

Setup

- 1) Connect to the wifi (on your laptop and devices)
- 2) Go to platform.telerik.com and login
- 3) Make sure you have the NativeScript app installed on your Android and/or iOS device(s)





NativeScript Deep Dive

- TJ VanToll | @tjvantoll
- Clark Sell | @csell5
- Sebastian Witalec | @sebawita

Agenda

- Welcome to NativeScript (TJ)
 - Lab #1
- Beyond the Basics (Clark)
 - Lab #2
- Diving Deep with {N} (Sebastian)
 - Lab #3
- Q&A



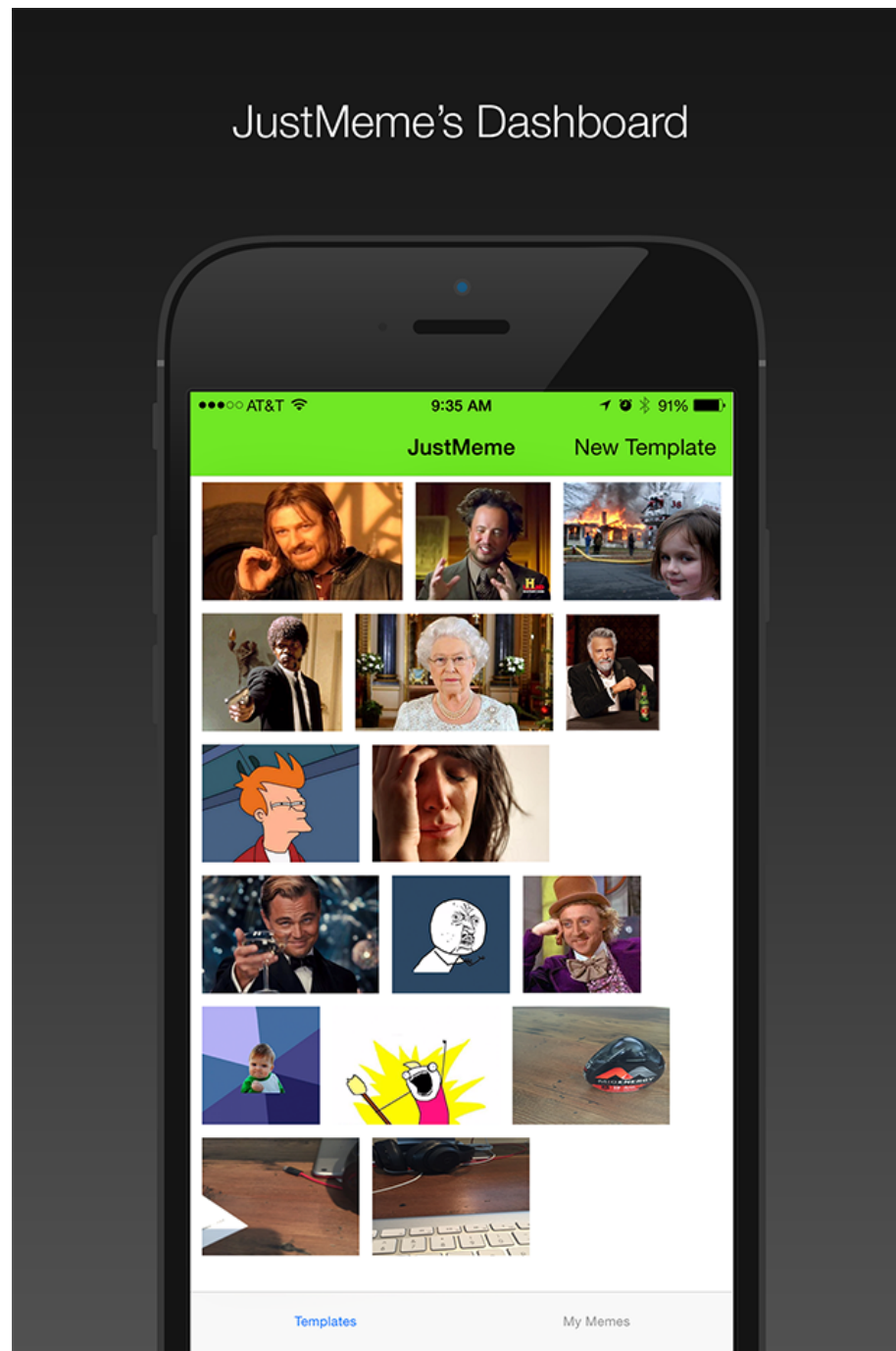
Follow NativeScript



- nativescript.org
- [@nativescript](https://twitter.com/nativescript)
- nativescript.org/blog



JustMeme



Oh snap

Hello Clark Sell,

Thank you for contacting the App Store Review team. We are unable to accommodate your request for an expedited review at this time.

While we do our best to accommodate requests for expedited reviews, and take individual circumstances into consideration, unfortunately we are unable to grant every request due to our volume.

Helping you get your app, update, or bundle to the App Store is very important to us, and we are working hard to process all submissions as quickly as possible. Thank you for your understanding.

Best Regards,

App Store Review



Oh snappppppppp

This is a notification that your application submission, JustMeme, for package ID net.csell.justmeme, has been rejected. If this submission was an update to an existing app, the version published prior to this update is still available on Google Play.

Please address the issue described below, then submit an update with your changes.

REASON FOR REJECTION: Violation of the [intellectual property](#) and [impersonation or deceptive behavior](#) provisions of the Content Policy. Please refer to the [IP infringement](#) and [impersonation policy help article](#) for more information.

