UNLEASH YOUR
WEB SKILLS
ON NATIVE!

WEB DEVELOPER
MOOD COASTER

WEB DEVELOPER IN NATURAL HABITAT

WEB DEVELOPER

- HTML
- CSS
- JavaScript
- Sass
- Node Package Manager

WEB DEVELOPER
ON NATIVE IOS / ANDROID

WEB DEVELOPER & NATIVE

- App stores
- Provisioning files
- Java or Kotlin for Android
- Objective-C or Swift for iOS

WEB DEVELOPER WITH NATIVESCRIPT

WEB DEVELOPER & NATIVESCRIPT

- App stores
- Provisioning files
- NativeScript
- HTML
- CSS
- JavaScript
- Sass
- Node Package Manager

WEB DEVELOPER ❤ NATIVESCRIPT

WHO?

ROWDY RABOUW

@rowdyrabouw

Gouda, The Netherlands

I ❤ superhero movies

Freelance web and app developer

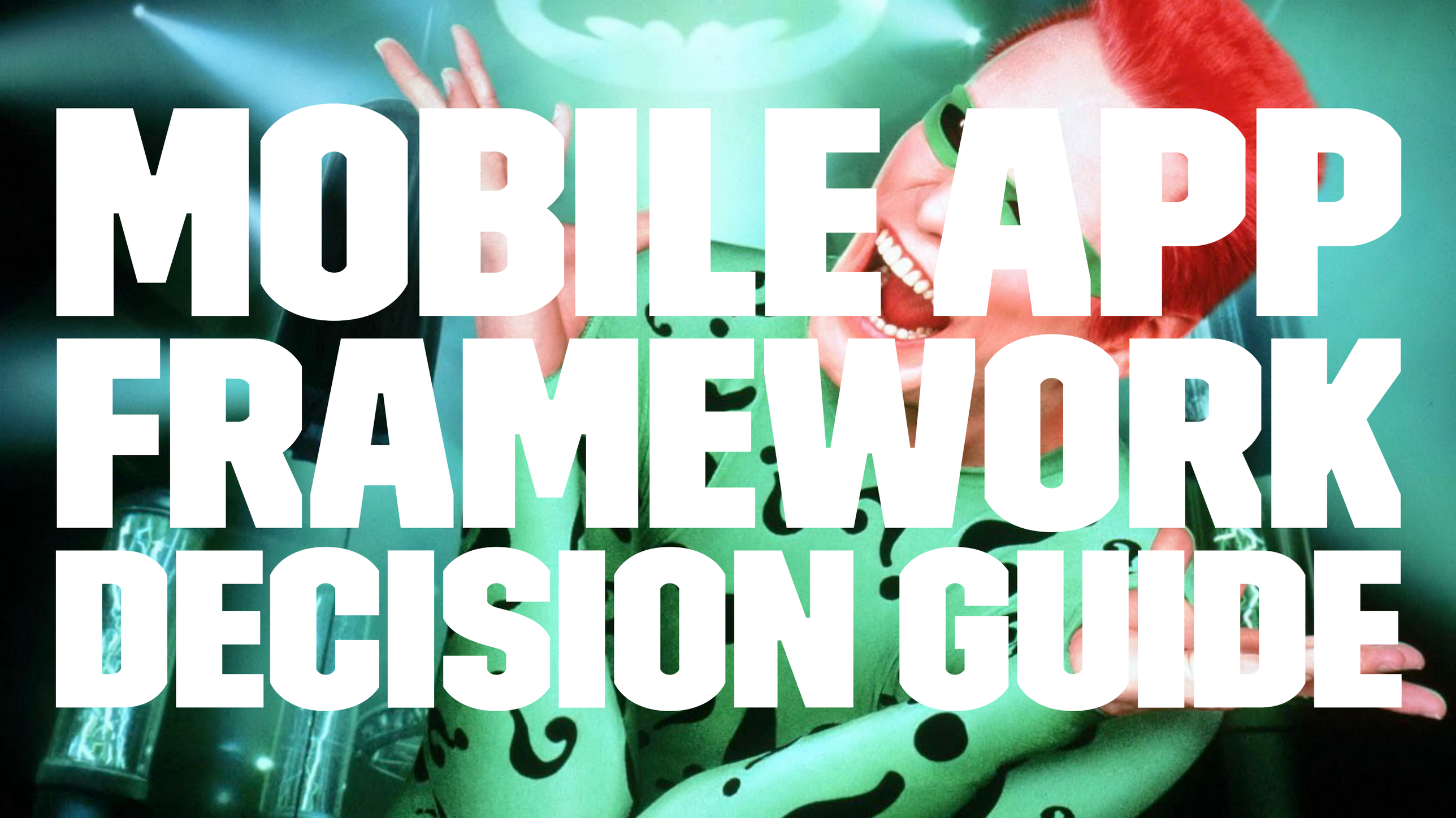
Lead developer Nationale-Nederlanden Pension App

Progress Developer Expert for Nativescript

GOT QUESTIONS?

sli.do 👉 event code K100

Ask Me Anything Corner on 2nd floor


MOBILE APP
FRAMEWORK
DECISION GUIDE

MOBILE APP FRAMEWORK DECISION GUIDE

Do you want/need a native User Interface and native performance?

No | Yes

MOBILE APP FRAMEWORK DECISION GUIDE

Do you want/need a native User Interface and native performance?

No **Yes**

Phonegap / Cordova with Ionic

- WebView
- DOM to manipulate
- HTML **styled** like native

MOBILE APP FRAMEWORK DECISION GUIDE

Do you want/need a native User Interface and native performance?

No **Yes**

Phonegap / Cordova with Ionic continue

- WebView
- DOM to manipulate
- HTML **styled** like native

MOBILE APP FRAMEWORK DECISION GUIDE

Do you have too much money and time?

Yes

No

MOBILE APP FRAMEWORK DECISION GUIDE

Do you have too much money and time?

Yes | **No**

Native iOS and Android

- Twice the work

MOBILE APP FRAMEWORK DECISION GUIDE

Do you have too much money and time?

Yes	No
Native iOS and Android	continue

- Twice the work

MOBILE APP FRAMEWORK DECISION GUIDE

Do you potentially want/need to share code with the web?

Or do you want/need to use web technologies?

No Yes

MOBILE APP FRAMEWORK DECISION GUIDE

Do you potentially want/need to share code with the web?

Or do you want/need to use web technologies?

No **Yes**

Xamarin

- .NET or C#
- Cross compiling
- Bindings to access native APIs

MOBILE APP FRAMEWORK DECISION GUIDE

Do you potentially want/need to share code with the web?

Or do you want/need to use web technologies?

No **Yes**

Flutter

- Dart
- Cross compiling
- Beta

MOBILE APP FRAMEWORK DECISION GUIDE

Do you potentially want/need to share code with the web?

Or do you want/need to use web technologies?

No	**Yes**
Flutter	continue

- Dart
- Cross compiling
- Beta

MOBILE APP FRAMEWORK DECISION GUIDE

Do you want to use modern JavaScript?

No **Yes**

MOBILE APP FRAMEWORK DECISION GUIDE

Do you want to use modern JavaScript?

No **Yes**

Titanium

- No ES6/ES2015 support
- Can't use NPM
- Old MVC framework (Alloy)

MOBILE APP FRAMEWORK DECISION GUIDE

Do you want to use modern JavaScript?

No **Yes**

Titanium continue

- No ES6/ES2015 support
- Can't use NPM
- Old MVC framework (Alloy)

MOBILE APP FRAMEWORK DECISION GUIDE

Do you know and like React?

Yes

No

MOBILE APP FRAMEWORK DECISION GUIDE

Do you know and like React?

Yes **No**

React Native

- React
- Native code to access APIs
- Version 0.55

MOBILE APP FRAMEWORK DECISION GUIDE

Do you know and like React?

Yes	No
React Native	continue

- React
- Native code to access APIs
- Version 0.55

NATIVESCRIPT

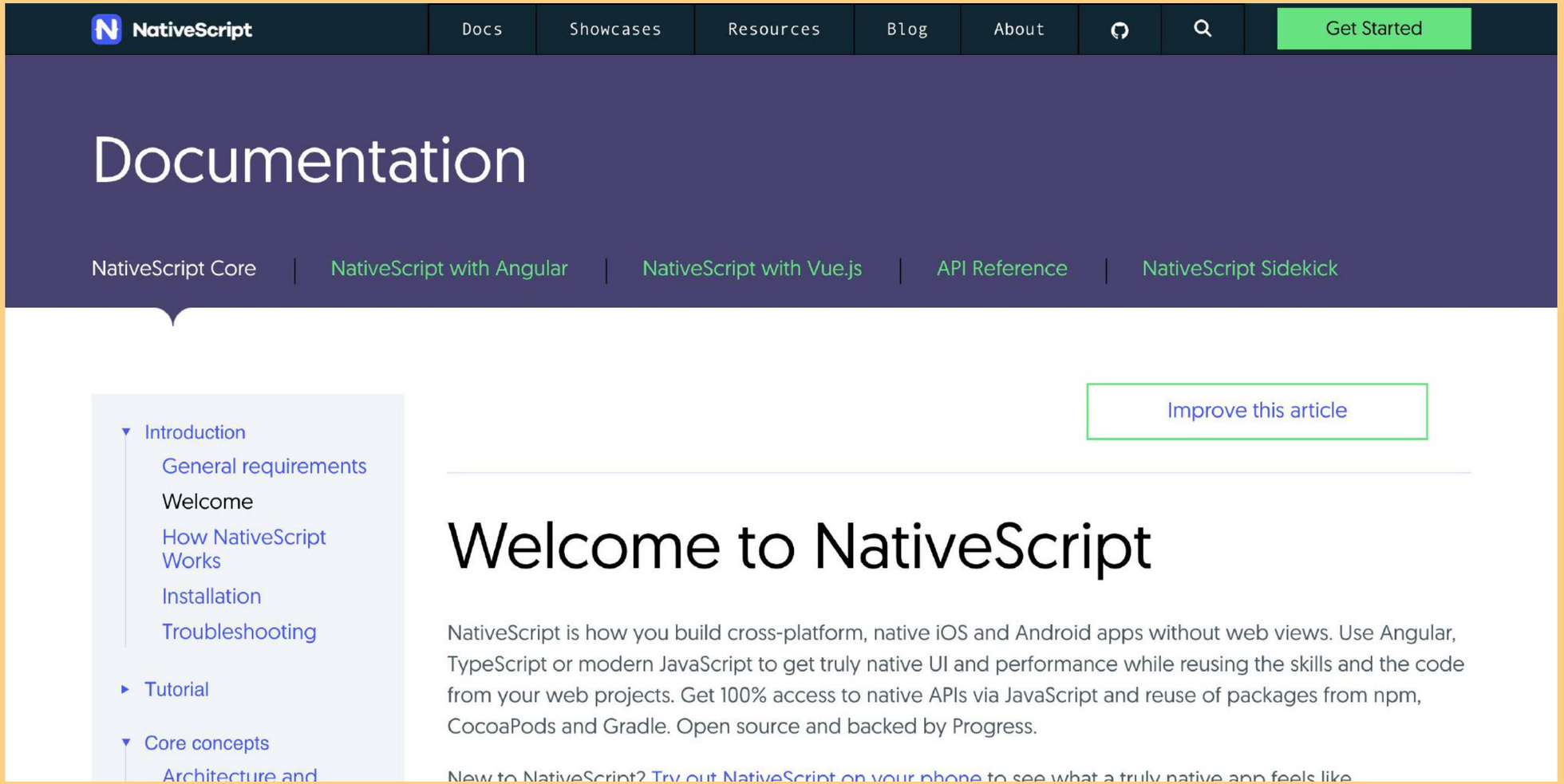
NATIVESCRIPT

WHAT IS NATIVESCRIPT?

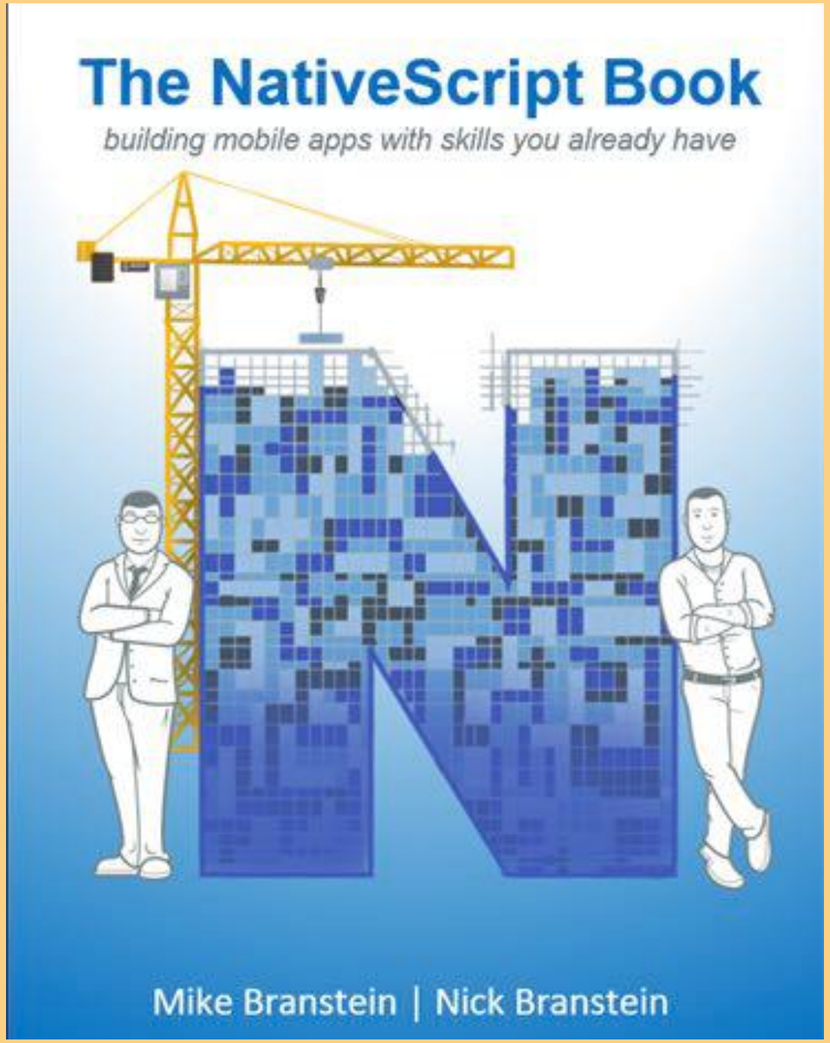
- Open source framework for building truly native mobile apps
- JavaScript, markup (XML/HTML) and CSS
- Native code inside your JavaScript if you want and dare
- Cross Platform: one codebase for iOS and Android
- Backed by software company Progress
- Android 4.2 or a later stable official release
- iOS 7.0 or later stable official release

HOW TO START?

