

REACT NATIVE WORKSHOP

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ABOUT ME

WORKSHOP STRUCTURE

- DIVE-IN
- **BASIC THEORY**
- CONNECT THE DOTS
- ADVANCED THEORY
- TRY IT!

- TO-DO APP
- ABILITY TO CREATE NEW ITEMS
- RENDER LIST OF CREATED ITEMS
- LAYOUT
- **STYLING**

WHY NATIVE

WHAT IS REACT

WHY USE REACT NATIVE

- ► DOES NOT RUN INSIDE A WEB BROWSER (WEBVIEW)
- VERY DIFFERENT FROM PHONEGAP/CORDOVA
- DOES NOT USE HTML
- RENDERS GENUINE NATIVE UI ELEMENTS

REQUIREMENTS

- Node & npm
- Xcode
- Android Studio with Android SDK and Android Emulator
- Atom (with Babel Syntax Highlighting)

DIVE-IN REVIEW

EXPLORING DOCUMENTATION

THE BASICS

Getting Started

Tutorial

Props

State

Style

Height and Width

Layout with Flexbox

Handling Text Input

Using a ScrollView

Using a ListView

Networking

Using Navigators

More Resources

GUIDES

Integration With Existing Apps

Colors

Images

Handling Touches

Animations

AsyncStorage

Asyncstorage is a simple, unencrypted, asynchronous, persistent, key-value storage system that is global to the app. It should be used instead of LocalStorage.

It is recommended that you use an abstraction on top of Asyncstorage instead of Asyncstorage directly for anything more than light usage since it operates globally.

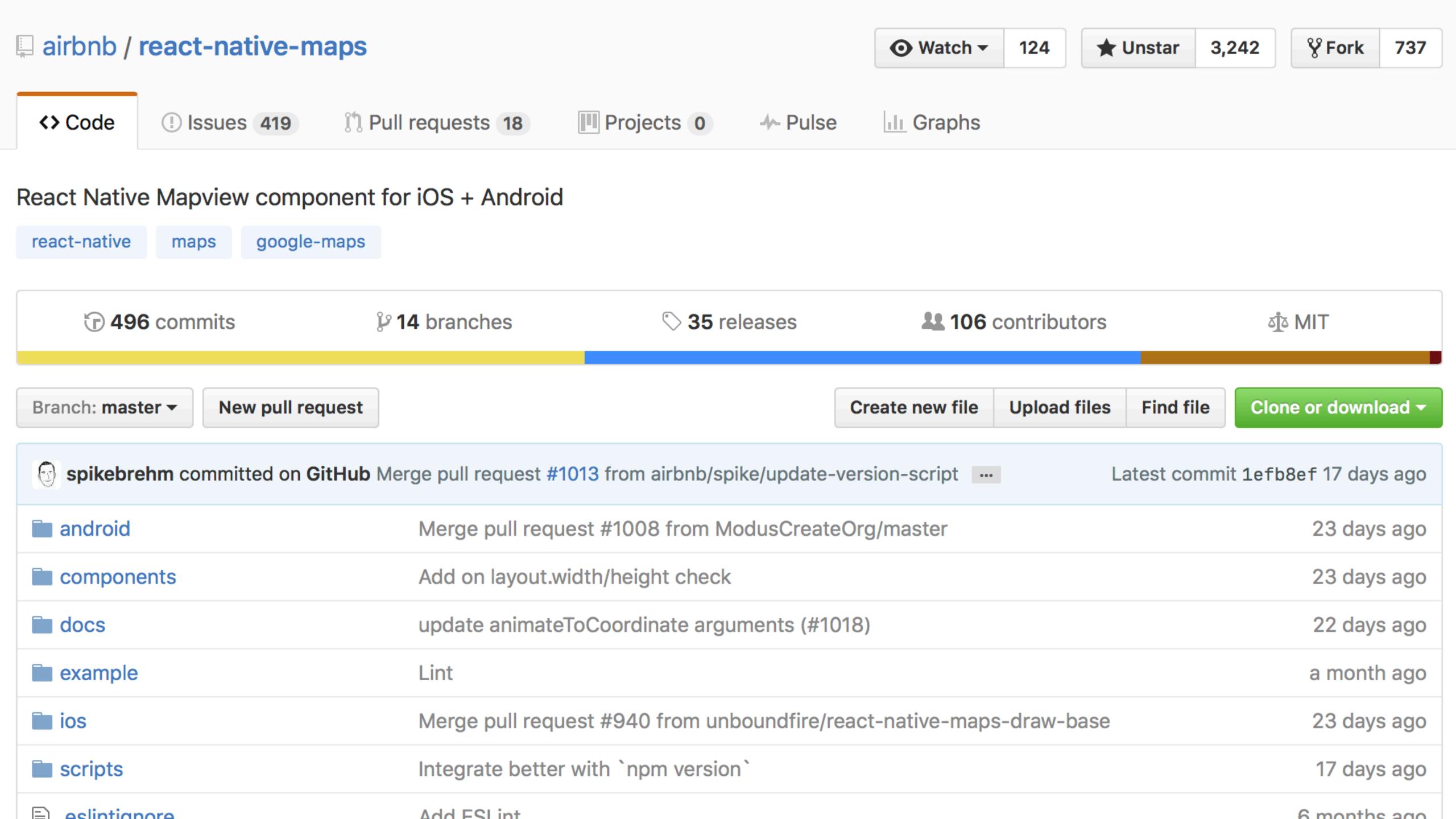
On iOS, Asyncstorage is backed by native code that stores small values in a serialized dictionary and larger values in separate files. On Android, Asyncstorage will use either RocksDB or SQLite based on what is available.

