

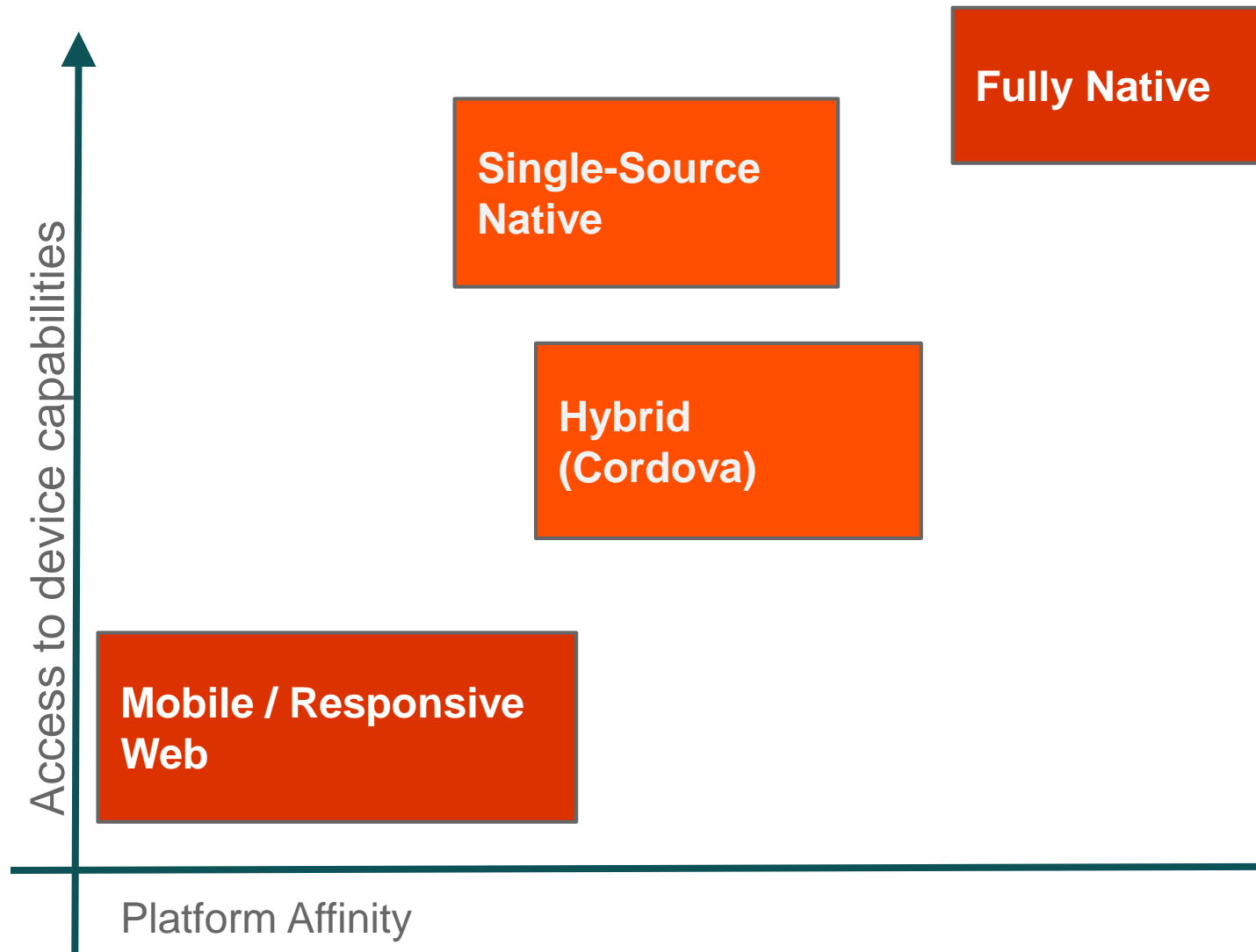
A decorative graphic on the left side of the slide, composed of two sets of parallel green lines. The top set of lines is lighter green and slanted downwards from left to right. The bottom set of lines is a brighter green and slanted upwards from left to right, creating a dynamic, geometric pattern.