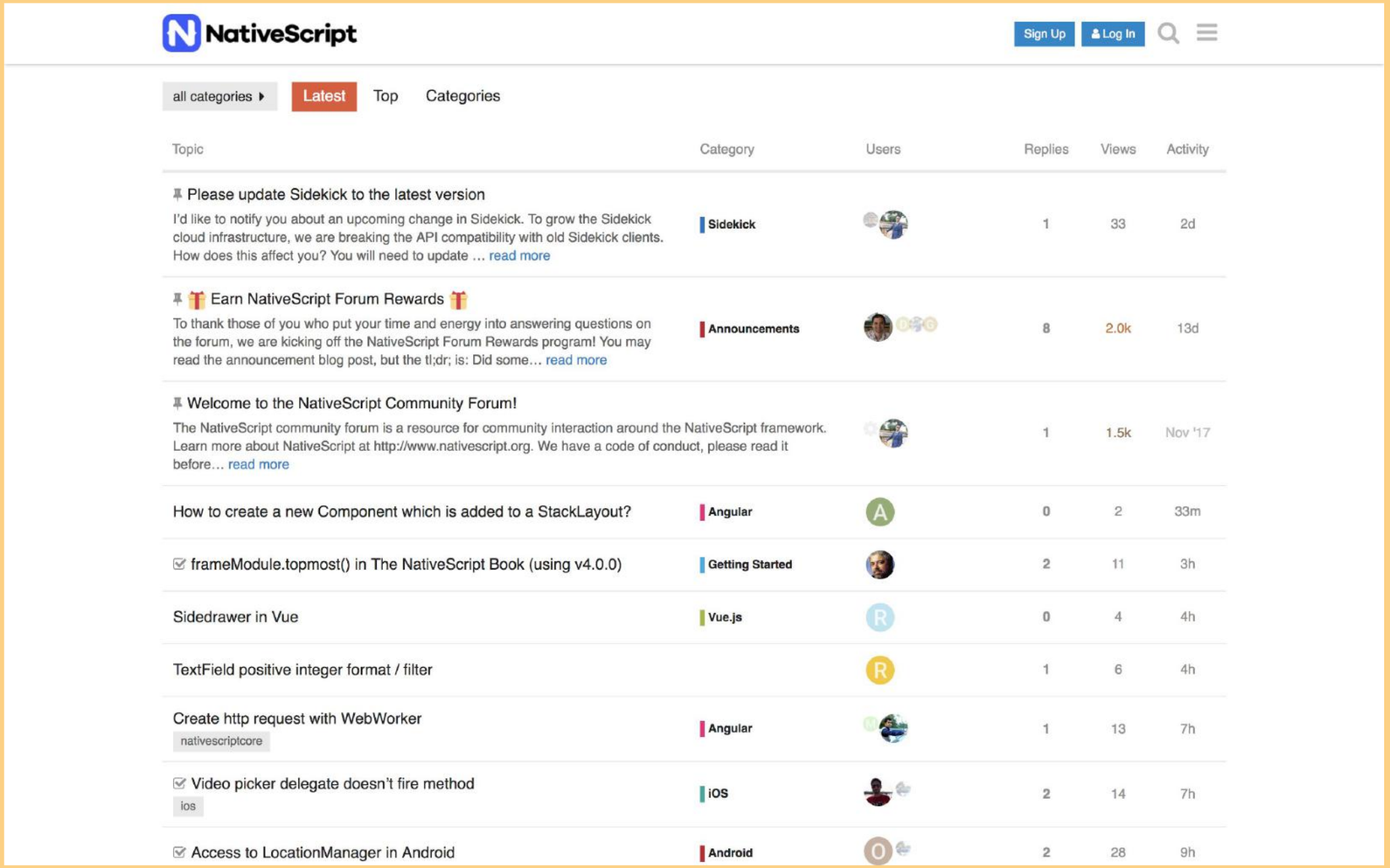
DOCS.NATIVESCRIPT.ORG



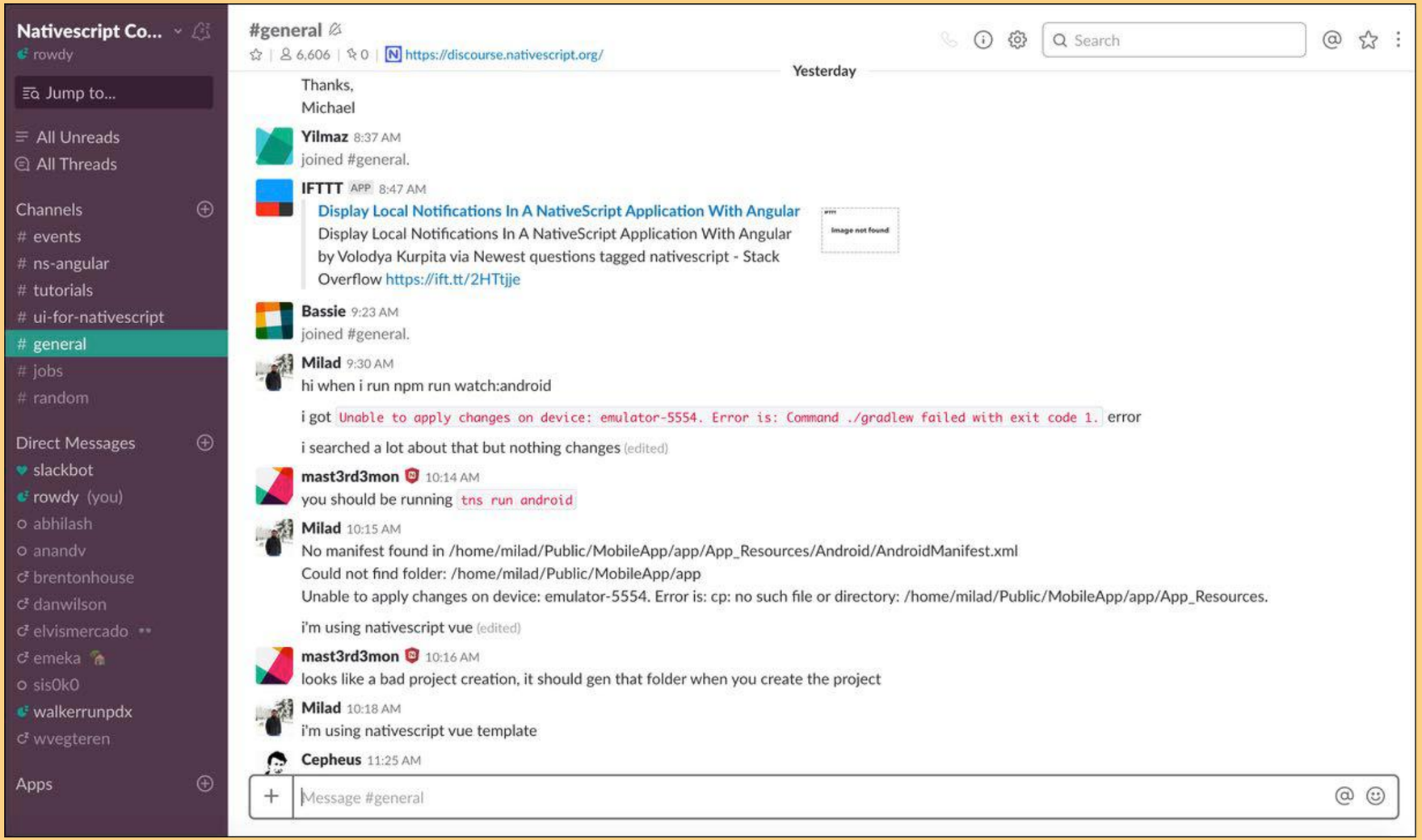
NATIVESCRIPT.ORG/GET-THE-NATIVESCRIPT-BOOK



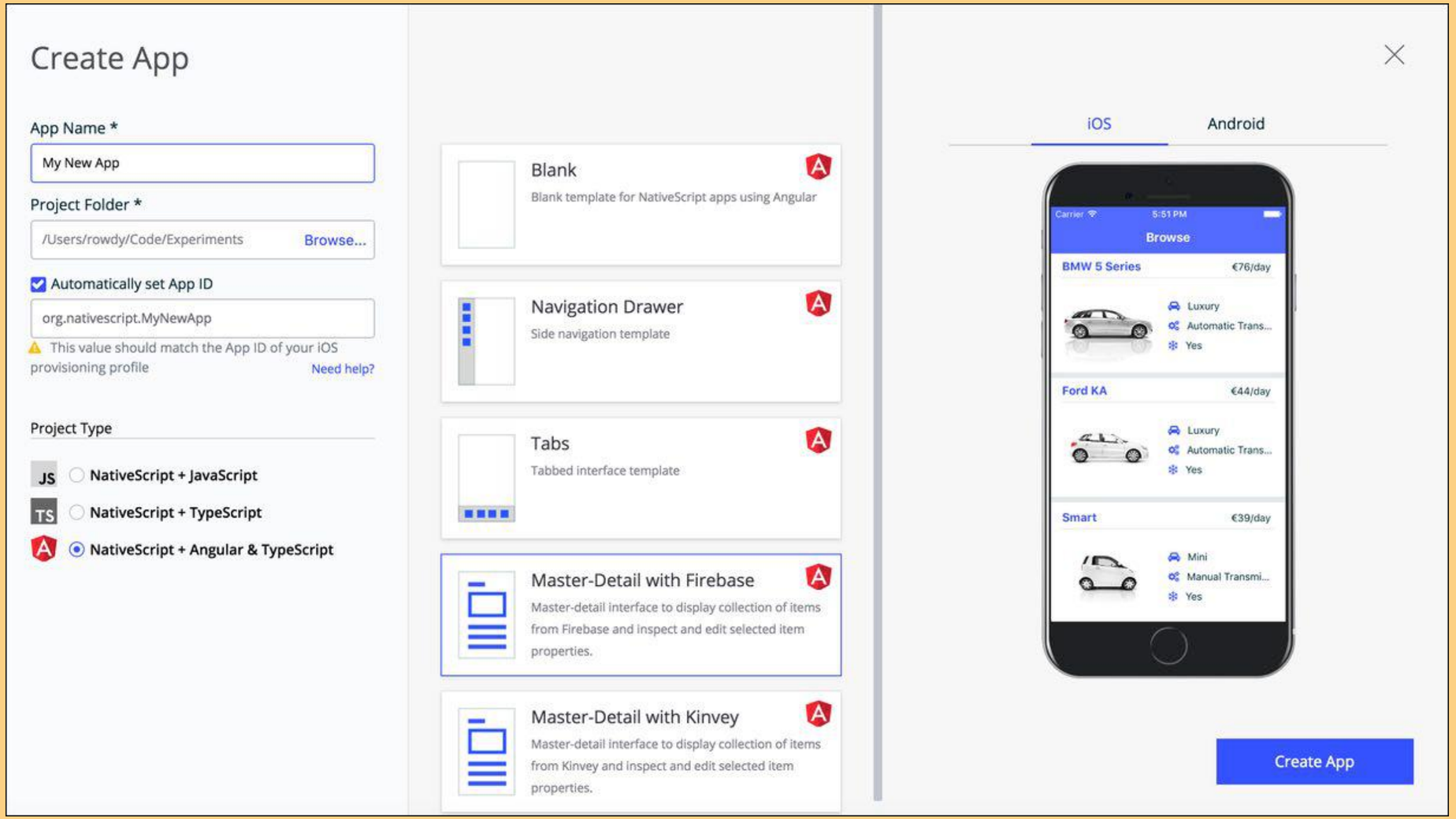
FORUM.NATIVESCRIPT.ORG



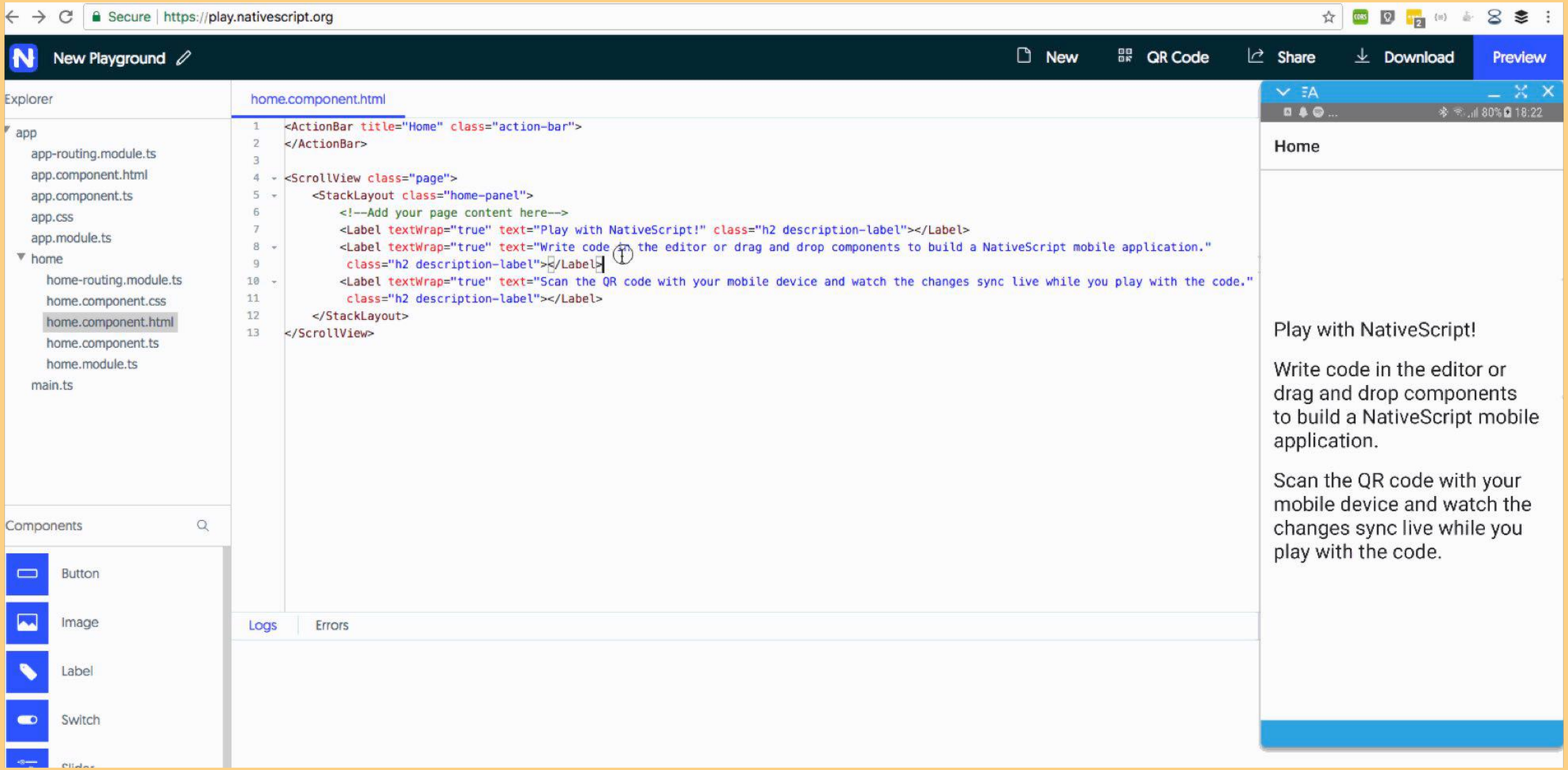
NATIVESCRIPTCOMMUNITY.SLACK.COM



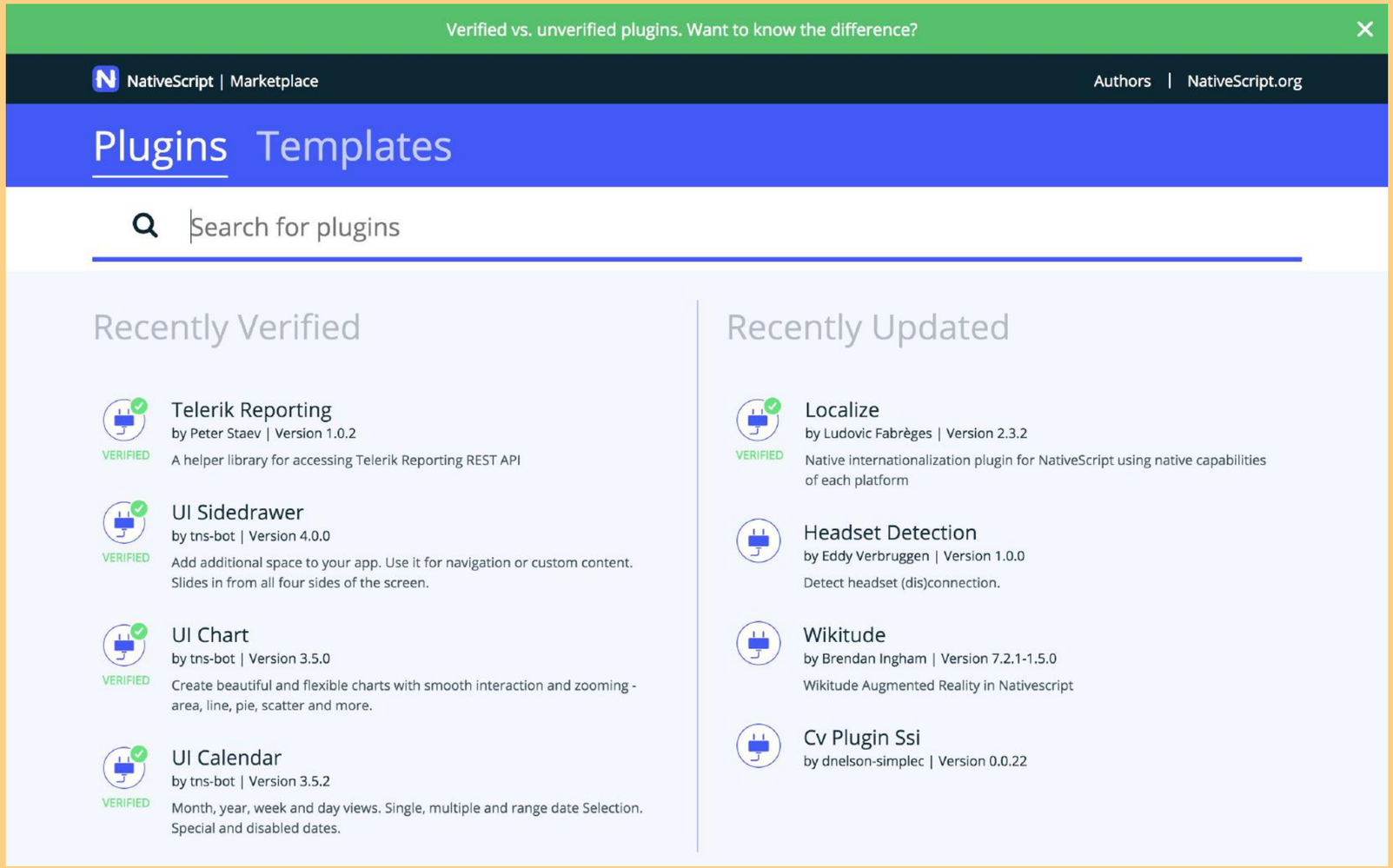
NATIVESCRIPT.ORG/NATIVESCRIPT-SIDEKICK



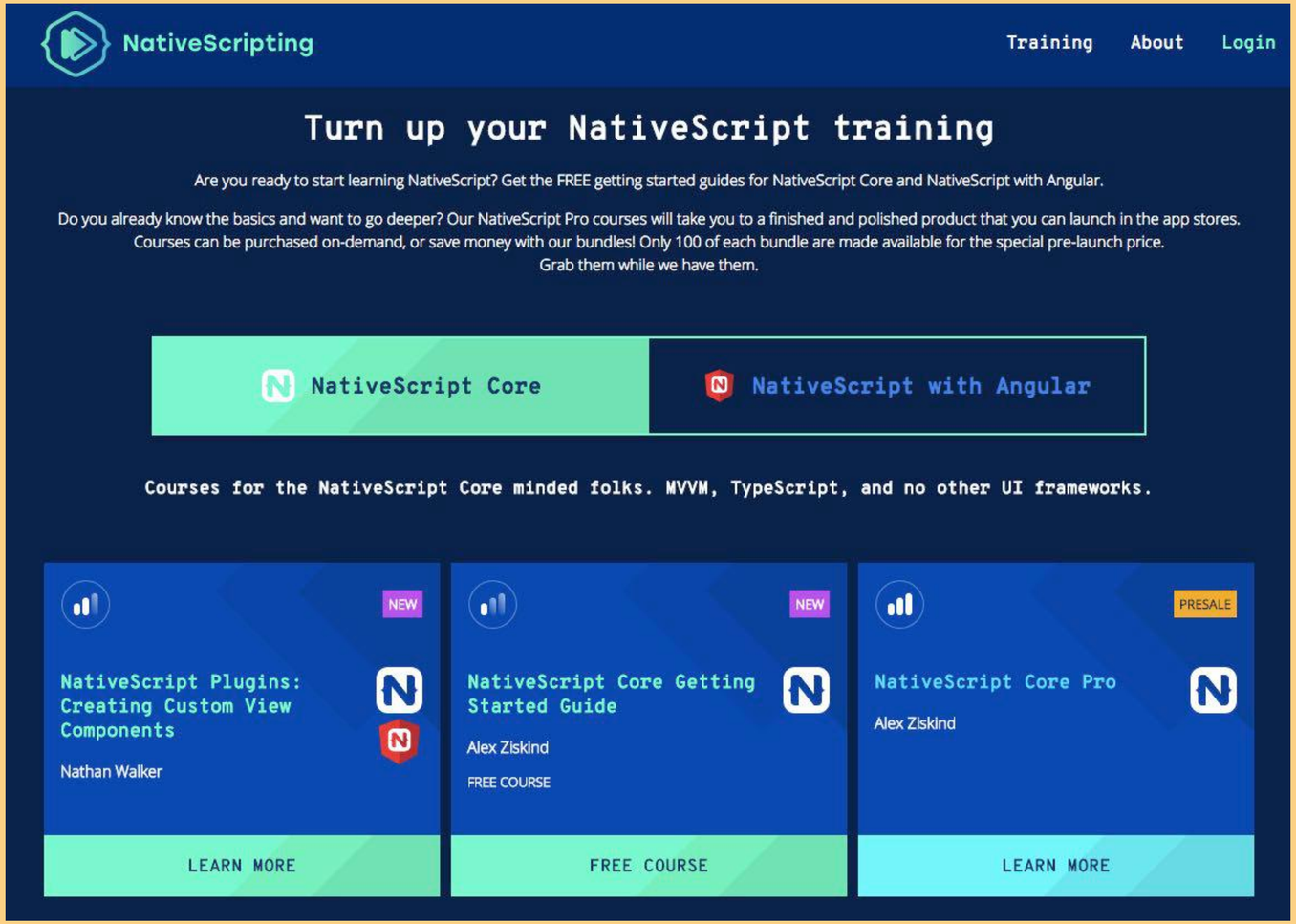
PLAY.NATIVESCRIPT.ORG



MARKET.NATIVESCRIPT.ORG



NATIVESCRIPTING.COM

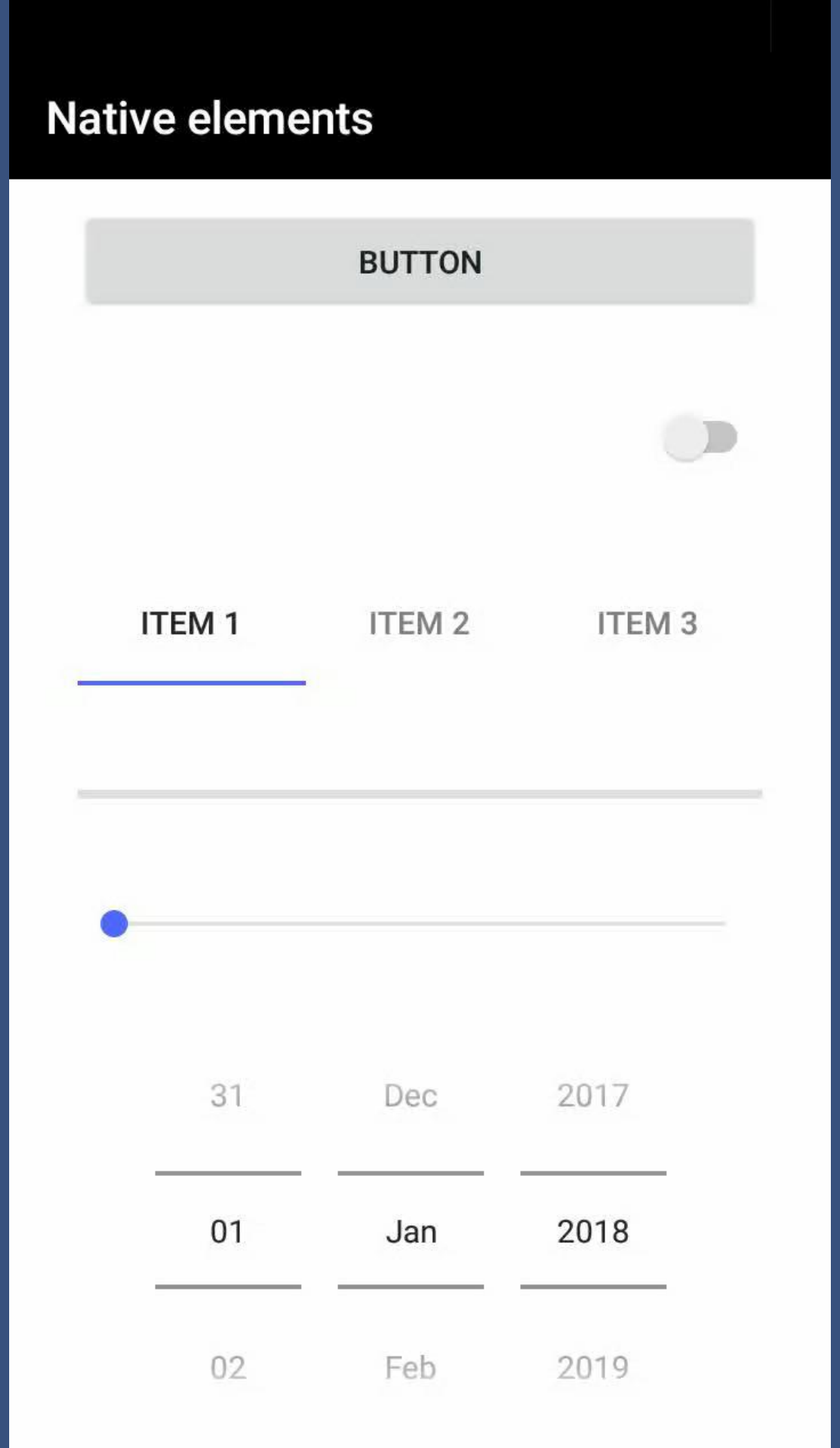


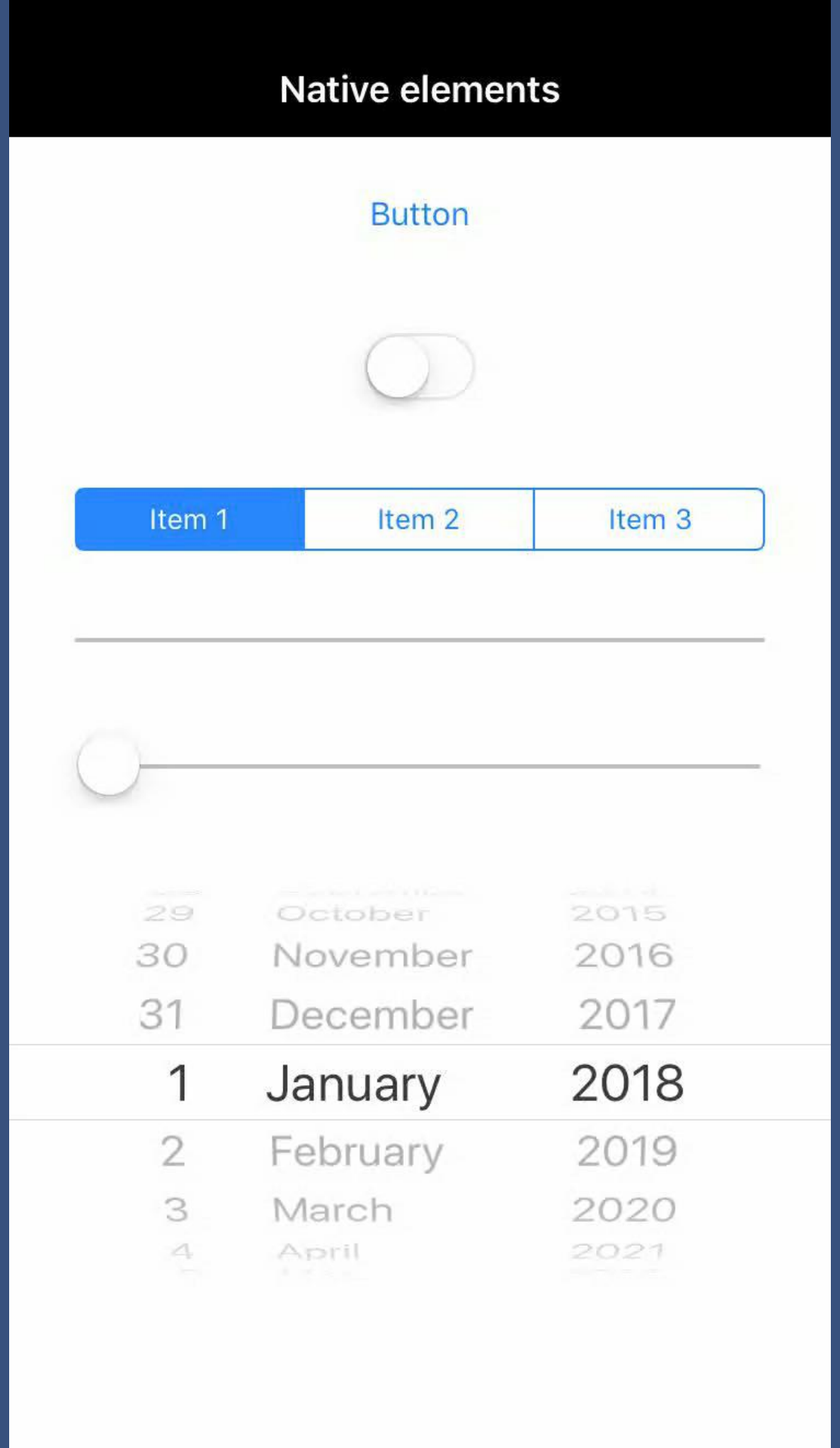
MARKUP
LIKE ON THE WEB

MARKUP

http://2xr.nl/markup
https://docs.nativescript.org/ui/components

```
<ActionBar title="Native elements"/>
<StackLayout>
    <Button text="Button" tap="{{ onButtonTap }}"/>
    <Switch checked="false"/>
    <SegmentedBar items="{{ segmentedBarItems }}"/>
    <Progress value="0" maxValue="100"/>
    <Slider value="0" minValue="0" maxValue="100"/>
    <DatePicker year="2018" month="1" day="1"
        minDate="1970-01-01" maxDate="2100-12-31"/>
</StackLayout>
```


Native elements
BUTTON
ITEM 1
ITEM 2