- Your app and/or elements of its listing on Google Play, including title, description, logo(s), or promotional screenshots must not include unauthorized usage of protected works belonging to a third party.
- Your app icon and promotional screenshots must not contain images that appear confusingly similar to existing products.

Protected work could typically include product names, brands, images, logos, music, and similar works.

Please make modifications to your app and/or its listing to bring it into compliance. To do so, remove any content that may be a protected work in your app and/or app listing.

If you are authorized to utilize this content, please contact us via the [Google Play Help Center](#) and attach verifiable and accepted proof of permission.

All submission rejections are tracked. Repeated rejections due to policy violations will result in app suspension, at which point this app will count as a strike against the good standing of your developer account and no longer be available on Google Play.

This notification also serves as notice for other apps in your catalog. You can avoid future submission rejections and/or app suspensions by immediately ensuring that no other apps in your catalog are in violation of (but not limited to) the above policy. Before publishing applications, please ensure your apps' compliance with the [Developer Distribution Agreement](#) and [Content Policy](#).

If you feel we have made this determination in error, you can visit this [Google Play Help Center article](#).

The Google Play Team

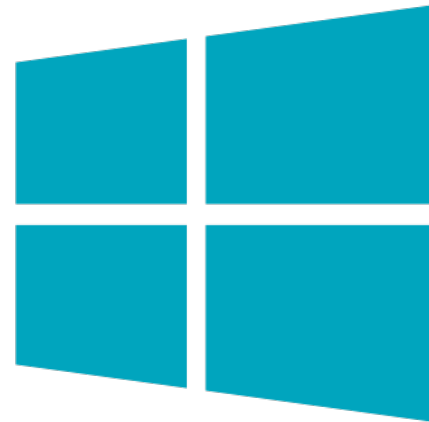


REJECTED?



What is NativeScript?

- A runtime for building and running *native* iOS, Android, and (soon) Windows Phone apps with a single, JavaScript code base



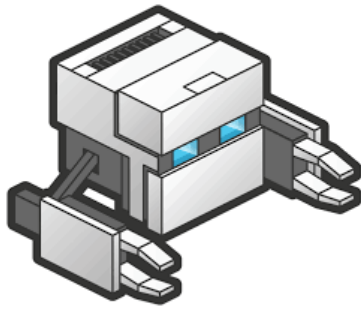
But wait

isn't that PhoneGap?





