

React Native



Üstün Özgür
@ustunozgur

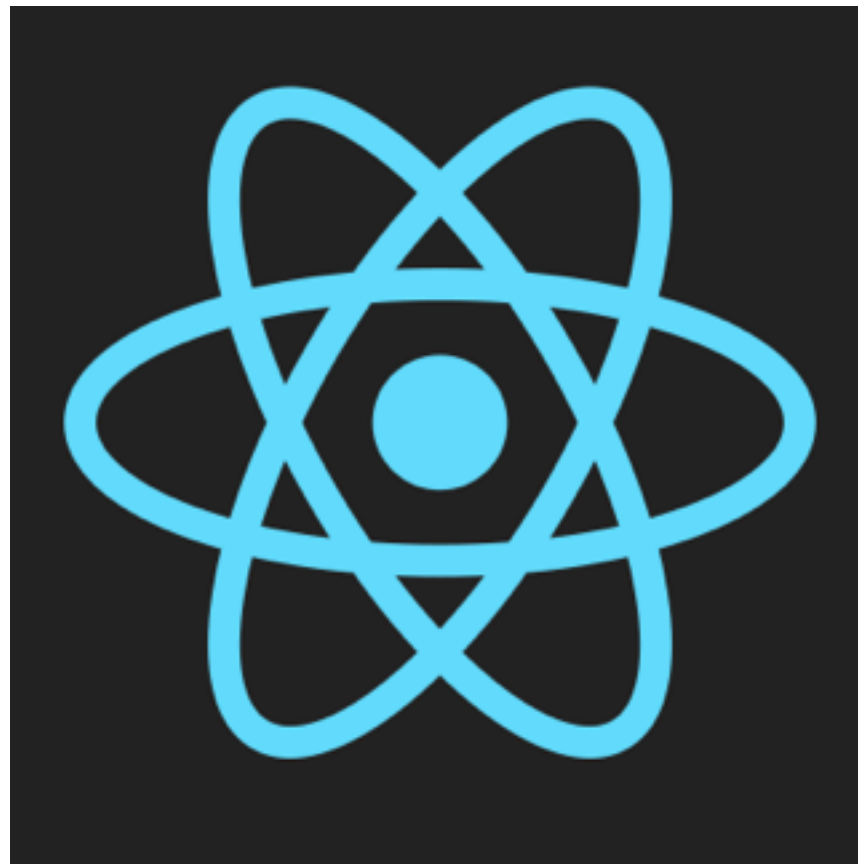
Key Points: 1/2

- Use JavaScript to code native apps
- Native iOS Components
 - UITabBar, UINavigationController, UIView
 - No UITableView, but ListView that is almost equivalent
 - Not hybrid mobile app like PhoneGap, ionic
- Can debug using Chrome Dev Tools

Key Points: 2/2

- Native touch handling (very important for native "feel" of apps)
- Flexbox and styling
- Extensibility: Extensible via native views and code (e.g. in ObjC) and exposed to JS side
- Can also use npm modules like underscore, momentjs

What is ReactJS ?



History



JSConf May 2013

Open source



Instagram



WhatsApp



Flipboard



sellercrowd

Difficulties in Building User Interfaces

building large applications with data that **changes over time**, in a simple and fast manner

Components

İnsanları, yerleri ve diğer şeyleri ara

Ustun Ana Sayfa Arkadaşlarını Bul

Ustun Ozgur
Profili Düzenle

Durum

Fotoğraf/Video Ekle

Fotoğraf Albümü Oluştur

Ne düşünüyorsun?

Haber Kaynağı

Mesajlar

Etkinlikler

Arkadaşlarını Bul

GRUPLAR

JavaScript Ankara

Grup Kur

ARKADAŞLAR

Ankara Civarından 20+

Yakın Arkadaşlar

Aile

Software Developer

TED Ankara Koleji

Bilkent Üniversitesi

Tanıdıklar

UYGULAMALAR

Oyunlar 20

Tavla

Dürtmeler

Fotoğraflar

Kaydedilenler

Oyun Haberleri 20+

İLGİ ALANLARI

Sayfalar ve Tanın...