ITEM 3
31
Dec
2017
01
Jan
2018
02
Feb
2019


Native elements
Button
Item 1
Item 2
Item 3
29
October
2015
30
November
2016
31
December
2017
1
January
2018
2
February
2019
3
March
2020
4
April
2021

TEXTFIELD

https://docs.nativescript.org/api-reference/modules/_ui_text_field_.textfield

```
<TextField/>

<TextField text=""/>

<TextField hint="Enter your name"/>
```

TEXTFIELD: AUTOCAPITALIZATION

https://docs.nativescript.org/api-reference/modules/_ui_text_field_.textfield

```
<TextField autocapitalizationType="allCharacters"/>

<TextField autocapitalizationType="sentences"/>

<TextField autocapitalizationType="words"/>
```

TEXTFIELD: AUTOCAPITALIZATION

https://docs.nativescript.org/api-reference/modules/_ui_text_field_.textfield

```
<TextField autocapitalizationType="allCharacters"/>

<TextField autocapitalizationType="sentences"/>

<TextField autocapitalizationType="words"/>

<TextField autocapitalizationType="none"/>
```

TEXTFIELD: AUTOCORRECT

https://docs.nativescript.org/api-reference/modules/_ui_text_field_.textfield

```
<TextField autocorrect="true"/>

<TextField autocorrect="false"/>
```