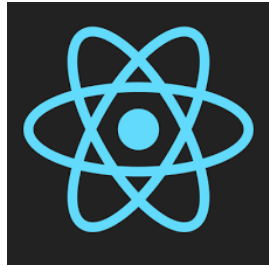
!=



- No DOM



!=



- Direct access to native APIs in JS



!=



- No cross compilation



Why NativeScript?

- Skills reuse
 - Standards-based JavaScript, CSS, optionally TypeScript
- Code reuse
 - npm modules, 3rd-party iOS and Android libraries
- Easily use native APIs
 - No wrappers to access native APIs
 - Use native UI elements
- Open source!



Contribute!

(nativescript.org/contribute)

Contributing to NativeScript

Thank you for your interest in contributing to the NativeScript project!

Anyone wishing to contribute to the NativeScript project MUST read & sign the NativeScript [Contribution License Agreement](#). The NativeScript team cannot accept pull requests from users who have not signed the CLA first.

NativeScript is a complex framework, involving cross-platform modules, a Command-Line Interface and platform-specific runtimes. Each of these follows a specific technology, therefore the contribution instructions are different for each.

Please, visit these repositories for detailed contribution guidelines:

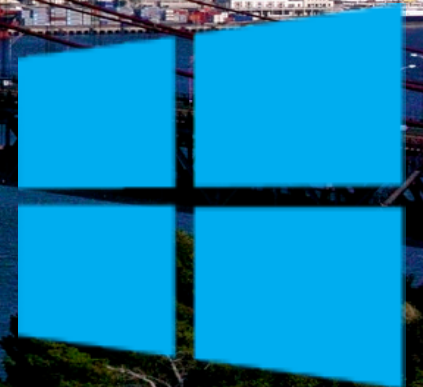
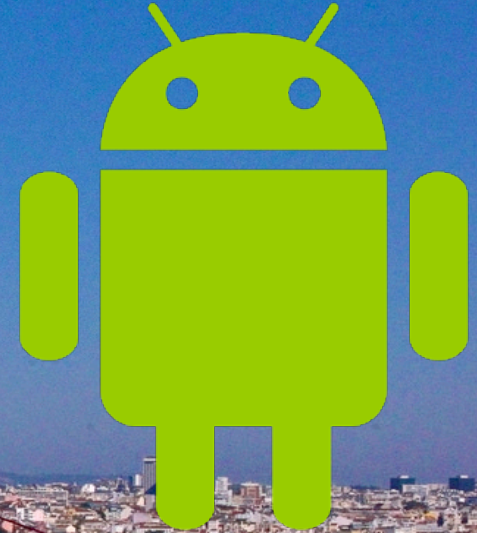
[Cross-Platform modules](#)

[Command-Line Interface](#)

[Android-Runtime](#)

[iOS-Runtime](#)