ETKİNLİKLER

Facebook'un React...

Etkinlik Oluştur

Karel Barbur, BuzzFeed Video'nun videosunu paylaştı.

1 saat ·



14.697.210 Görüntüleme

BuzzFeed Video

8 Awesome Kids With Awesome Pets

via America's Funniest Home Videos

Beğen · Yorum Yap · Paylaş

4 kişi bunu beğendi.

Pinar Burnukara

1 saat · Beğen · 1

Yorum yaz...

Facebook'un React.js..., saati: 19:00

Bilgun Yıldırım'ın doğum günü bugün

ÖNERİLEN GRUPLAR

Tümünü Gör

Ankara Kolejlilerin buluşma noktası

Onur Özkoç ve 4 diğer arkadaş katıldı

+ Katıl

Aşk ve Sohbet Odası

39.943 üye

+ Katıl

BU MEMLEKET BİZİM.

TC Nihat Özgür katıldı

+ Katıl

Türkçe · Gizlilik · Koşullar · Çerezler · Reklamlar · Diğer ·

Facebook © 2015

Deniz Urulbay, Cenk Şaşmaz'ın gönderisini beğendi.

Karel Barbur kendi gönderisine yorum yaptı.

Elçin Erkin ile Anusha Rajan arkadaş oldu.

Kudret Barlas Site

Sevgi Köstel Mobil

Damla Hendriks 39d

Çağla Tosun İtler Mobil

Celal Can Bilen Site

Can Akdağ Site

Didem Yücel Mobil

Gunsu Ozkarar Mobil

Cicek Sahin Site

Ozan Dogu Tuna 1s

Gizem Altay 5s

Deniz Minican

Kaan Bayka

Hakan Kocaoğlu 8d

Diğer Arkadaşlar (2)

Mustafa Emre Urfa... Site

A Simple Component



A Simple Component: HelloWorld

```
var HelloWorld = React.createClass({  
  render: function () {  
    return <div>Hello World</div>;  
  }  
})
```