TEXTFIELD: KEYBOARDTYPE

http://2xr.nl/keyboardType
https://docs.nativescript.org/api-reference/modules/_ui_enums_.keyboardtype

```
<TextField keyboardType="number"/>
<TextField keyboardType="datetime"/>
<TextField keyboardType="phone"/>

<TextField keyboardType="email"/>

<TextField keyboardType="url"/>
```

keyboardType

- datetime
- number
- phone
- email
- url
- default

keyboardType

- datetime
- number
- phone
- email
- url
- default

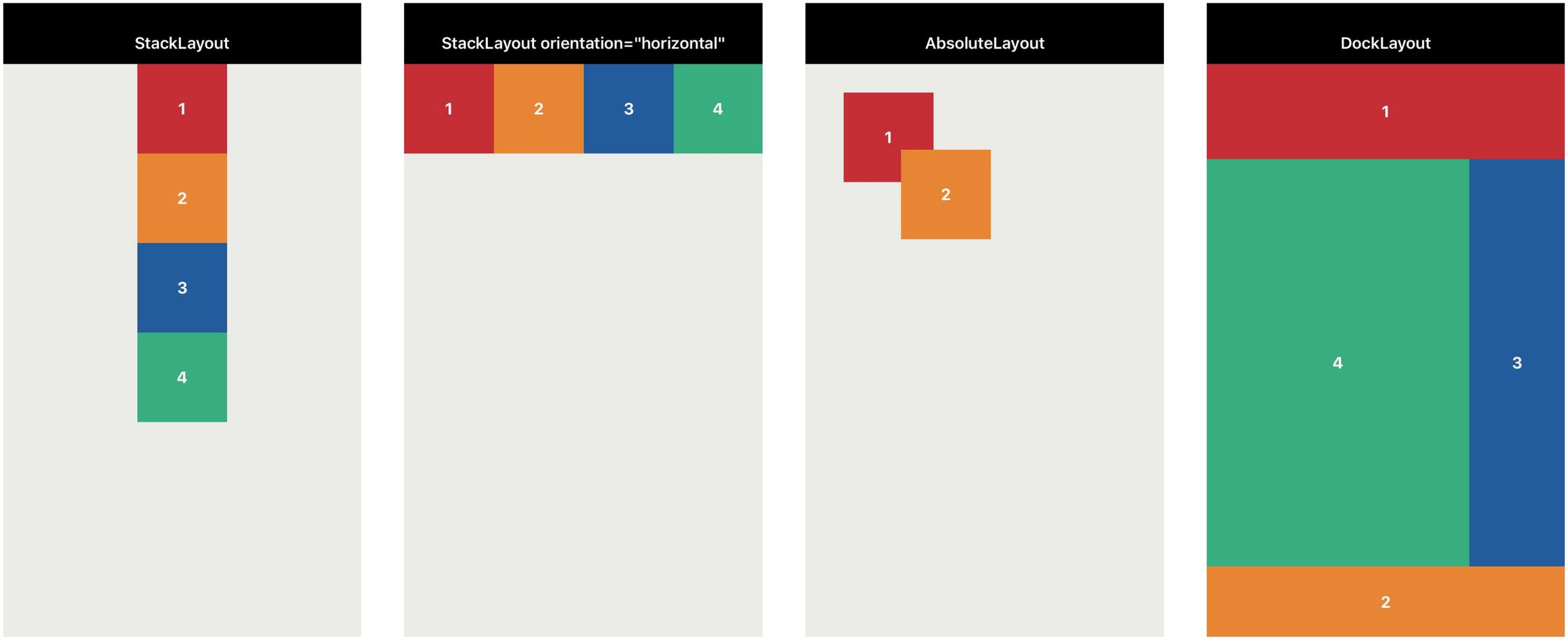
TEXTFIELD: MORE ATTRIBUTES

https://docs.nativescript.org/api-reference/modules/_ui_text_field_.textfield

```
<TextField textAlignment=""/>

<TextField visibility=""/>

<TextField width=""/>

<TextField maxLength=""/>
```

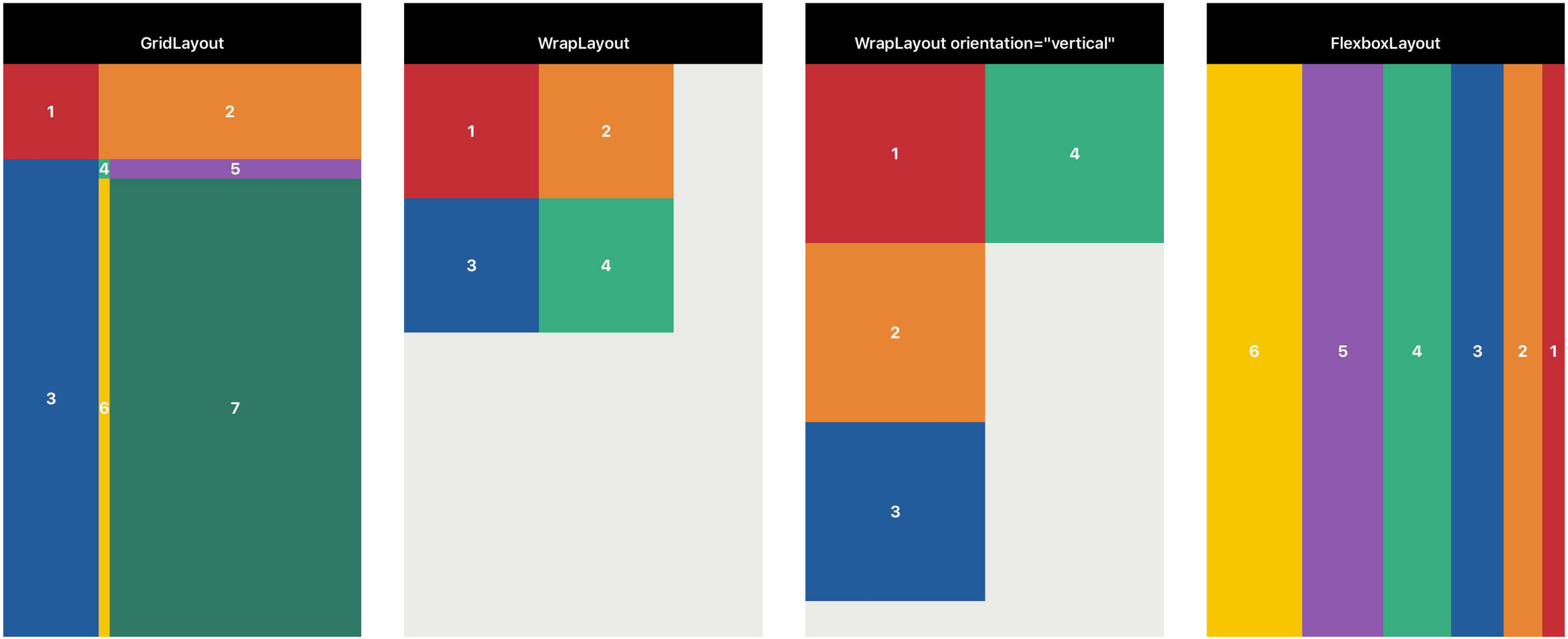
LAYOUTS

https://docs.nativescript.org/ui/layouts



LAYOUTS

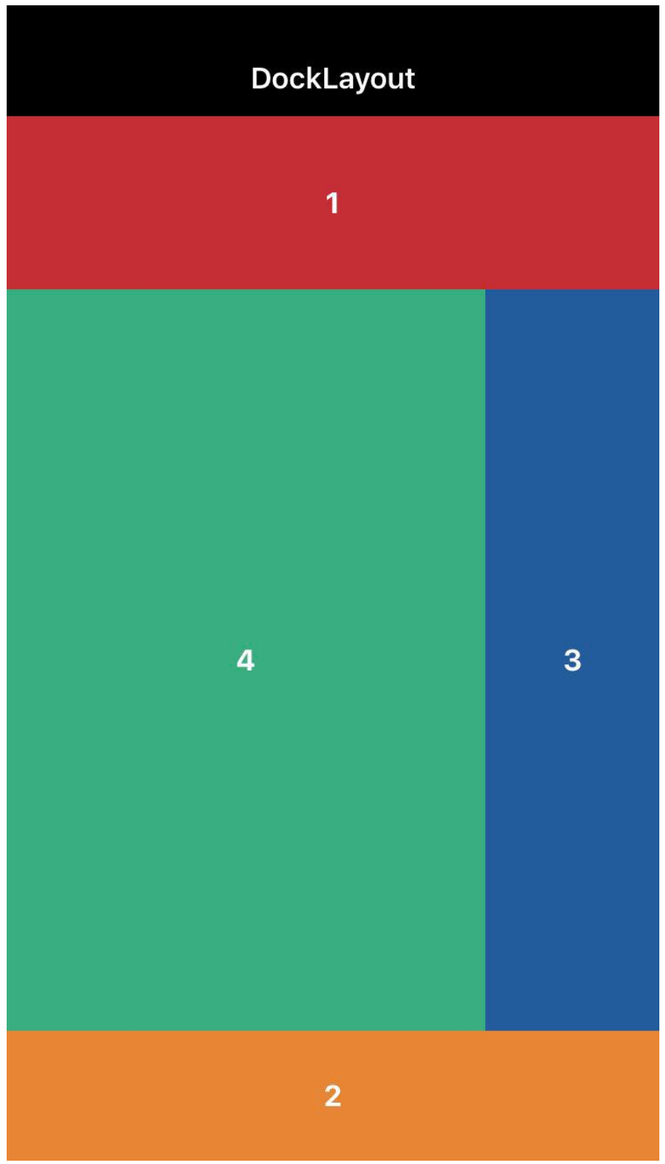
https://docs.nativescript.org/ui/layouts



DOCKLAYOUT

https://docs.nativescript.org/ui/layouts

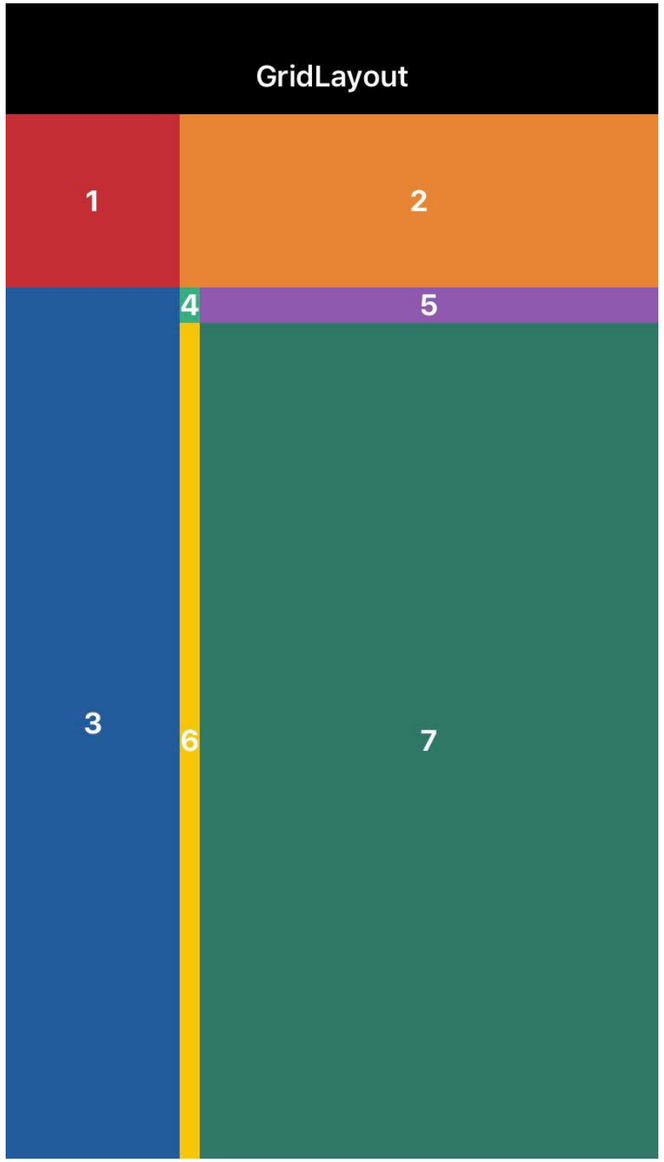
```
<DockLayout height="100%"
    stretchLastChild="true">

    <Label text="1" dock="top"/>
    <Label text="2" dock="bottom"/>
    <Label text="3" dock="right"/>
    <Label text="4" dock="left"/>

</DockLayout>

<!--
  1 + 2 have fixed height
  3 has fixed width
  4 will get all remaining space
-->
```



GRIDLAYOUT

https://docs.nativescript.org/ui/layouts

```
<GridLayout
    rows="100, auto, *"
    columns="100, auto, *">
    <Label text="1" row="0" col="0">
    <Label text="2" row="0" col="1"
        colSpan="2"/>
    <Label text="3" row="1" col="0"
        rowSpan="2"/>
    <Label text="4" row="1" col="1"/>
    <Label text="5" row="1" col="2"/>
    <Label text="6" row="2" col="1"/>
    <Label text="7" row="2" col="2"/>
</GridLayout>
```



CASCADING STYLE SHEETS

CASCADING STYLE SHEETS

https://docs.nativescript.org/ui/styling

- a large subset of CSS properties is supported
- device-independent pixels
- application-wide, page-specific or inline
- platform-specific possible

CASCADING STYLE SHEETS

```
button,
.btn,
button[btn-type="primary"] {
  height: 40;
  font-size: 16;
  color: rgb(197, 46, 54);
  background-color: #f6c600;
  text-transform: uppercase;
  opacity: 0.5;
}
```

CSS ANIMATIONS

https://docs.nativescript.org/ui/animation-css

- opacity
- background-color
- transform: translate
- transform: scale
- transform: rotate

CSS ANIMATIONS

```
@keyframes example {
    0%   { background-color: red; transform: translate(0, 0); }
    25%  { background-color: yellow; transform: translate(200, 0); }
    50%  { background-color: blue; transform: translate(200, 200);  }
    75%  { background-color: green; transform: translate(0, 200); }
    100% { background-color: red; transform: translate(0, 0); }
}

.view {
    animation-name: example;
    animation-duration: 4s;
    animation-fill-mode: forwards;
}
```

SASS (CSS WITH SUPERPOWERS)

https://docs.nativescript.org/ui/theme#sass-usage

- **variables**

```
$dark: #022734;
.button-primary { background-color: $dark; }
```

- **nested rules**

```
StackLayout.error {
  Label { color: red; }
}
```

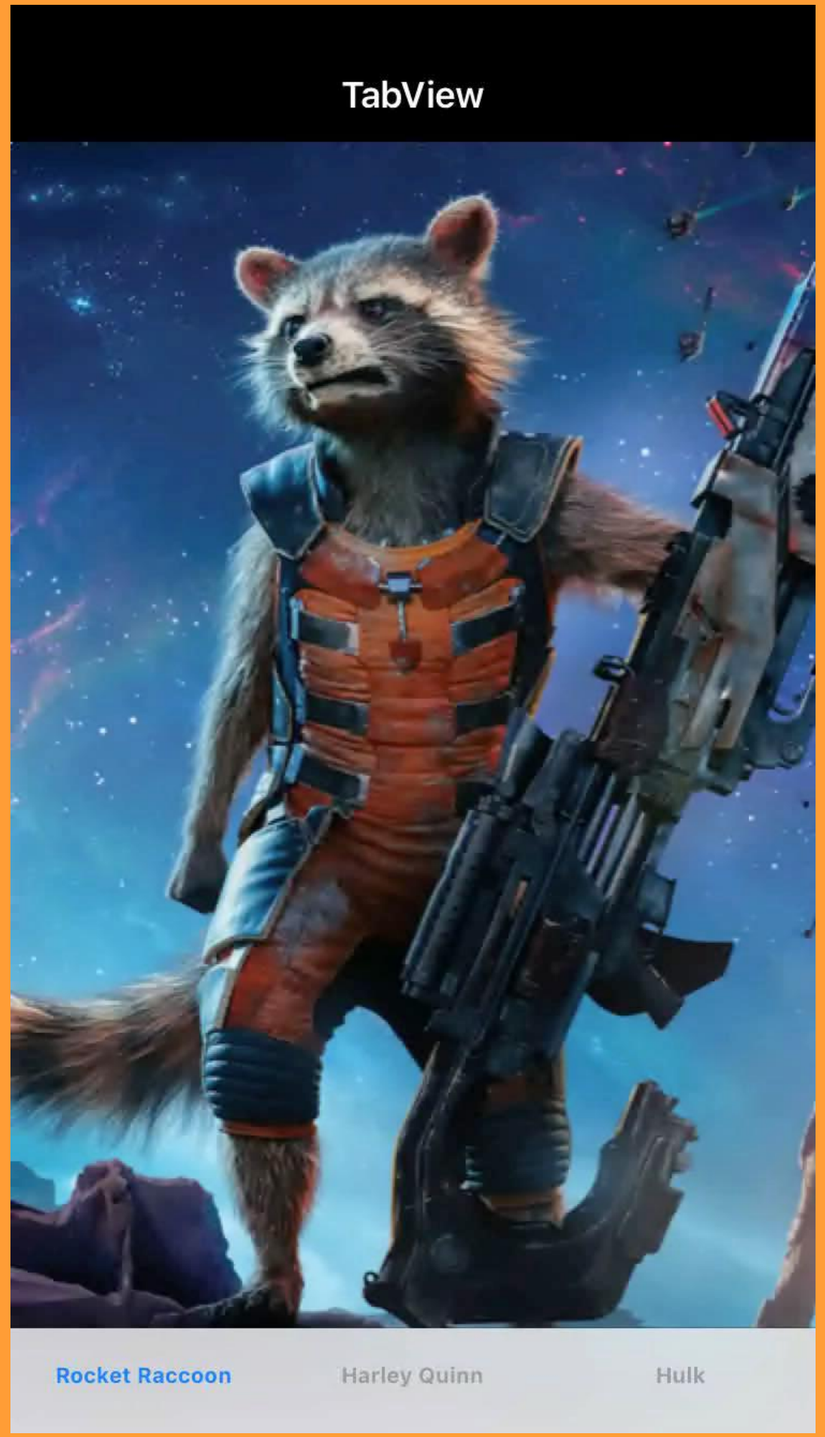
TABVIEW

```
<TabView height="100%">
    <StackLayout *tabItem="{title: 'Rocket Raccoon'}" class="full rocket"/>
    <StackLayout *tabItem="{title: 'Harley Quinn'}" class="full harley"/>
    <StackLayout *tabItem="{title: 'Hulk'}" class="full hulk"/>
</TabView>
```