NativeScript Android example

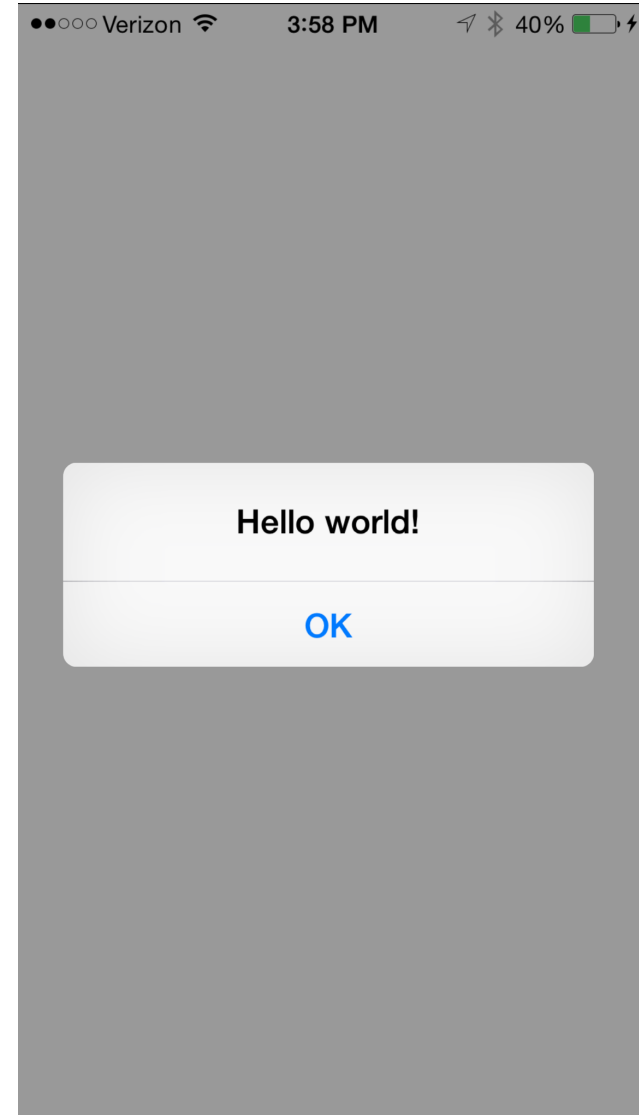
```
var time = new android.text.format.Time();  
time.set( 1, 0, 2015 );  
console.log( time.format( "%D" ) );
```

Output: "01/01/15"



NativeScript iOS example

```
var alert = new UIAlertView();  
alert.message = "Hello world!";  
alert.addButtonWithTitle( "OK" );  
alert.show();
```



UIAlertView Class Reference

Apple Inc. [US] https://developer.apple.com/library/prerelease/ios/documentation/UIKit/Reference/UIAlertView_C...

IOS Developer Library — Pre-Release

UIKit Framework Reference > UIAlertView Class Reference

Search iOS Developer Library

Language: [Swift](#) [Objective-C](#) [Both](#) On This Page Options

UIAlertView

Setting Properties

[delegate](#) *Property*

[alertViewStyle](#) *Property*

[title](#) *Property*

[message](#) *Property*

[visible](#) *Property*

Configuring Buttons

[- addButtonWithTitle:](#)

[numberOfButtons](#) *Property*

[- buttonTitleAtIndex:](#)

[- textFieldAtIndex:](#)

[cancelButtonIndex](#) *Property*

[firstOtherButtonIndex](#) *Property*

Displaying

[- show](#)

Tasks

- Creating Alert Views
- Setting Properties
- Configuring Buttons
- Displaying
- Dismissing

Constants

- UIAlertViewStyle

Related Documentation

- Alert Views in UIKit User Interface Catalog

Related Sample Code

- AdvancedURLConnections
- GKTapper
- MVCNetworking
- SquareCam
- URLCache

Feedback

```
var alert = new UIAlertView();
alert.message = "Hello world!";
alert.addButtonWithTitle( "OK" );
alert.show();
```



How does this work?



NativeScript and JS VMs

- NativeScript runs JavaScript on a JavaScript VM
 - JavaScriptCore on iOS
 - V8 on Android
 - JavaScriptCore on Windows (subject to change)