Telerik Platform

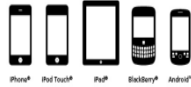
Product Features

Laurent KIEFFER : laurent@progress.com

App Types – Trade Offs



Mobile Design Approaches



	Responsive Website	Mobile Web App	Hybrid App	NativeScript App	Native App
Supports	Any device (desktop or mobile)	Any mobile device	iOS, Android, Windows Phone	iOS, Android	(Platform specific)
Based On	HTML, CSS, JS	HTML, CSS, JS	HTML, CSS, JS	XML, CSS, JS	(Native Languages)
Accessed Via	A Web Browser	A Web Browser	An App	An App	An App
Device API Access	Low	Low	Medium	High	High
Offline Support	No	No	Yes	Yes	Yes

Telerik Platform Supports All Three Approaches

Web Apps

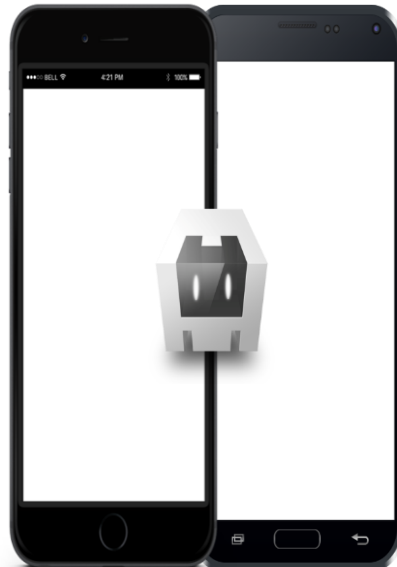
Using Kendo UI **Open Source**



or

Hybrid Apps

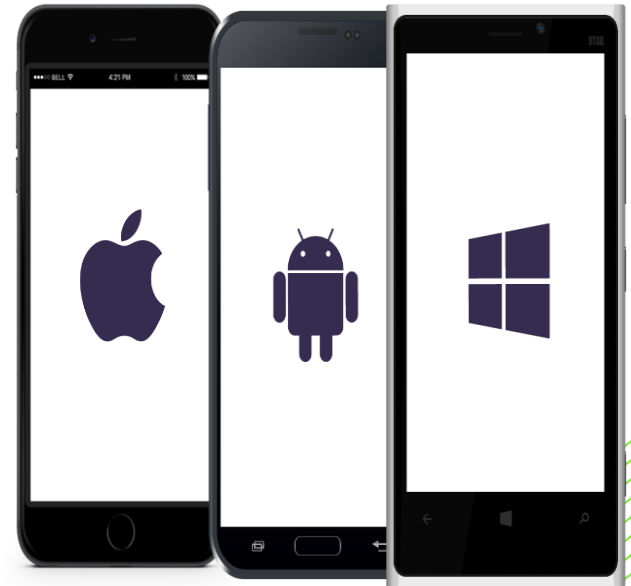
Using Cordova **Open Source**



or

Native Apps

Using NativeScript **Open Source**



Fastest performing
framework

Verified Plug-ins
Marketplace

100% Shared UI

Familiar Technologies



Web Technologies

Based on familiar web technologies (HTML, CSS and JavaScript).



PhoneGap / Cordova

Uses Apache Cordova and PhoneGap plugins to produce hybrid apps.



NativeScript

Uses Telerik's NativeScript open-source project to produce native apps.