TABVIEW

```
.full {
  background-size: cover;
  background-position: center;
  background-repeat: no-repeat;
}

.rocket { background-image: url("~/images/rocket-raccoon.jpg"); }

.harley { background-image: url("~/images/harley-quinn.jpg"); }

.hulk { background-image: url("~/images/hulk.jpg"); }
```

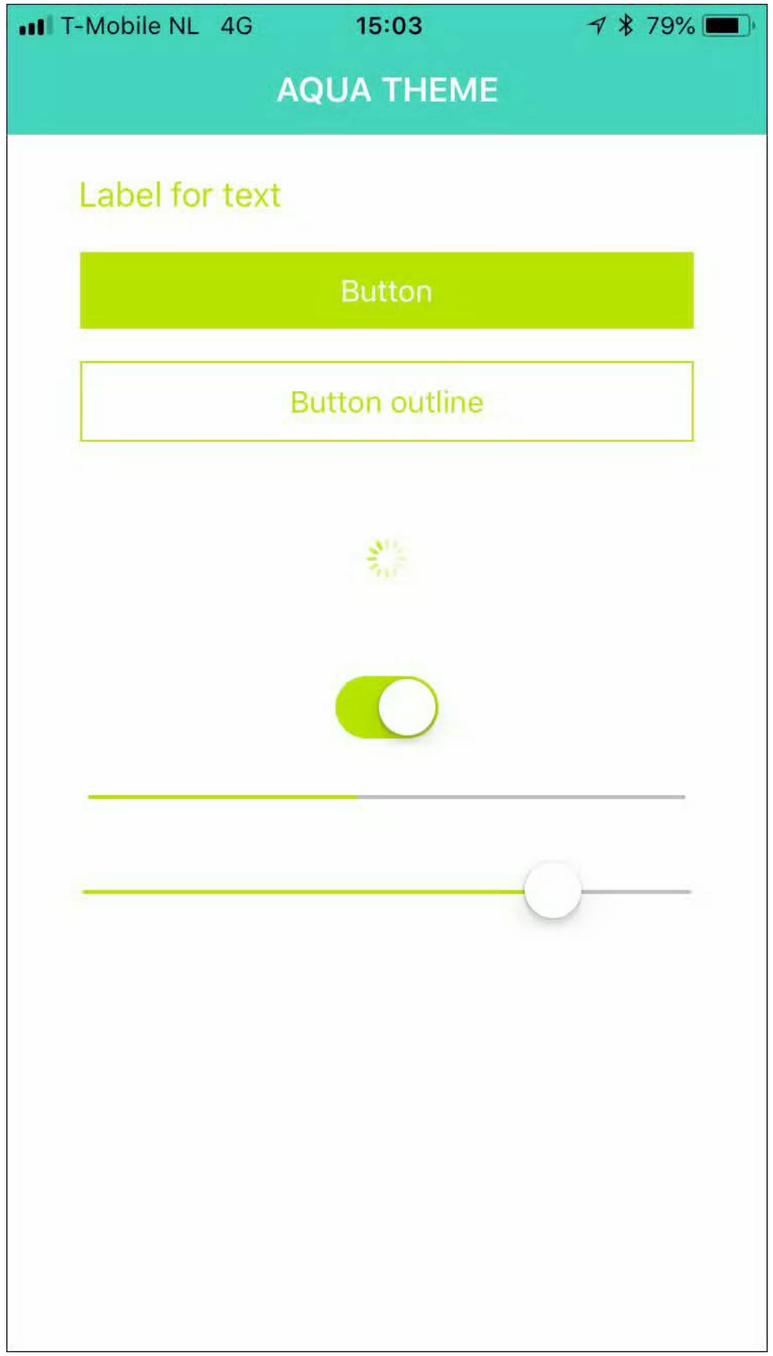
TabView
ROCKET RACCOON
HARLEY QUINN
HULK


TabView
Rocket Raccoon
Harley Quinn
Hulk

{N} CORE THEMES

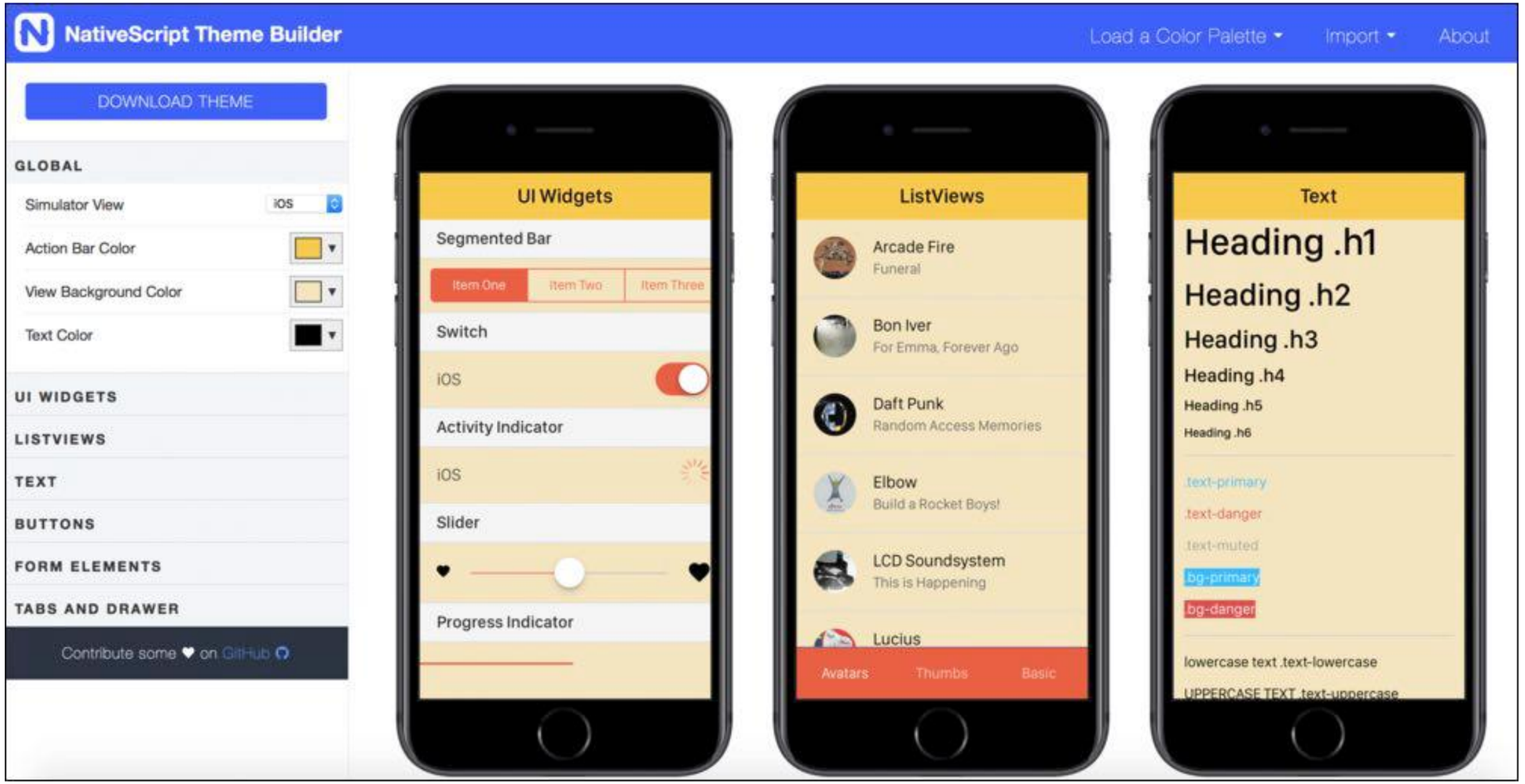
https://docs.nativescript.org/ui/theme

- ready to use color schemes
- tailored for iOS and Android

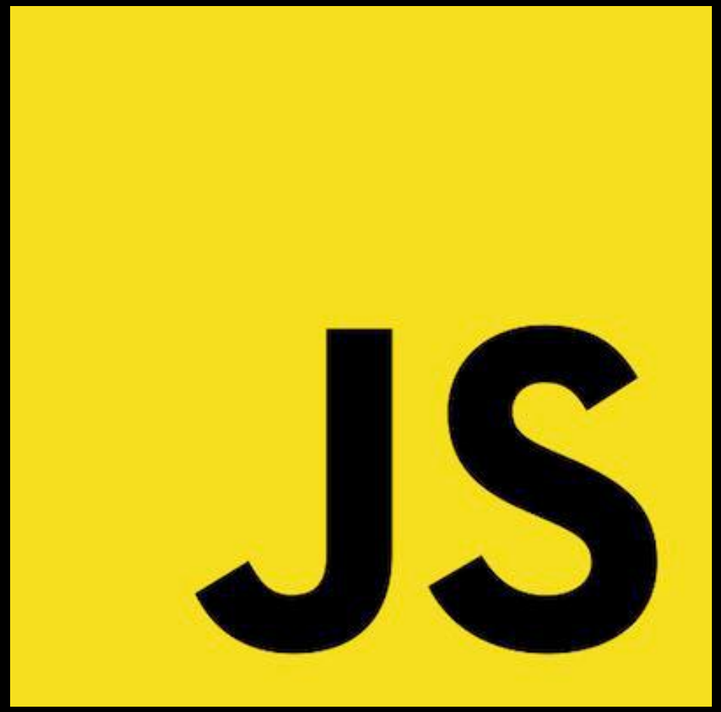


NATIVESCRIPT THEME BUILDER

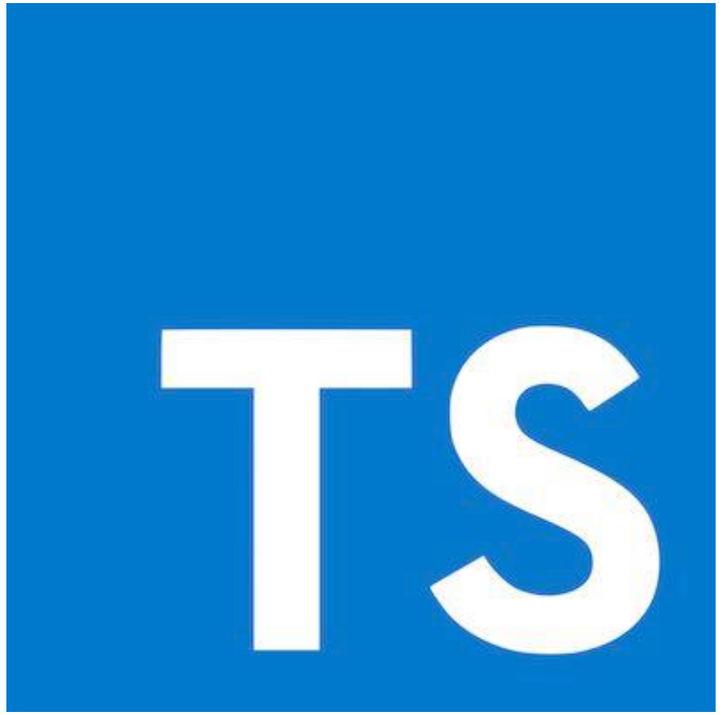
https://www.nativescriptthemebuilder.com



4 FANTASTIC
CHOICES



JAVASCRIPT



TYPESCRIPT

VUE.JS

ANGULAR

ANGULAR

- Opinionated JavaScript framework
- Typescript
- Full-featured routing
- Dependency injection
- Data binding

ANGULAR

```
import { LanguageService } from "../../services/language.service";

export class HomeComponent {

  constructor(private languageService: LanguageService) {}

  changeLanguage(lang: string) {
    this.languageService.setLanguage(lang);
  }

}
```

ANGULAR

one-way data binding

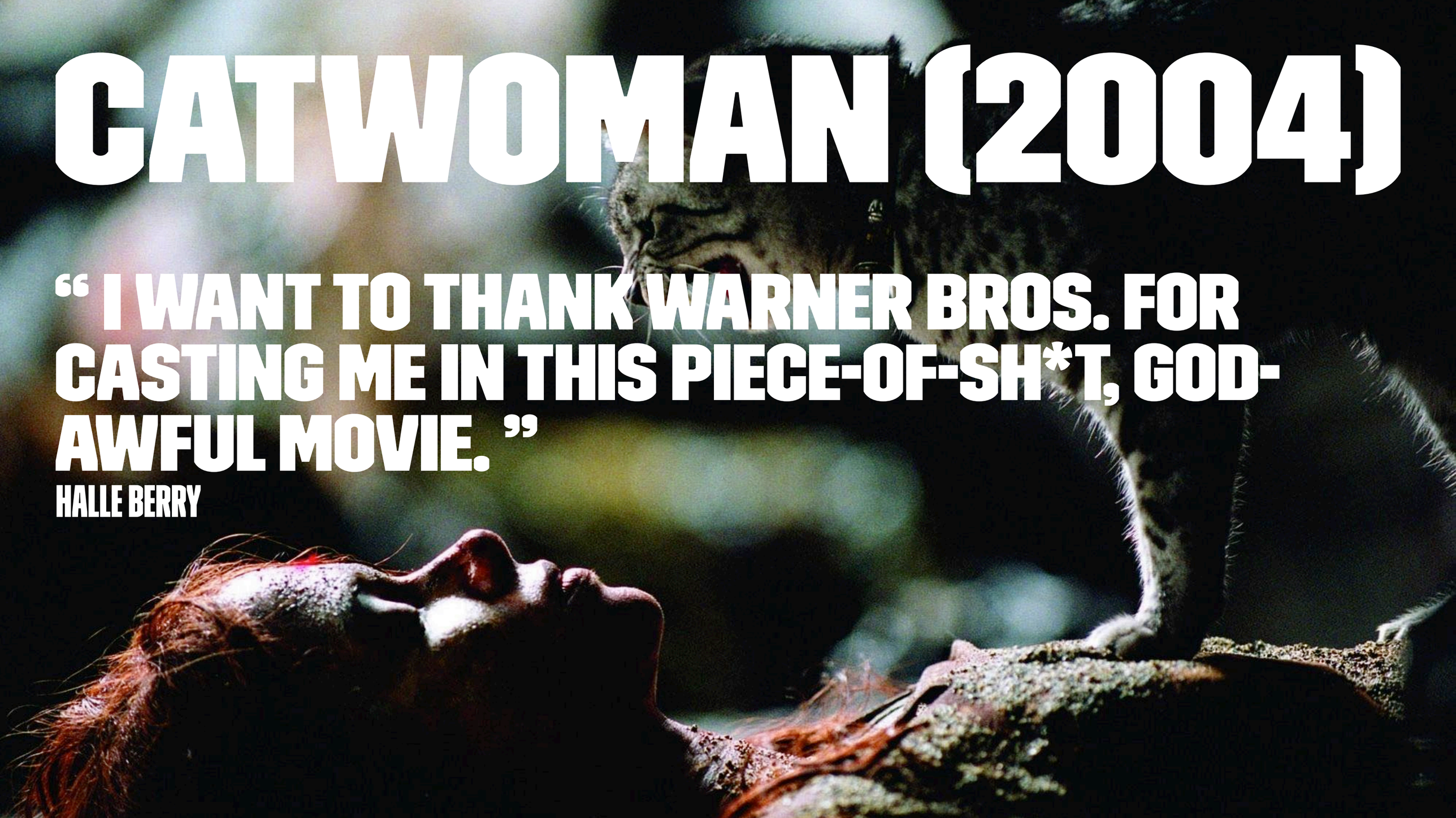
```
<Label [text]="text"></Label>
<Label text="{{text}}"></Label>

text: string = "Hello Vilnius!";
```