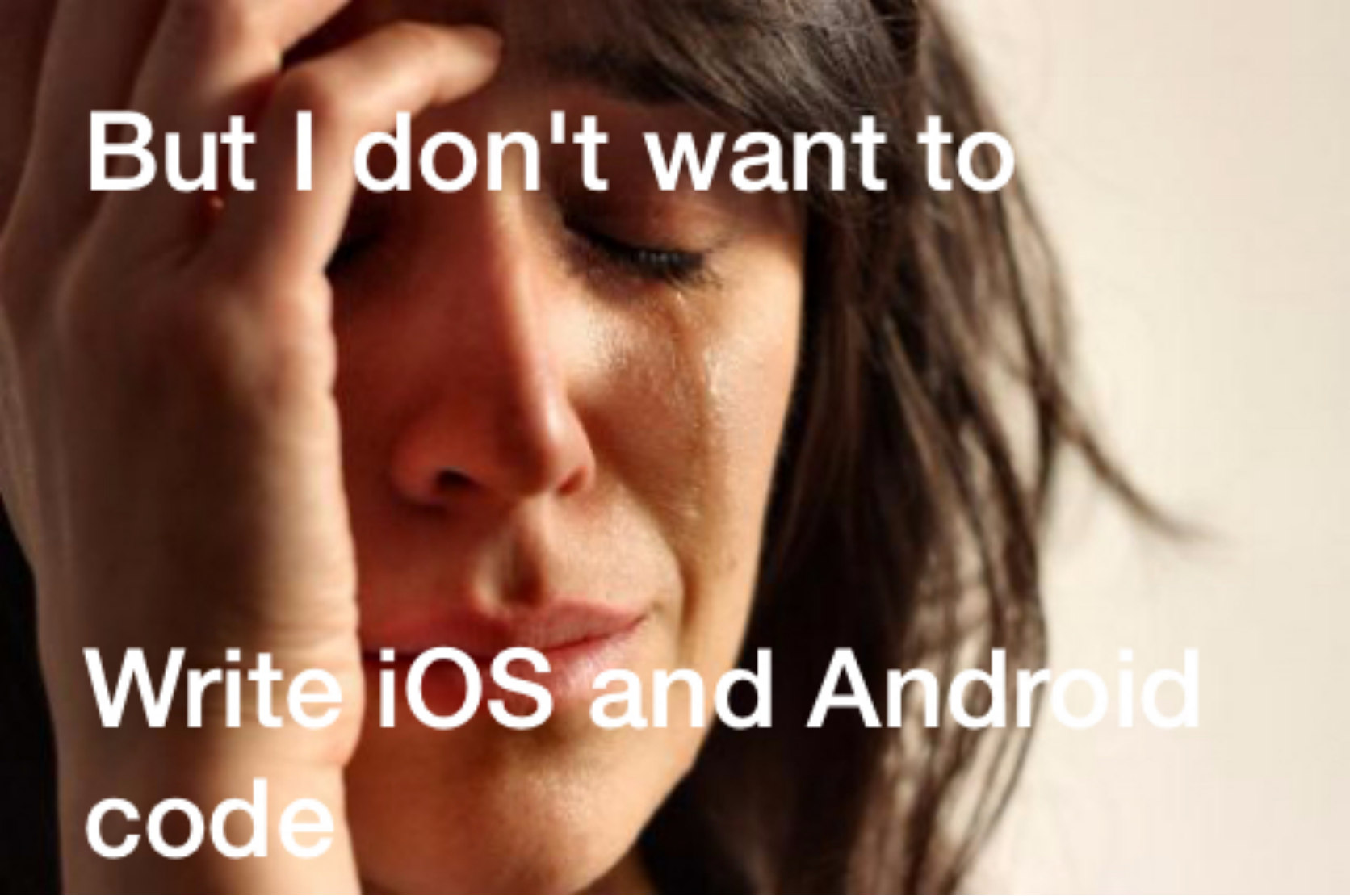
```
var time = new android.text.format.Time();  
time.set( 1, 0, 2015 );  
console.log( time.format( "%D" ) );
```

- Runs on V8

```
var alert = new UIAlertView();  
alert.message = "Hello world!";  
alert.addButtonWithTitle( "OK" );  
alert.show();
```