Telerik Platform (aPaaS) Architecture

TELERIK PLATFORM

UI/UX Tools

UI Libraries | Prototyping | Screen Builder | Feedback Tools

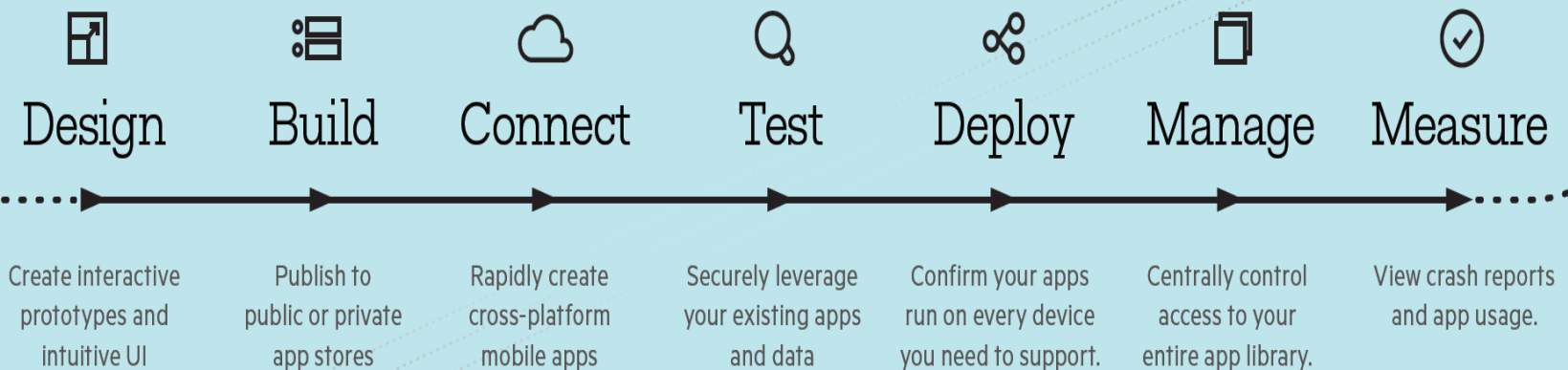
Development Tools

Web, Hybrid, Native | Coding Environments | Debugging | Testing

Services

Compile | mBaaS | Deployment | Enterprise Data Connectors | Security | Analytics

End-to-end App Lifecycle Management Capabilities



Flexible Development Options

Create App

Cordova Hybrid

- Use your HTML and JavaScript skills
- Access native code with Apache Cordova
- Run on iOS, Android and WP8

NativeScript

- Use your JavaScript and CSS skills
- Access native code with NativeScript
- Run on iOS and Android

Advanced

- Start from a template or sample
- Clone existing repository
- TypeScript, jQuery, Kendo UI, Progress

☒ Samples and templates ☐ Clone repository

Filter: Hybrid **NativeScript** JavaScript TypeScript Search

Nativescript groceries
NativeScript iOS and Android demo app for managing grocery lists

Nativescript iOS CameraApp
In this sample we are demonstrating how you can write platform specific code with NativeScript. We are building iOS only app which uses the latest iOS8 camera APIs.

Nativescript PhotoAlbum
Photo album NativeScript demo app. Used as quick start tutorial on <https://platform.telerik.com>

Nativescript Tasks
Open source cross-platform Tasks app built with NativeScript.

Version Control Publish

LOCAL OPERATIONS

- Compare with Latest Version
- Commit
- Revert
- History
- Conflicts

REMOTE OPERATIONS

- Branches
- Push
- Pull
- Configure Remote Repository

- Multiple Development options
 - Web IDE
 - Platform IDE
 - Visual Studio Plugin
 - Sublime
 - Command line Interface
- Hybrid or Native Apps
- Extend app templates (Choose from NativeScript, JavaScript or Typescript)
- Or clone from code repository

What is NativeScript?



NativeScript is a runtime bridge connecting JavaScript APIs to their native instance of the API without the need of a webview

- . Open source development framework by Telerik
- . Biggest advantages: Native performance & UI, 100% code reuse
- . Based on JavaScript
- . Use when hybrid approach is insufficient