ANGULAR

two-way data binding 🍌🍌🎁

```
<TextField
   keyboardType="number"
   (focus)="OnInputFocus($event)"
   (blur)="OnInputBlur($event)"
   [maxLength]="maxLengthSalary"
   [(ngModel)]="salary">
</TextField>
```

CATWOMAN (2004)



“ I WANT TO THANK WARNER BROS. FOR CASTING ME IN THIS PIECE-OF-SH*T, GOD-AWFUL MOVIE. ”

HALLE BERRY

AFV

ANGULAR: PERFORMANCE

- Uglify
  - code minification
  - reduces names of local variables
- Webpack
  - traverses your source tree via module imports
  - only include modules that are used

ANGULAR: PERFORMANCE

- Ahead-of-Time compilation
  - pre-compiles application components and templates
  - Angular compiler not included in bundle
- Lazy-Load modules
  - not all modules are needed at startup
  - pre-load in background

Damaged
AHAHAHA

NATIVE CODE

{N} ANGULAR DIRECTORY STRUCTURE

```
app/components/slider/

    slider.component.html
    slider.component.ts
    slider.component.css

    slider-routing.module.ts
    slider-module.ts
```

SLIDER.COMPONENT.HTML

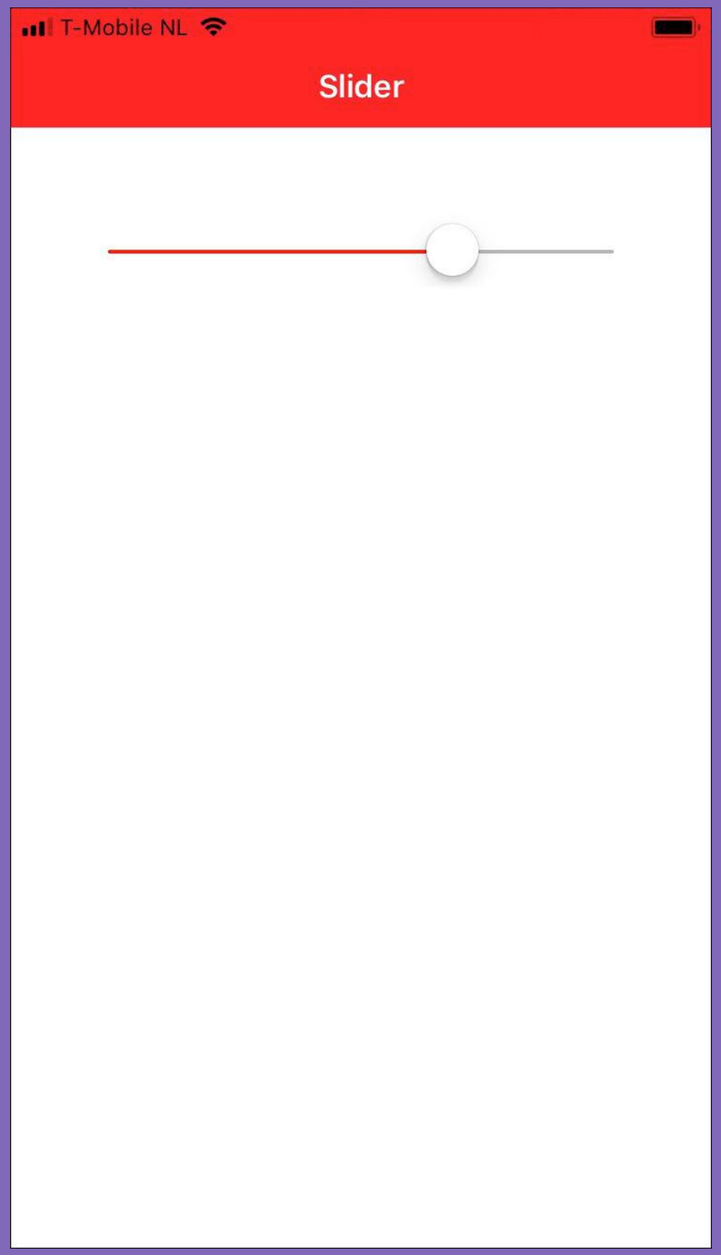
```
<ActionBar title="Slider"></ActionBar>

<StackLayout>
    <Slider value="70"></Slider>
</StackLayout>
```

SLIDER.COMPONENT.TS

```
import { Component } from "@angular/core";

@Component({
  selector: "app-slider",
  moduleId: module.id,
  templateUrl: "slider.component.html",
  styleUrls: ["slider.component.css"]
})
export class SliderComponent {
  constructor() {}
}
```

SLIDER.COMPONENT.CSS

```
ActionBar {
  color: white;
  background-color: red;
}

StackLayout {
  padding: 50;
}

Slider {
  background-color: red;
}
```


T-Mobile NL
Slider

SLIDER.COMPONENT.HTML

```
<ActionBar title="Slider"></ActionBar>

<StackLayout>
    <Slider slider-icon value="70"></Slider>
</StackLayout>
```

- attribute directive

- changes the appearance or behavior of an element

SLIDER.DIRECTIVE.TS

```
import { Directive, ElementRef } from "@angular/core";
import { isIOS } from "platform";

@Directive({
  selector: "[slider-icon]"
})
export class SliderIconDirective {
  constructor(private el: ElementRef) {
    if (isIOS) {
      let uiSlider = this.el.nativeElement.ios;
      uiSlider.setThumbImageForState(
        UIImage.imageNamed("image.png"), UIControlState.Normal);
    }
  }
}
```

SLIDER.DIRECTIVE.TS

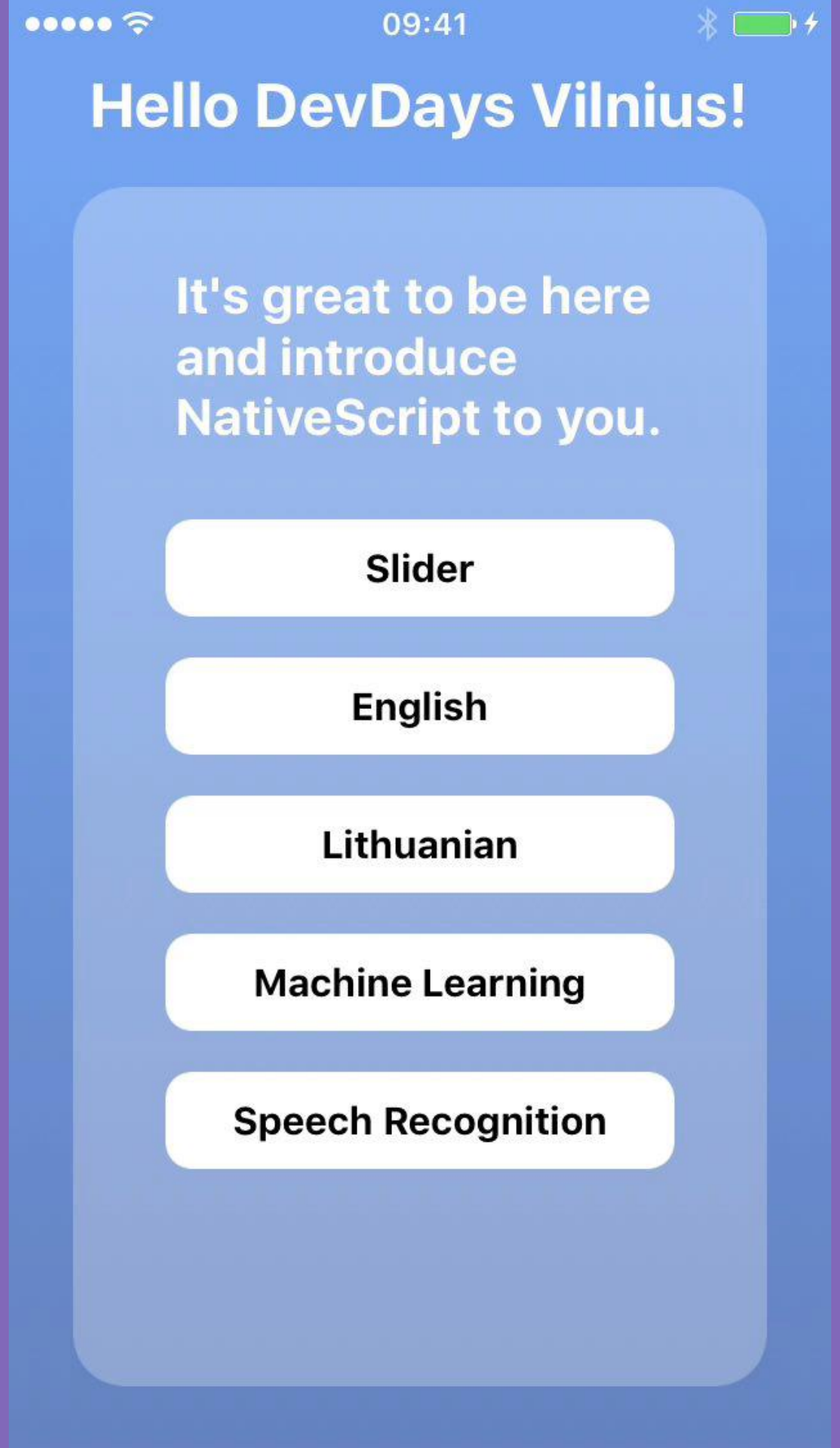
```
import { Directive, ElementRef } from "@angular/core";
import { isIOS } from "platform";

@Directive({
  selector: "[slider-icon]"
})
export class SliderIconDirective {
  constructor(private el: ElementRef) {
    if (isIOS) {
      let uiSlider = this.el.nativeElement.ios;
      uiSlider.setThumbImageForState(
        UIImage.imageNamed("image.png"), UIControlState.Normal);
    }
  }
}
```

SLIDER.DIRECTIVE.TS

```
import { Directive, ElementRef } from "@angular/core";
import { isIOS } from "platform";

@Directive({
  selector: "[slider-icon]"
})
export class SliderIconDirective {
  constructor(private el: ElementRef) {
    if (isIOS) {
      let uiSlider = this.el.nativeElement.ios;
      uiSlider.setThumbImageForState(
        UIImage.imageNamed("image.png"), UIControlState.Normal);
    }
  }
}
```

SLIDER.MODULE.TS

```
import { NgModule, NO_ERRORS_SCHEMA } from "@angular/core";
import { NativeScriptModule } from "nativescript-angular/nativescript.module";

import { SliderIconDirective } from "./slider.directive";

import { SliderRoutingModule } from "./slider-routing.module";
import { SliderComponent } from "./slider.component";

@NgModule({
  imports: [NativeScriptModule, SliderRoutingModule],
  declarations: [SliderComponent, SliderIconDirective],
  schemas: [NO_ERRORS_SCHEMA]
})
export class SliderModule {}
```


09:41
Hello DevDays Vilnius!
It's great to be here and introduce NativeScript to you.
Slider
English
Lithuanian
Machine Learning
Speech Recognition

PACKAGES
&LIBRARIES

NODE PACKAGE MANAGER

- commonly known as npm
- ready to use JavaScript modules
- about 650.000 packages of free, reusable code
- npm install packagename --save
- package.json

NODE PACKAGE MANAGER

CRYPTO-JS

Cryptography standards (AES-256)

ACCOUNTING.JS

Number, money and currency formatting

EMAIL-VALIDATOR

Email syntax validator

ANDROID ARSENAL

- libraries for Android (Java / Kotlin)

COCOAPODS

- libraries for iOS (Objective-C / Swift)

MULTILINGUAL:
NGX-TRANSLATE

MULTILINGUAL: NGX-TRANSLATE

- internationalization library for Angular 2+
- define translations in different languages
- switch between them easily
- no hardcoded text/labels, all in one place
- start directly, even with one language

MULTILINGUAL: NGX-TRANSLATE

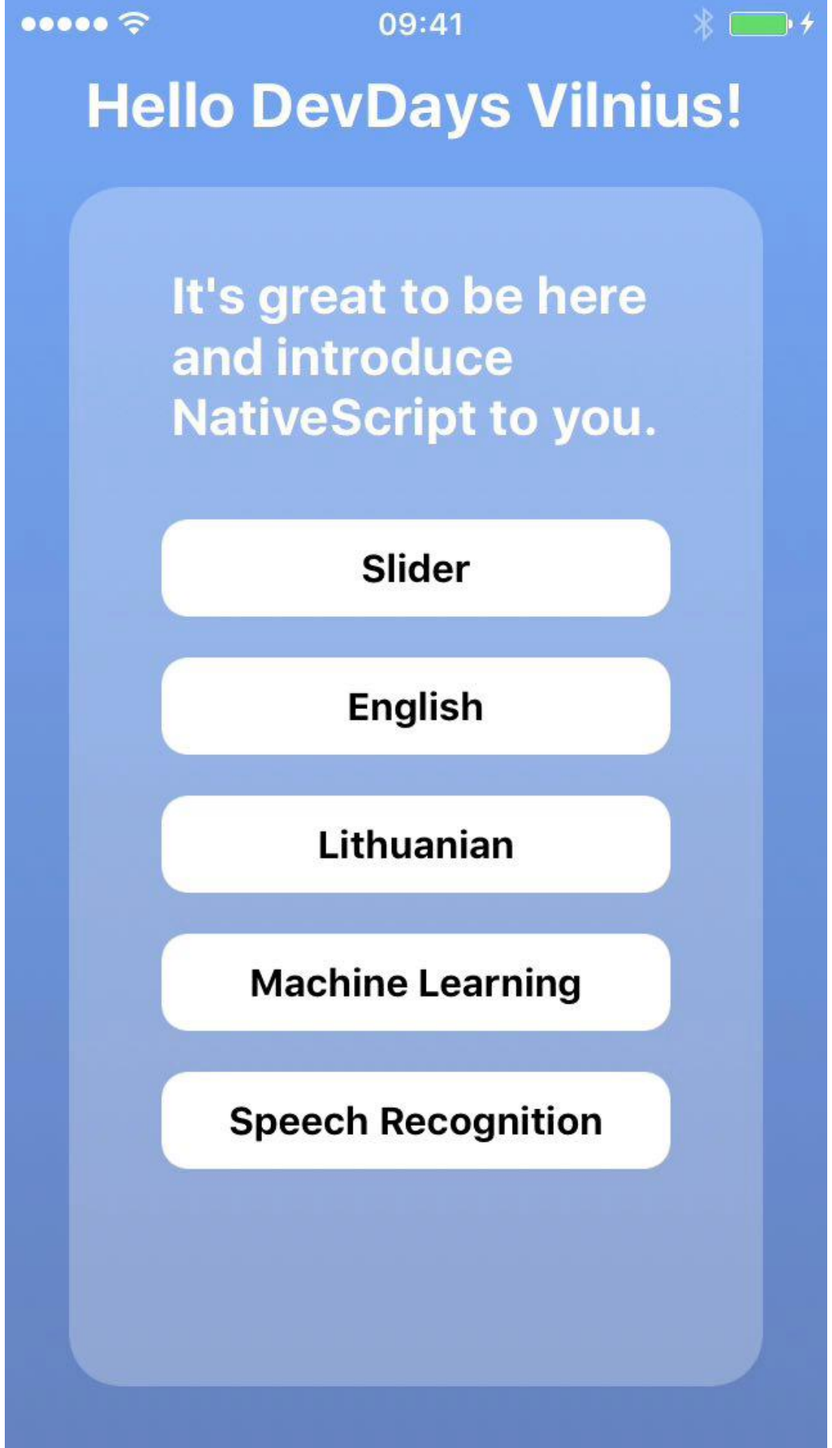
```
{
  "HOME": {
    "TITLE": "Hello DevDays Vilnius!",
    "TEXT": "It's great to be here and introduce NativeScript to you.",
    "SLIDER": "Slider",
    "ENGLISH": "English",
    "FOREIGN": "Lithuanian",
    "MACHINE_LEARNING": "Machine Learning",
    "SPEECH_RECOGNITION": "Speech Recognition"
  }
}
```