- Runs on JavaScriptCore



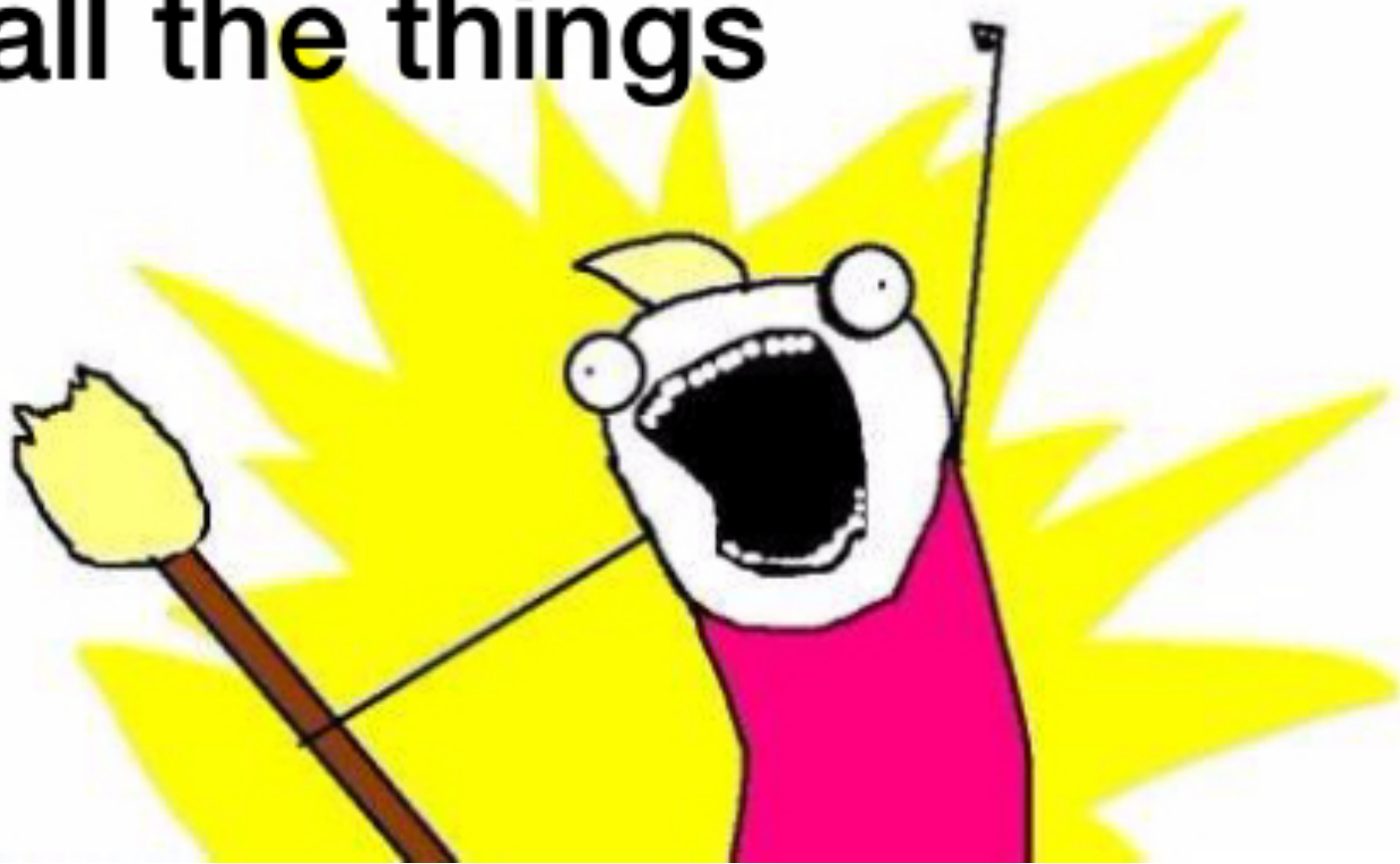


But I don't want to

Write iOS and Android
code



NativeScript modules for all the things



NativeScript modules

- NativeScript-provided modules that provide cross-platform functionality.
- There are dozens of them and they're easy to write yourself.
- NativeScript modules follow Node module's conventions (CommonJS).