The Asyncstorage JavaScript code is a simple facade that provides a clear JavaScript API, real Error objects, and simple non-multi functions. Each method in the API returns a Promise object.

Persisting data:

```
try {
  await AsyncStorage.setItem('@MySuperStore:key', 'I like to save it.');
} catch (error) {
  // Error saving data
}
```

INSTALLING 3RD PARTY LIBRARIES



HISTORY OF REACT NATIVE

- ► STARTED AS FACEBOOK'S INTERNAL HACKATHON PROJECT, IN THE SUMMER OF 2013
- NOW ONE OF THE MOST POPULAR FRAMEWORKS WITH 44,000 STARS IN GITHUB
- THE FIRST PUBLIC PREVIEW WAS IN JANUARY OF 2015 AT REACT.JS CON
- ► IN MARCH OF 2015, FACEBOOK ANNOUNCED AT F8 THAT REACT NATIVE IS OPEN AND AVAILABLE ON GITHUB

LAYOUTS IN CSS USING YOGA



A cross-platform layout engine

Yoga is a cross-platform layout engine enabling maximum collaboration within your team by implementing an API familiar to many designers and opening it up to developers across different platforms.

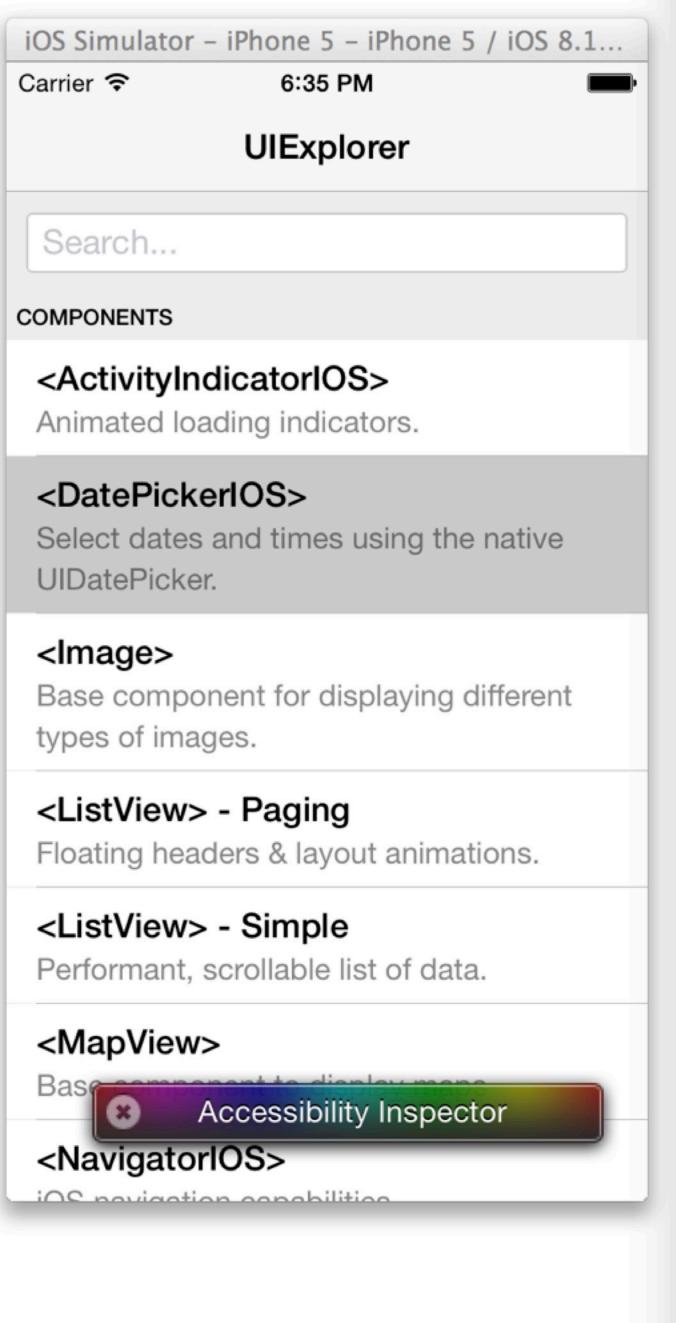
- Do you already know Flexbox? Then you already know Yoga.
- Write code in a language familiar to you Java, C#, Objective-C, C.
- C under the hood so your code moves fast.
- Battle tested in popular frameworks like React Native.