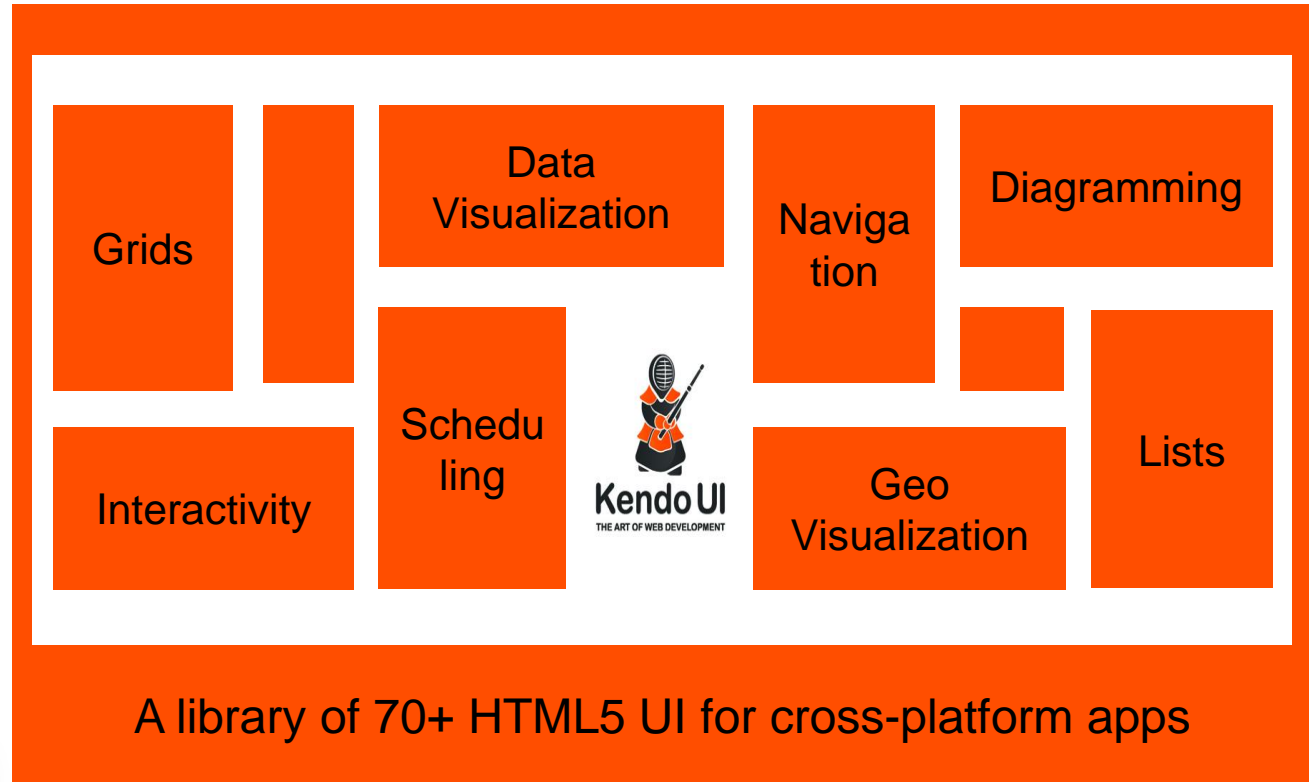
Rich User Experience with Kendo UI

Kendo UI Mobile



Kendo UI