JSX



```
React.createElement("div", null, "Hello World")
```

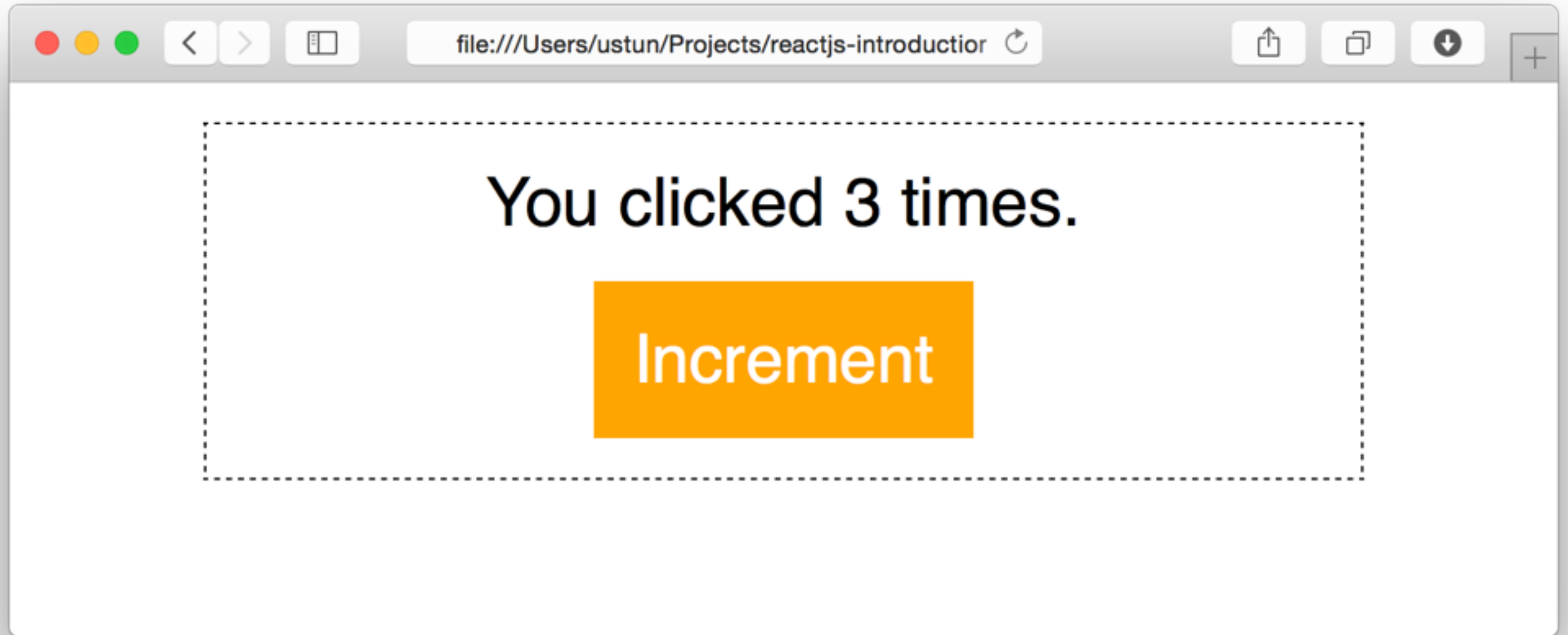
A Compound Component: Greeting



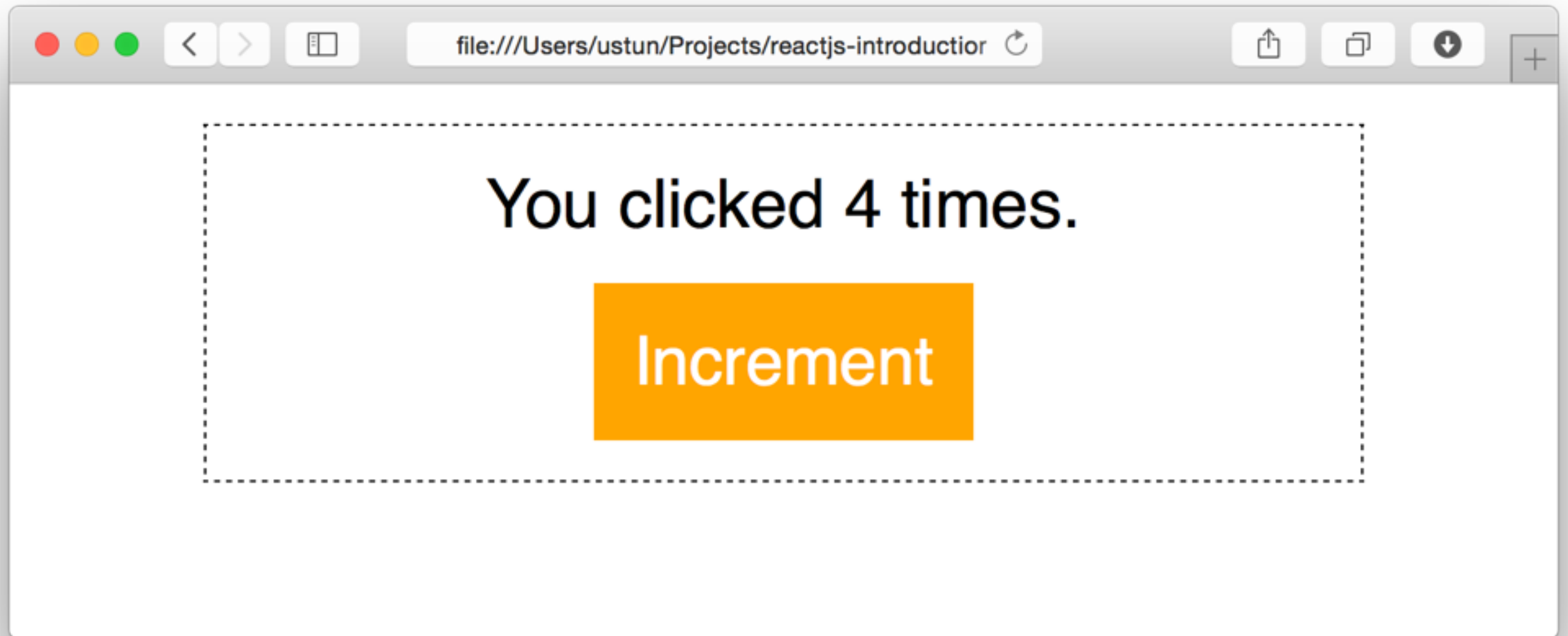
Compound Component: Greeting

```
var Greeting = React.createClass({  
  render: function () {  
    return (  
      <div>  
        <HelloWorld/>  
        <HelloWorld/>  
      </div>  
    )  
  }  
})
```