GET STARTED

LEARN MORE

JAVASCRIPT ENGINE & BRIDGE

DEBUGGING



```
Elements Network Sources Timeline Profiles Resources Audits Console React
■ UIExplorerList.js ×
                                                           var filter = (component) => regex.test(component.title) ▶ Watch Expressions
168
169
                                                                  ▼ Call Stack
                                                                                                                                    Async
170
        this.setState({
171
          dataSource: ds.cloneWithRowsAndSections({
                                                                    UIExplorerList_onPressRow
                                                                                                                         UIExplorerList.js:179
172
             components: COMPONENTS.filter(filter),
                                                                                                                         UIExplorerList.js:151
                                                                    (anonymous function)
173
             apis: APIS.filter(filter),
174
                                                                    React.createClass.touchableHandlePress
                                                                                                                   TouchableHighlight.js:148
175
        });
176
                                                                    TouchableMixin._performSideEffectsForTransition
                                                                                                                            Touchable.js:648
177
                                                                    TouchableMixin._receiveSignal
                                                                                                                            Touchable.js:572
178
       _onPressRow(<mark>example</mark>) -
179
        if (exampl === ReactNavigatorExample)
                                                                    TouchableMixin.touchableHandleResponderRelease
                                                                                                                            Touchable.js:376
180
          this
                  Object
181
            Re
                                                                    executeDispatch
                                                                                                                       EventPluginUtils.js:110
                  description: "Select dates and times using...
182
                 ▼ examples: Array[1]
                                                                                                                        EventPluginUtils.js:98
183
                                                                   forEachEventDispatch
           retu
                   ▼ 0: Object
184
                                                                                                                       EventPluginUtils.js:119
                                                                    executeDispatchesInOrder
                     ▶ render: function () /*ReactElement*/ {
185
        var Co
                      title: "<DatePickerIOS>"
186
        this.p
                                                                                                                        EventPluginHub.js:46
                                                                    executeDispatchesAndRelease
                    ▶ __proto__: Object
187
          titl
                    length: 1
188
                                                                    forEachAccumulated
                                                                                                                    forEachAccumulated.js:23
          comp
189
                   ▶ __proto__: Array[0]
                                                                    EventPluginHub.processEventQueue
                                                                                                                       EventPluginHub.js:253
190
                  title: "<DatePickerIOS>"
191
                 ▶ __proto__: Object
                                                                    runEventQueueInBatch
                                                                                                                 ReactEventEmitterMixin.js:18
192
193
    var styles
                                                                                                                 ReactEventEmitterMixin.js:44
                                                                    ReactEventEmitterMixin.handleTopLevel
194
      listCont
                                                                                                                  ReactIOSEventEmitter.js:121
                                                                    merge._receiveRootNodeIDEvent
195
        flex:
196
                                                                                                                  ReactIOSEventEmitter.js:205
                                                                    merge.receiveTouches
197
      list: {
198
        backgr
                                                                   jsCall
                                                                                                                         MessageQueue.js:46
199
                                                                    MessageQueueMixin._callFunction
                                                                                                                        MessageQueue.js:293
200
      sectionHeader: {
201
        padding: 5,
                                                                    ErrorUtils.applyWithGuard
                                                                                                                            error-guard.js:30
202
203
      group: {
                                                                                                                         MessageQueue.js:95
                                                                    guardReturn
204
        backgroundColor: 'white',
                                                                    MessageQueueMixin.callFunctionReturnFlushedQueue
                                                                                                                        MessageQueue.js:302
205
206
      sectionHeaderTitle: {
                                                                    messageHandlers.executeJSCall:method:arguments:callback:
                                                                                                                             debugger-ui:54
207
        fontWeight: 'bold',
208
        fontSize: 11,
                                                                                                                             debugger-ui:80
                                                                    ws.onmessage
200
{} Line 179, Column 1
                                                                                         Paused on a lavaScript breakpoint.
Console Search Emulation Rendering
    <rp><top frame>
                                 ▼ Preserve log
> example.description
```

"Select dates and times using the native UIDatePicker."

WHERE TO GO FROM HERE