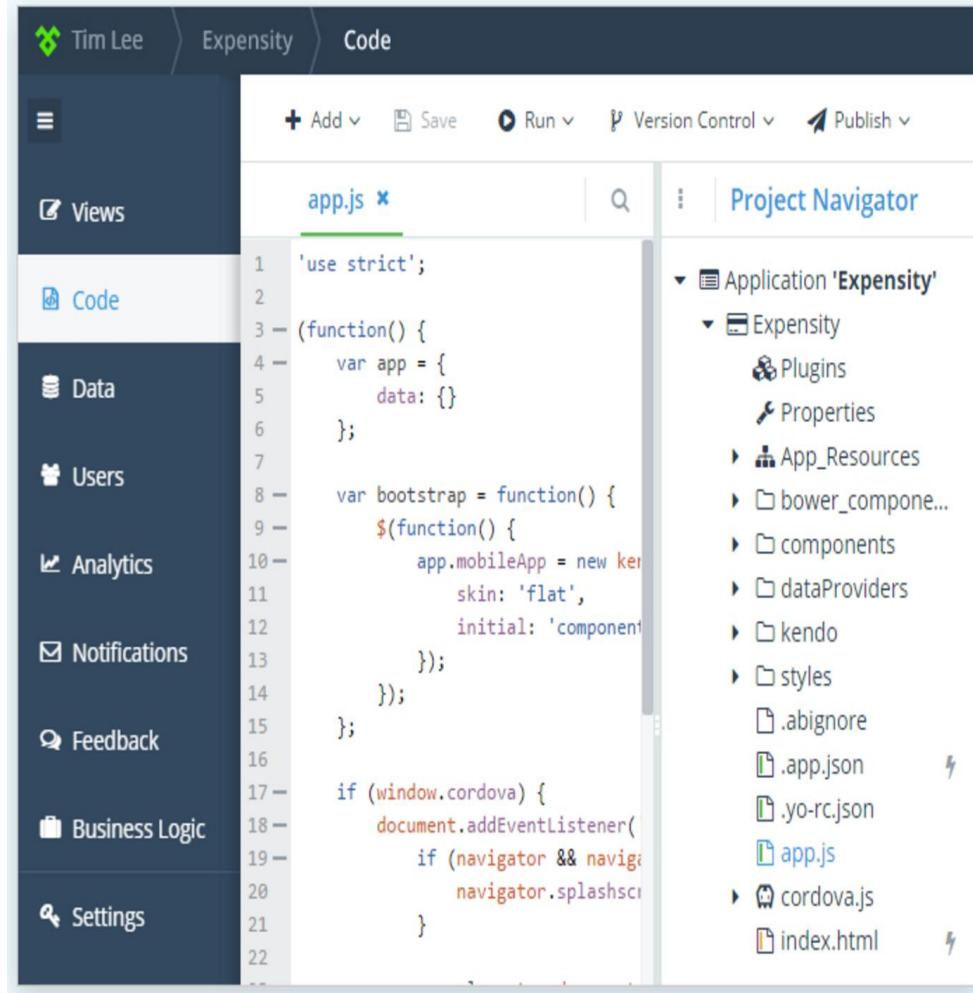
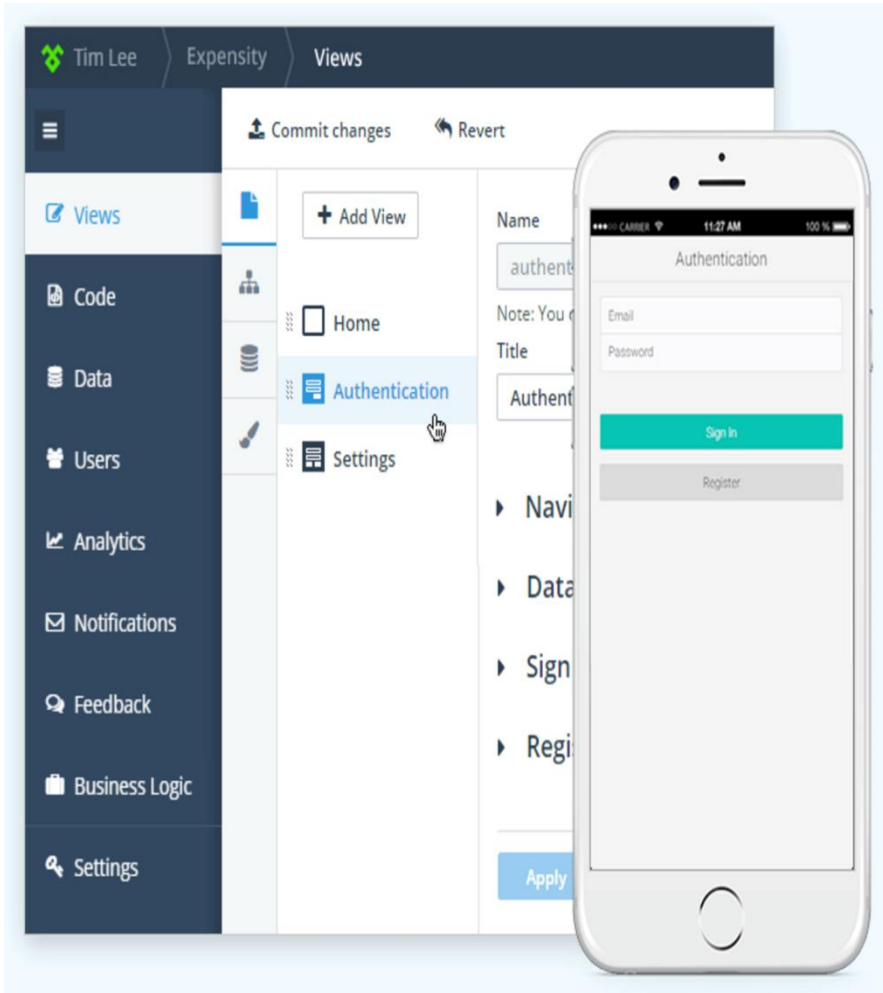
Beautiful *pre-designed* widgets. 80%
productivity increase.