Mutable Data: *state*



Mutable Data: *state*



```
var Counter = React.createClass({
```

```
  getInitialState: function () {  
    return {counter: 0};  
  },
```

```
  render: function () {
```

```
    <div>You clicked {this.state.count} times</div>
```

```
  }
```

```
})
```



```
var Counter = React.createClass({  
  getInitialState: function () {  
    return {counter: 0};  
  },  
  render: function () {  
    return (<div>  
      You clicked {this.state.counter}times.  
      <button>Increment</button>  
    </div>);  
  }  
})
```

```
var Counter = React.createClass({  
  getInitialState: function () {  
    return {counter: 0};  
  },
```

```
  increment: function () {  
    // What should we write here?  
  },
```

```
  render: function () {  
    return (  
      <div>  
        You clicked {this.state.counter} times.  
        <button onClick={this.increment}>Increment</button>  
      </div>;  
    )  
  }  
})
```

```
var Counter = React.createClass({  
  getInitialState: function () {  
    return {counter: 0};  
  },  
  artir: function () {  
    var currentCount = this.state.counter;  
    this.setState({counter: currentCount + 1});  
  },  
  render: function () {  
    return (  
      <div>  
        You clicked {this.state.counter} times.  
        <button onClick={this.increment}>Increment</button>  
      </div>  
    )  
  }  
})
```

setState!

React Summary

- UI is separated into components
- Components have props and state for data
- All state changes are explicit
- Components re-render whenever data changes

React on Web: Components

```
MyComponent = React.createClass({  
  render: function () {  
    return <div>  
      <span>Hello World</span>  
    </div>  
  });
```

React on Mobile: Components

```
MyComponent = React.createClass({  
  render: function () {  
    return <View>  
      <Text>Hello World</Text>  
    </View>  
  });
```

Events on Web

```
MyComponent = React.createClass({  
  onClick: function () { alert("You clicked me")},  
  render: function () {  
    return <div>  
      <span onClick={this.onClick}>Hello</span>  
    </div>  
  });
```

Events on Mobile

```
MyComponent = React.createClass({  
  onPress: function () { console.log("You pressed me")},  
  render: function () {  
    return <View>  
      <TouchableHighlight onPress={this.onPress}>  
        <Text>Hello</Text>  
      </TouchableHighlight>  
    </View>  
  });
```


Styling

- Stylesheets inside JavaScript
- Implementation of a subset of flexbox for positioning and layout
- No classes, refer to styles in stylesheet

React on Web: Using Classes

```
React.createClass({  
  render: function () {  
    return <div class={divClasses}>  
      <span class={spanClasses}>Hello</Text>  
    </div>  
  });
```

React on Mobile: Defining Styles

```
var styles = StyleSheet.create({  
  myStyle: { color: 'red', fontSize: 12},  
  anotherStyle: { color: 'yellow', padding: 10, marginTop: 5}  
  container: {flex: 1, flexDirection: 'row',  
               justifyContent: 'center'}  
});
```