MULTILINGUAL: NGX-TRANSLATE

```
<ActionBar
   [title]="'HOME.TITLE' | translate">
</ActionBar>

<Button
   [text]="'HOME.ENGLISH' | translate"
   (tap)="changeLanguage('en')">
</Button>
```

[] = one way data binding in Angular

| = display-value transformations


09:41
Hello DevDays Vilnius!
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NATIVESCRIPT
PLUGINS

{N} PLUGINS
ANATOMY

VERSION-NUMBER.IOS.TS

```
export class VersionNumber {
  get() {
    let version = NSBundle.mainBundle.objectForInfoDictionaryKey("CFBundleShortVersionString");
    return version;
  }
}
```

VERSION-NUMBER.ANDROID.TS

```
import * as application from "application";

export class VersionNumber {
  get() {
    let PackageManager = android.content.pm.PackageManager;
    let pkg = application.android.context
      .getPackageManager()
      .getPackageInfo(application.android.context.getPackageName(), PackageManager.GET_META_DATA);
    return pkg.versionName;
  }
}
```

VERSION-NUMBER.D.TS

```
export declare class VersionNumber {
    get(): any;
}
```

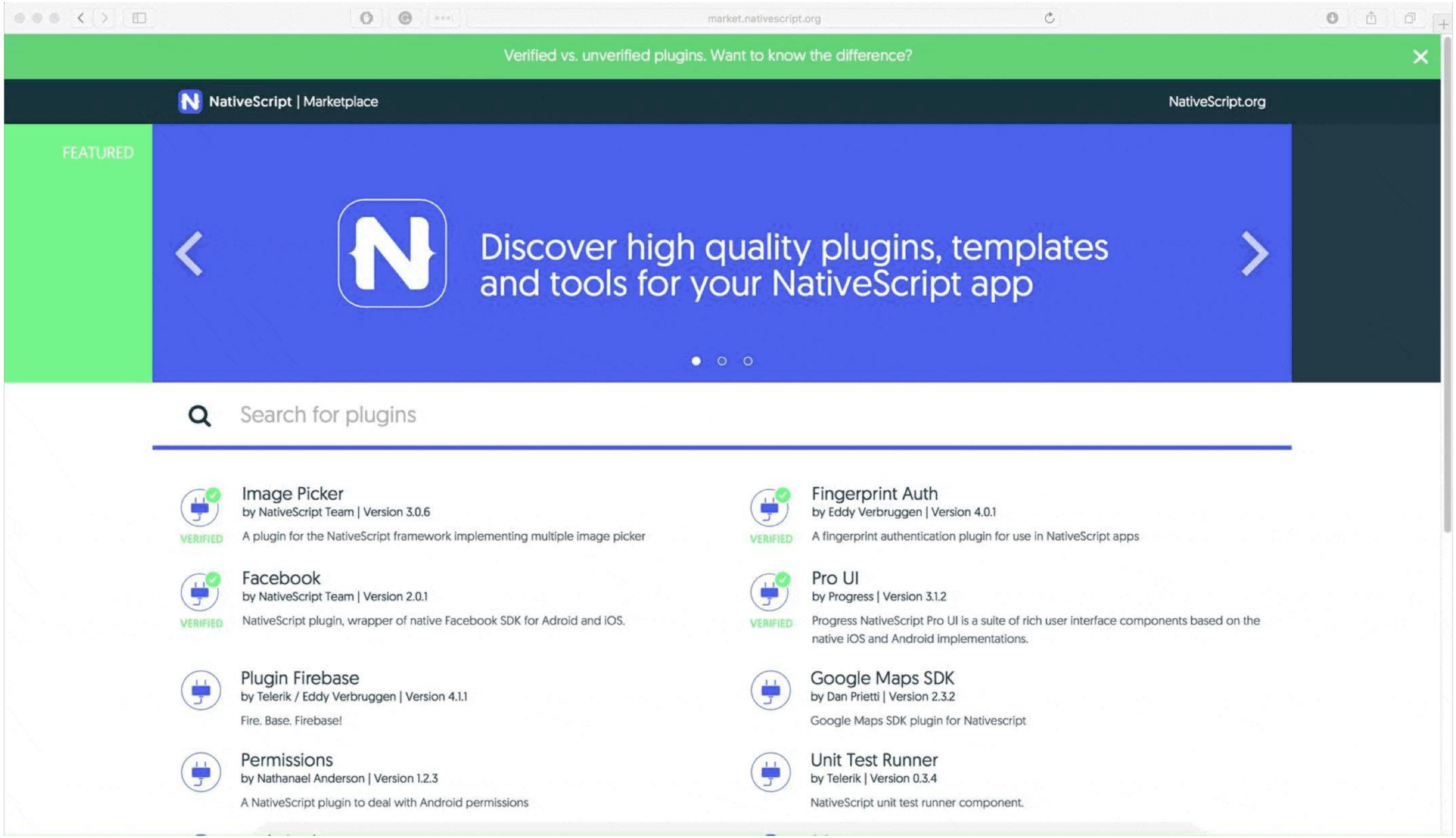
INSTALL

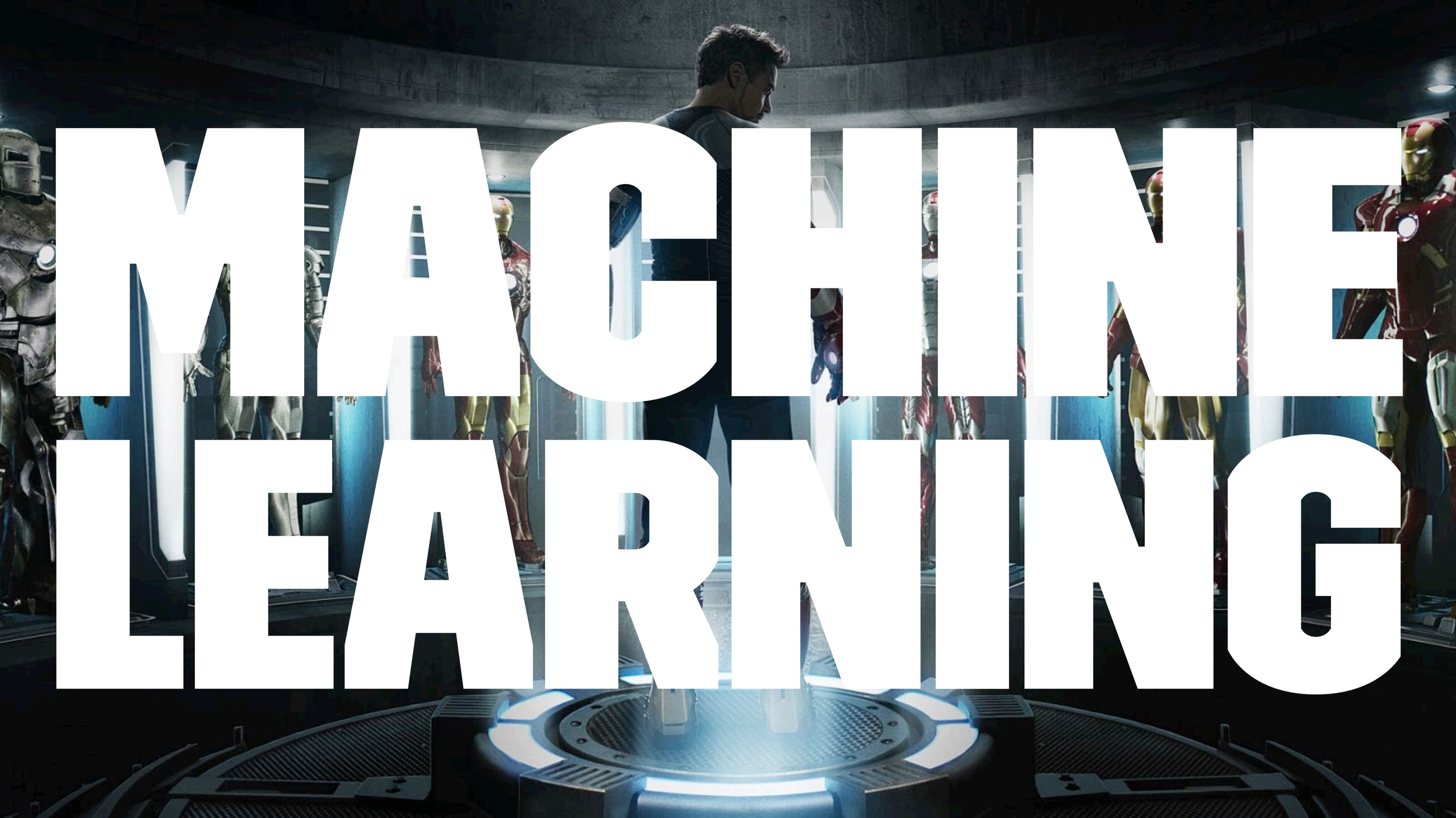
```
tns plugin add nativescript-version-number
```

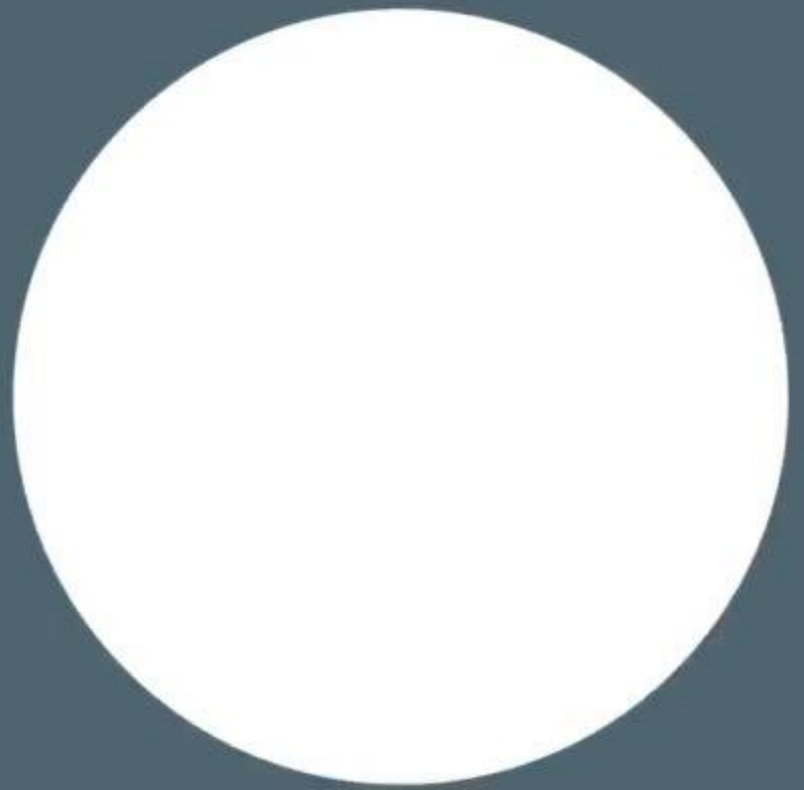
USE

```
import { VersionNumber } from "nativescript-version-number";

let version = new VersionNumber().get();
```


market.nativescript.org
Verified vs. unverified plugins. Want to know the difference?
NativeScript | Marketplace
NativeScript.org
FEATURED
Discover high quality plugins, templates and tools for your NativeScript app
Search for plugins
Image Picker
by NativeScript Team | Version 3.0.6
VERIFIED
A plugin for the NativeScript framework implementing multiple image picker
Fingerprint Auth
by Eddy Verbruggen | Version 4.0.1
VERIFIED
A fingerprint authentication plugin for use in NativeScript apps
Facebook
by NativeScript Team | Version 2.0.1
VERIFIED
NativeScript plugin, wrapper of native Facebook SDK for Adroid and iOS.
Pro UI
by Progress | Version 3.1.2
VERIFIED
Progress NativeScript Pro UI is a suite of rich user interface components based on the native iOS and Android implementations.
Plugin Firebase
by Telerik / Eddy Verbruggen | Version 4.1.1
Fire. Base. Firebase!
Google Maps SDK
by Dan Prietti | Version 2.3.2
Google Maps SDK plugin for Nativescript
Permissions
by Nathanael Anderson | Version 1.2.3
A NativeScript plugin to deal with Android permissions
Unit Test Runner
by Telerik | Version 0.3.4
NativeScript unit test runner component.


MACHINE
LEARNING



AAN HET BEGIN VAN DIT EXPLOSIEVE ACTIESPEKTAKEL LIJKT EEN REMEDIE BINNEN HANDBEREIK VOOR THE INCREDIBLE HULK, DE ONSTUITBARE OERKRACHT DIE UITGROEIDE TOT ÉÉN VAN DE POPULAIRSTE SUPERHELDEN ALLER TIJDEN.

WETENSCHAPPER BRUCE BANNER (EDWARD NORTON) STRUINT ANONIEM DE PLANEET AF, OP ZOEK NAAR EEN TEGENGIF VOOR ZIJN AANDOENING, MAAR WORDT HIERIN GEHINDERD DOOR PERSONEN DIE ZIJN KRACHTEN WILLEN MISBRUIKEN EN DOOR DE GEDACHTE AAN BETTY ROSS (LIV TYLER), DE ENIGE VROUW VAN WIE HIJ OOIT HEEFT GEHOUDEN.

DE GENIALE BANNER WORDT GENADELOOS OPGEJAAGD DOOR THE ABOMINATION, EEN WARE NACHTMERRIE VAN EEN MONSTER DAT ZICH VOEDT MET ADRENALINE EN RAZERNIJ. DE KRACHTEN VAN THE ABOMINATION DOEN NIET ONDER VOOR DIE VAN THE HULK EN HUN UITEINDELIJKE CONFRONTATIE LEIDT TOT EEN DUEL VAN COMICACHTIGE PROPORTIES, WAARBIJ DE TOTALE VERNIETIGING VAN NEW YORK OP HET SPEL STAAT.

