeker (een deel van) een landnaam invult en op Zoeken klikt, wordt een lijst met landen getoond.
  - o In de lijst wordt de vlag van het land, de naam, de hoofdstad en het inwoneraantal getoond.
- o Er moet een knop zijn om de lijst weer leeg te maken/te verbergen.

#### **React Native Next Steps**



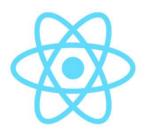
- Building/Publishing your apps
- Styling React Router Web/Advanced Navigation
- Routing Guards / security
- State Management with Context and/or Redux
- Writing Custom Hooks
- More Core components
- Using UI Libraries...



# Wrap-up

What have we learned?

#### **Goals of this training**



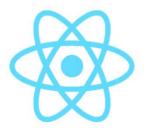
You're **not** going to be a React Native wizard in 2 days (sorry)

but....

#### Goals

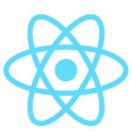
- 1. You will learn about the structure and architecture of React Native Apps. From a small hello-world app to the largest enterprise applications.
- 2. You are familiar with the main React Native concepts of the framework and operating systems. You can Google details yourself.
- 3. You will gain insights in React Native core components, platform specific components, external API's & device API's, navigation, forms.
- 4. You will have a some hands-on experience with *React Native* to build Native Mobile Applications for Android and iOS.

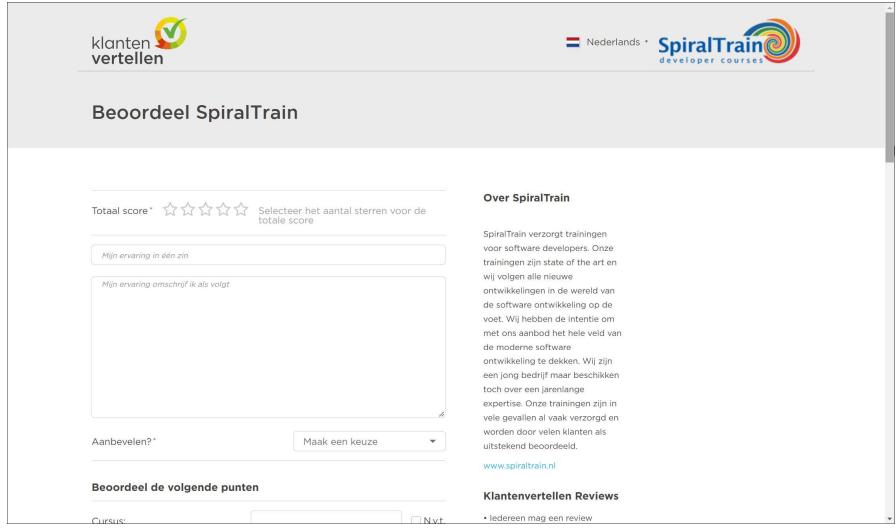
#### **Getting some experience...**



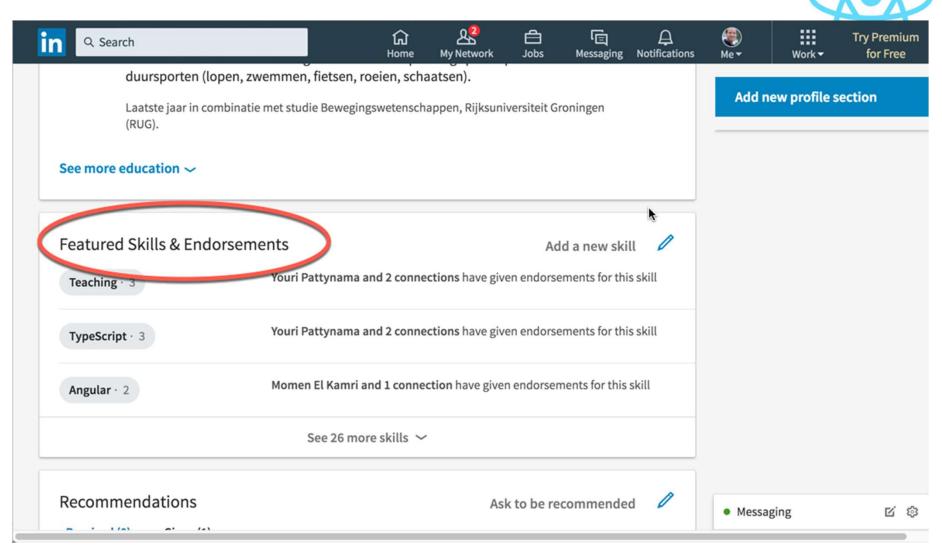
# Finish your case!

#### Eval Time! - rb.gy/frv8sf

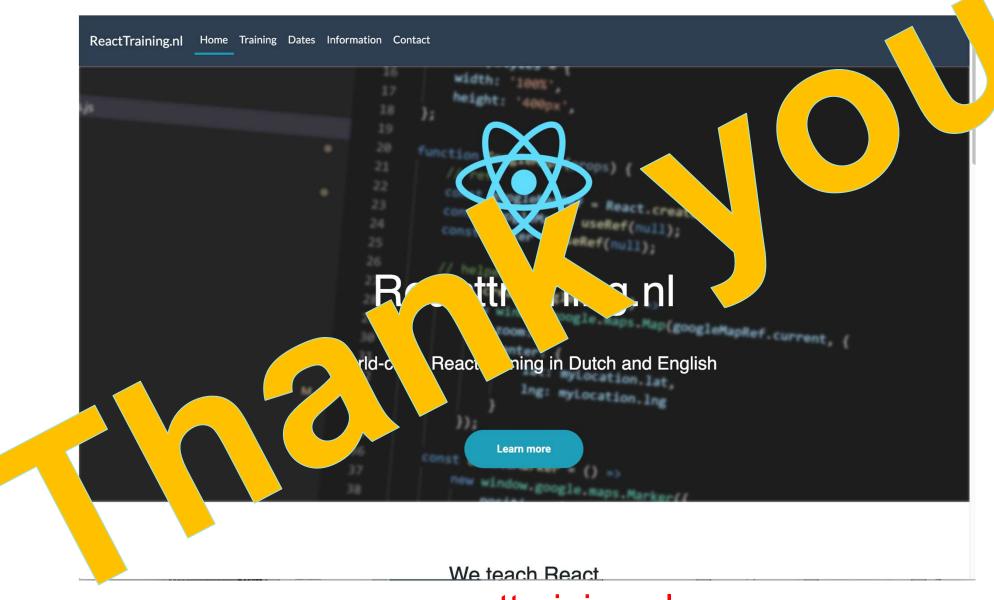




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www.reacttraining.nl