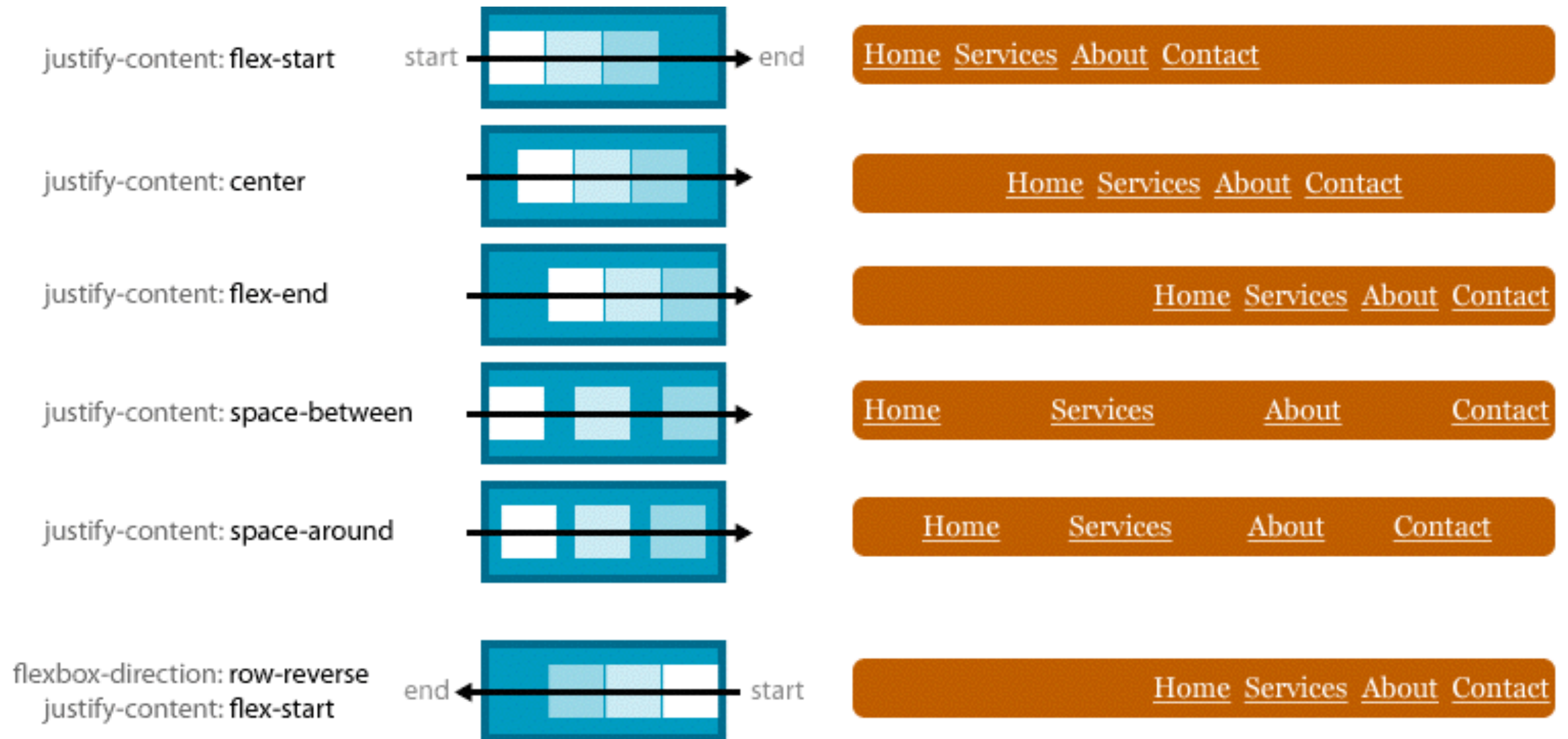
React on Mobile: Using Styles

```
React.createClass({  
  render: function () {  
    return <View style={styles.container}>  
      <Text style={styles.myStyle}>Hello</Text>  
    </View>  
  });
```

Flexbox

- Flexible Box System
- Supported by all modern browsers
- Solves positioning issues of CSS
- Row and column layout
- Boxes can grow or shrink (flex: 1, flex: 2)
- Box alignment: flex-start, flex-end, center ...
- Subset implemented in React Native

Flexbox



Other Features

- Extensible from ObjC via plugins
 - Async Communication via a Bridge
 - Keyboard Events, Vibration, Camera
- Can use npm modules like underscore

Learn once, write
everywhere!

React Native is the future of
mobile app development

Demos

Questions?

Üstün Özgür
@ustunozgur
ustun@ustunozgur.com