EXTRA'S: FILMCOMMENTAAR MET REGISSEUR LOUIS LETERRIER EN TIM ROTH

UNIVERSAL PICTURES AND MARVEL ENTERTAINMENT PRESENT A MARVEL STUDIOS PRODUCTION A VALHALLA MOTION PICTURES PRODUCTION

EDWARD NORTON "THE INCREDIBLE HULK" LIV TYLER TIM ROTH TIM BLAKE NELSON TY BURRELL AND WILLIAM HURT

CASTING BY LARAY MAYFIELD MUSIC BY CRAIG ARMSTRONG

MUSIC SUPERVISOR DAVE JORDAN VISUAL EFFECTS SUPERVISOR KURT WILLIAMS EDITORS JOHN WRIGHT ACE RICK SHAINE ACE PRODUCTION DESIGNER KIRK M. PETRUCCELLI DIRECTOR OF PHOTOGRAPHY PETER MENZIES, JR., ACS

EXECUTIVE PRODUCERS STAN LEE DAVID MAISEL JIM VAN WYCK PRODUCED BY AVI ARAD GALE ANNE HURD KEVIN FEIGE SCREEN STORY AND SCREENPLAY BY ZAK PENN DIRECTED BY LOUIS LETERRIER

MARVEL

A UNIVERSAL RELEASE

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Universal on Internet: www.universalpictures.nl or www.universalpictures.be

ONDERTITELING:

English* (for the hearing impaired)
Nederlands*
Dansk
Islenska
Magyar
Norsk
Suomi
Svenska
Türkçe
العربية

AUDIO:

English 5.1 Dolby Digital
English 2.0 Dolby Digital
Magyar 5.1 Dolby Digital

Deze disc is kopieerbeveiligd

www.dvdlogo.nl

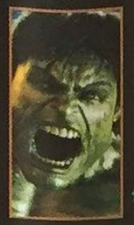
2.35:1 ANAMORPHIC WIDESCREEN

12

Stemra nvpi

UITSLUITEND BESTEMD VOOR VERKOOP

MARVEL DOLBY 2.5 DVD UNIVERSAL



THE INCREDIBLE HULK

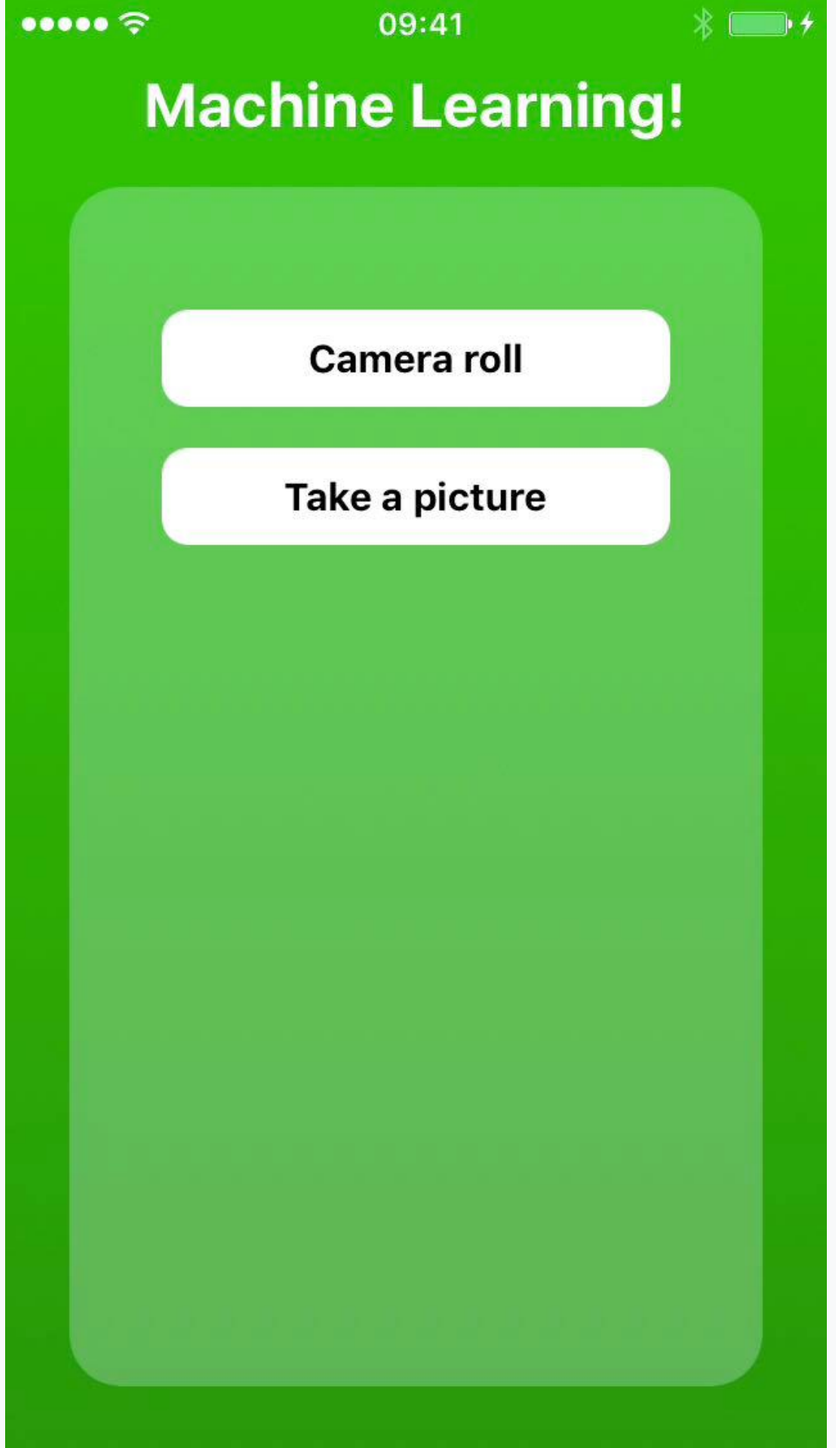
MARVEL

THE INCREDIBLE HULK™

TEXT RECOGNITION

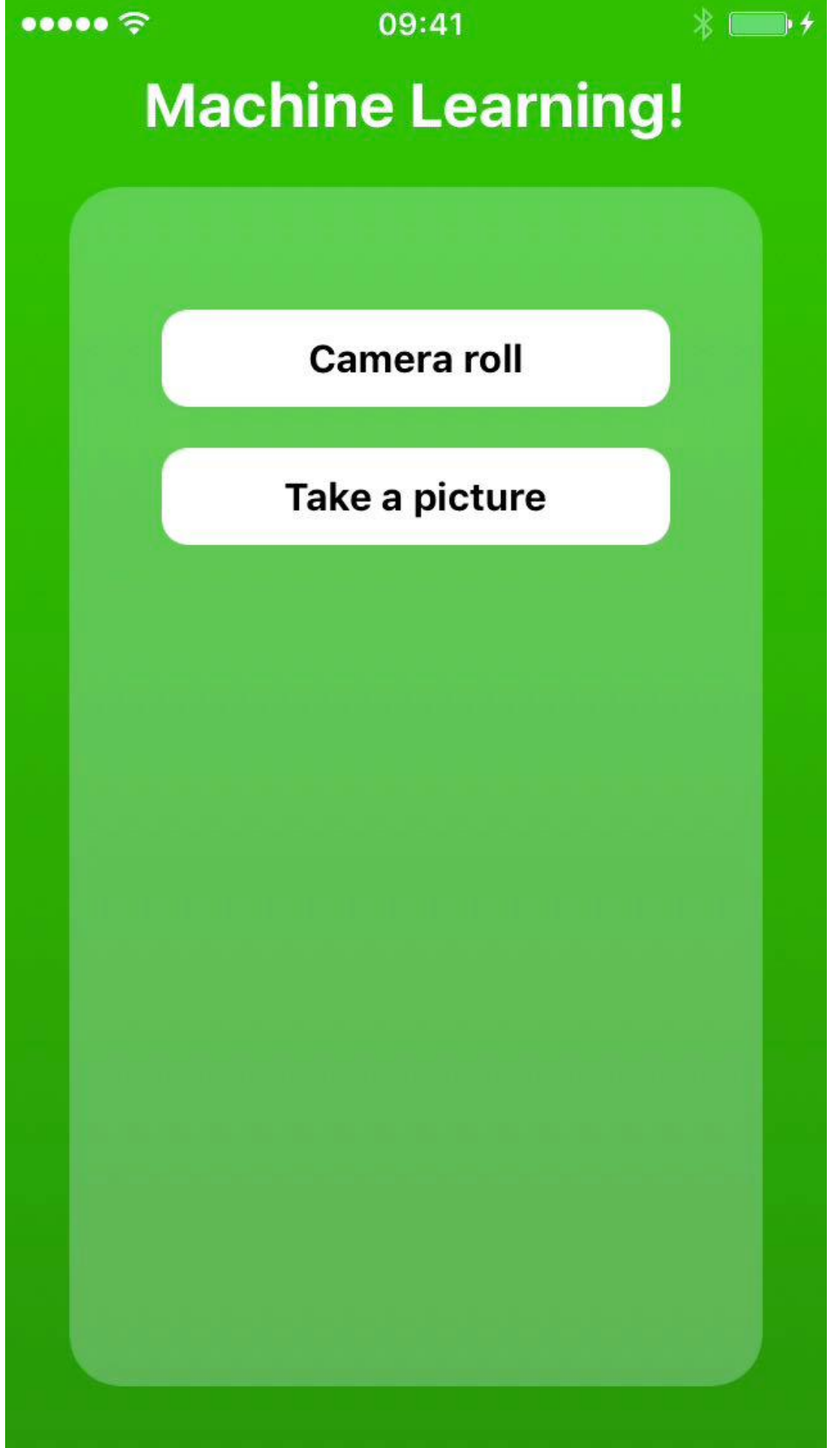
- Dutch synopsis
- Translate to English with Yandex

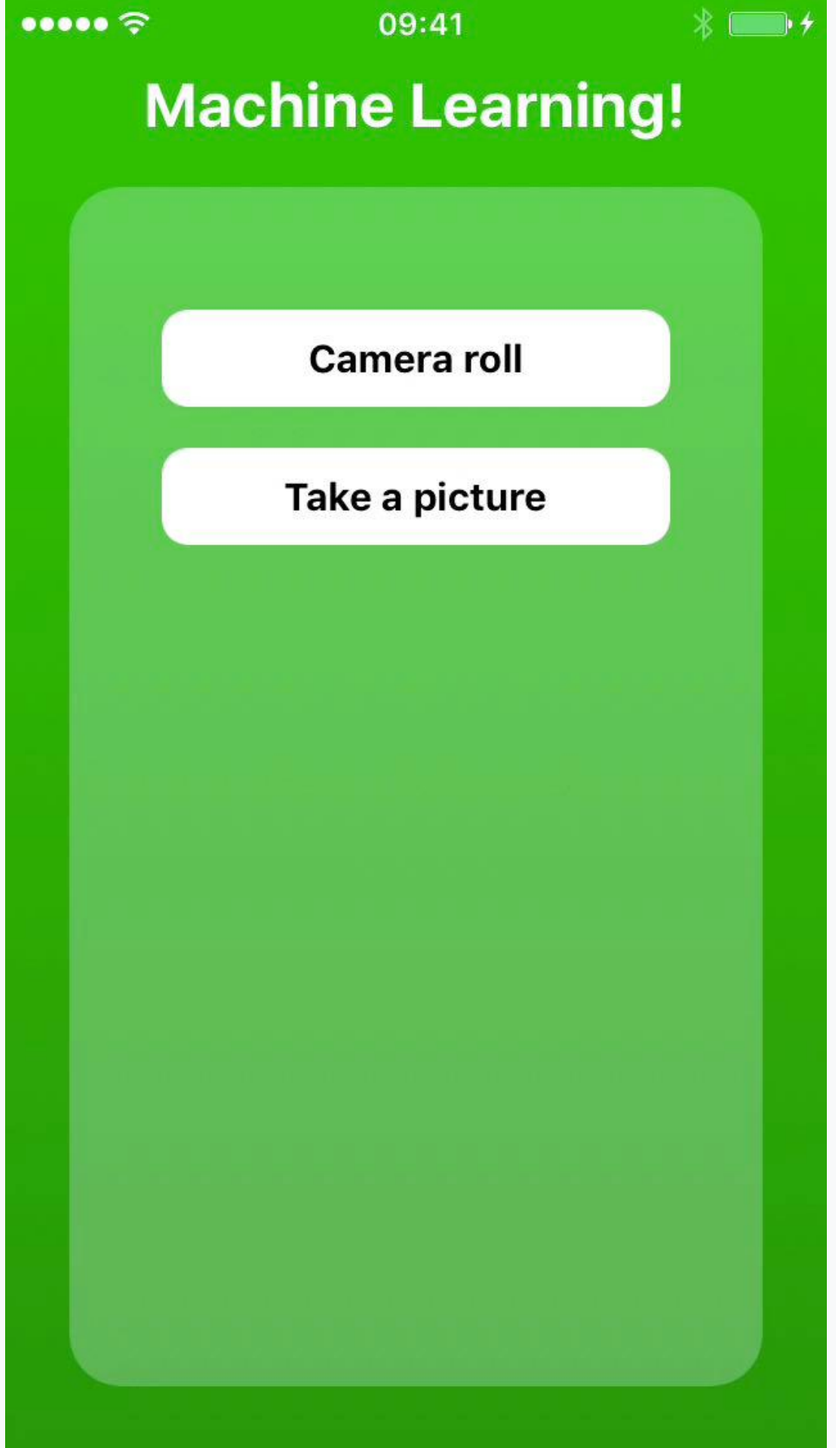
EDWARD NORTON
LIV TYLER
TIM ROTH
EN WILLIAM HURT
THE INCREDIBLE HULK
WETENSCHAPPER BRUCE BANNER (EDWARD NORTON) STRUINT ANONIEM DE PLANEET AF, OP ZOEK NAAR EEN TEGENGIF VOOR ZIJN AANDOENING, MAAR WORDT HIERIN GEHINDERD DOOR PERSONEN DIE ZIJN KRACHTEN WILLEN MISBRUIKEN EN DOOR DE GEDACHTE AAN BETTY ROSS (LIV TYLER), DE ENIGE VROUW VAN WIE HIJ OOIT HEEFT GEHOUDEN.
DVD VIDEO
12


09:41
Machine Learning!
Camera roll
Take a picture

LANDMARK RECOGNITION

- Bridge in London
- Near St Paul's Cathedral


09:41
Machine Learning!
Camera roll
Take a picture


09:41
Machine Learning!
Camera roll
Take a picture

{N} PLUGINS
LIVE DEMO

NATIVESCRIPT PLUGINS

- nativescript-bluetooth
- nativescript-camera
- nativescript-social-share
- nativescript-speech-recognition
- nativescript-texttospeech
- nativescript-videoplayer

NATIVESCRIPT-BLUETOOTH

```
import * as bluetooth from "nativescript-bluetooth";

bluetooth.isBluetoothEnabled()
  .then(function(enabled) {
    alert("Enabled? " + enabled);
  });
```

NATIVESCRIPT-BLUETOOTH

```
private uuid = "CA9F644C-1920-4572-8833-1D137A6T2A05";

bluetooth.startScanning({
  seconds: 4,
  onDiscovered: peripheral => {
    if (peripheral.UUID == this.uuid) {
      bluetooth.connect({
        UUID: peripheral.UUID,
        onConnected: peripheral => {
          bluetooth.stopScanning();
          // do stuff
        }
      });
    }
  }
});
```

NATIVESCRIPT-CAMERA

```
import * as camera from "nativescript-camera";
import { ImageSource } from "tns-core-modules/image-source";


camera.requestPermissions();

camera.takePicture({
  width: 1000,
  height: 1000
})
.then(imageAsset => {
  new ImageSource().fromAsset(imageAsset).then(imageSource => {
    // do something with the image
  });
});
```

NATIVESCRIPT-SOCIAL-SHARE

```
import * as camera from "nativescript-camera";
import { ImageSource } from "tns-core-modules/image-source";
import * as SocialShare from "nativescript-social-share";

camera.requestPermissions();

camera.takePicture({
  width: 1000,
  height: 1000
})
.then(imageAsset => {
  new ImageSource().fromAsset(imageAsset).then(imageSource => {
    SocialShare.shareImage(imageSource);
  });
});
```

NATIVESCRIPT-SPEECH-RECOGNITION

```
import { SpeechRecognition, SpeechRecognitionTranscription }
  from "nativescript-speech-recognition";

private speechRecognition = new SpeechRecognition();

this.speechRecognition.available().then(
  (available: boolean) => console.log(available ? "YES!" : "NO"),
  (err: string) => console.log(err)
);

this.speechRecognition.requestPermission().then((granted: boolean) => {
  console.log("Granted? " + granted);
});
```

NATIVESCRIPT-SPEECH-RECOGNITION

```
this.speechRecognition.startListening({
  locale: "en-US",
  returnPartialResults: true,
  onResult: (transcription: SpeechRecognitionTranscription) => {
    console.log(`User said: ${transcription.text}`);
  }
});

this.speechRecognition.stopListening().then(() => {
  // do something with the recognized text
});
```

NATIVESCRIPT-TEXTTOSPEECH

```
import { TNSTextToSpeech, SpeakOptions }
  from "nativescript-texttospeech";

let textToSpeech = new TNSTextToSpeech();
let speakOptions: SpeakOptions = {
  text: "Hello world!",
  locale: "en-GB",
  speakRate: 0.5,
  pitch: 0.8
};

textToSpeech.speak(speakOptions);
```

NATIVESCRIPT-VIDEOPLAYER

```
<VideoPlayer
   src="video.mp4"
   controls="true"
   loop="true"
   autoplay="false">
</VideoPlayer>
```

WIN {N} SOCKS!
@ROWDYRABOUW

AČIŪ!
2XR.NL/DEVDAYSVILNIUS

LINKS

Native elements playground: http://2xr.nl/markup

keyboardType playground: http://2xr.nl/keyboardType

TabView playground: http://2xr.nl/TabView

Plugin demo app: http://2xr.nl/DevDaysVilnius2018code