NativeScript file module

```
var fileSystemModule = require( "file-system" );  
new fileSystemModule.File( path );
```



`new java.io.File(path);`



`NSFileManager defaultManager();`
`fileManager.createFileAtPathContentsAttributes(path);`

HTTP module example

```
var http = require( "http" );  
http.getJSON( "https://api.myservice.com" )  
  .then(function( result ) {  
    // result is JSON Object  
  });
```



Community modules

nativescript

Command-line interface for building NativeScript pr...

version 0.10.0

305 downloads in the last week

nativescript-sqlite

A sqlite NativeScript module for Android and (soon) iOS

version 0.0.2

21 downloads in the last week

nativescript-maps

A NativeScript module for using native map APIs

version 0.1.1

39 downloads in the last week

nativescript-texttospeech

A texttospeech NativeScript module for Android and ...

version 1.0.1

0 downloads in the last week

nativescript-flashlight

A flashlight NativeScript module for Android and iOS

version 0.1.1

180 downloads in the last week

nativescript-vibrate

A vibrate NativeScript module for Android and iOS

version 1.0.1

22 downloads in the last week

nativescript-phone

A phone NativeScript module for Android and iOS

version 0.1.2

5 downloads in the last week

nativescript-social-share

A NativeScript module to use the native social sharin...

version 0.1.0

0 downloads in the last week

nativescript-azure-mobile-basic

A NativeScript module to read Azure Mobile Services...

version 0.1.2

15 downloads in the last week

tns-ios

Telerik NativeScript Runtime for iOS

version 0.10.0

156 downloads in the last week

tns-template-hello-world

Hello World project template for NativeScript

version 0.10.1

279 downloads in the last week

nativenumber

Is a creator to native numbers in Java

version 0.1.2

4 downloads in the last week

tns-android

NativeScript Runtime for Android

version 0.10.0

189 downloads in the last week

ios-sim-portable

ios-sim-portable =====

version 1.0.6

450 downloads in the last week

appbuilder

command line interface to Telerik AppBuilder

version 2.8.3-331

232 downloads in the last week



But how do I turn this into an app?



Two ways to use NativeScript

1)  **Telerik**PlatformSM

2) `npm install -g nativescript`





Telerik PlatformSM

<http://telerik.com/platform>

- Backend-as-a-service
 - Push notifications, cloud data, file storage, and more
- Analytics
- AppBuilder
 - Cloud builds (build iOS apps on Windows, Windows Phone apps on a Mac)
 - NativeScript debugging and tooling
- Automated app testing
- And more!





<https://www.telerik.com/purchase/platform>

Telerik Platform
30 Day Trial

FREE

Start now

Try everything Telerik Platform
has to offer, FREE, for 30 days

☁ All Platform Services

📱 Web, Hybrid & Native UI

Unlimited trial support

Telerik Platform
Developer

\$39 /month/user
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getting started with mobile app
development

☁ Core Platform

📱 Hybrid UI

Limited web support

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requires annual upfront payment

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consumer apps

☁ Core Platform

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+ Direct App Store Deployment

📱 Hybrid & Native UI

Limited web support

MOST
POPULAR

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Business

\$149 /month/user
requires annual upfront payment

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For developers and large teams
building advanced apps
connected to business data

☁ Pro Platform

+ Active Directory Integration
+ Enterprise Data Connectors
+ Private App Distribution

📱 Web, Hybrid & Native UI

Unlimited web support

Telerik AppBuilder IDE Options

- In-Browser Client
- Visual Studio Extension
- Sublime Text Package
- Command-Line Interface



NativeScript CLI

- Free and open source
- <https://github.com/nativescript/nativescript-cli>



NativeScript CLI requirements

- <https://github.com/nativescript/nativescript-cli#system-requirements>



- JDK, Apache Ant, Android SDK



- Xcode, Xcode CLI tools, iOS SDK





NativeScript versions

- 0.10
 - The version we're using
- 1.0
 - Newly released
 - Available on the CLI, not AppBuilder quite yet
 - Changelog
 - <http://docs.nativescript.org/Changelogs/Cross-Platform%20Modules>
- Future
 - <https://www.nativescript.org/roadmap>





Lab 1

- <https://github.com/NativeScript/NativeScript-NEXT-Workshop>
- labs/Lab-1