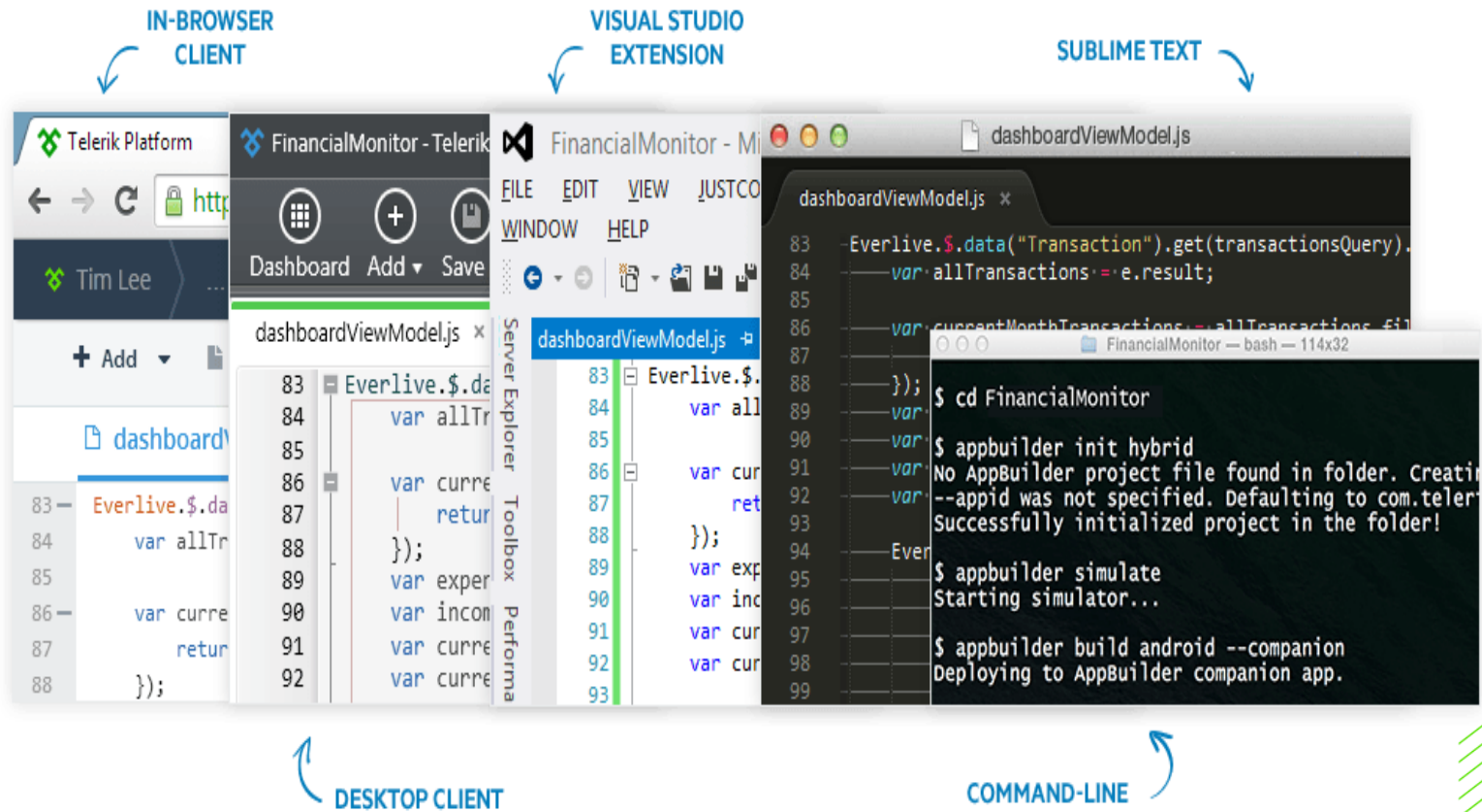
✓ **Fastest
performance**

✓ **Open and
extensible**

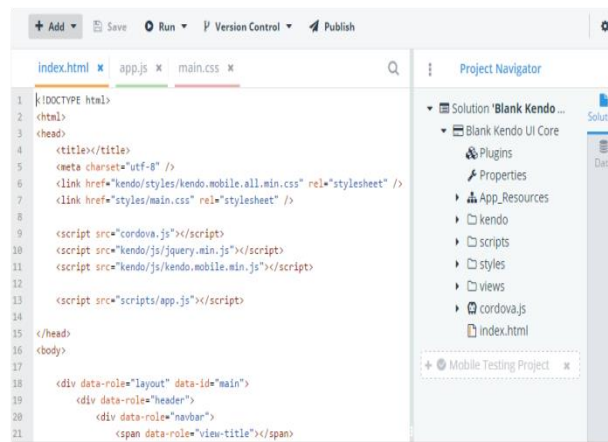
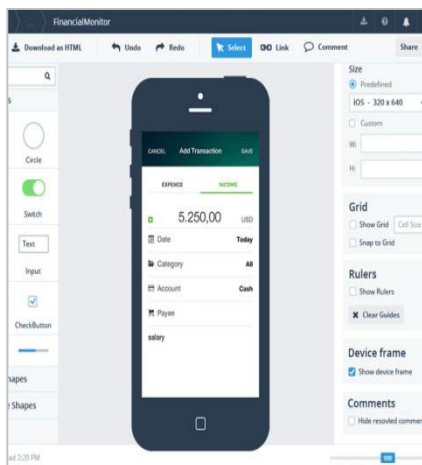
Build apps visually & extend them with code



IDE Choices



Multiple Paths To Success



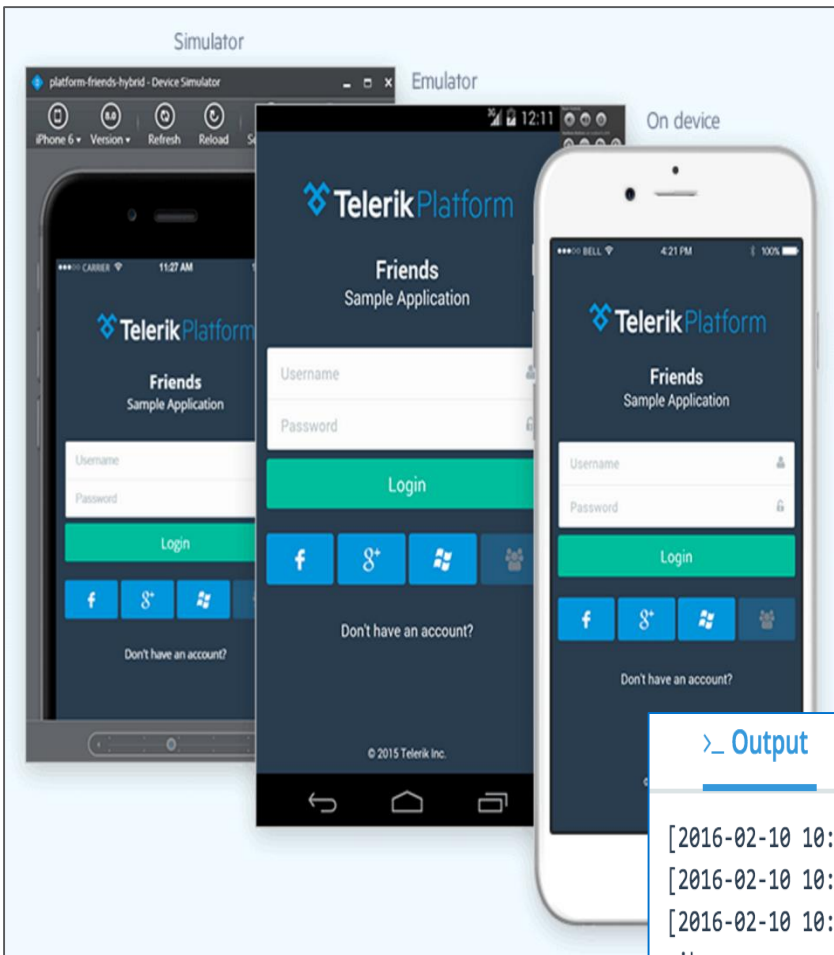
Screen Builder

Start from prebuilt interaction screens and data connectors.

AppBuilder

Or start with app templates and customize using JavaScript.

Debug App behavior on the fly



- Verify UI/ app behavior while building
 - On Device: LiveSync feature with A/B app
- Simulator/emulators (with extra device functions)
 - No need for platform specific devices for testing
- Console output for debugging/checking status

>_ Output

```
[2016-02-10 10:24:44.503] Emmet plug-in is off (cmd+e to turn it on)
[2016-02-10 10:24:44.835] Page load: 384ms Network latency: 180ms Render: 204ms Module loading: 3478ms
[2016-02-10 10:24:44.841] Client version: 2016.1.204.4 Server version: 2016.1.204.5 Server: platform.telerik.com
[2016-02-10 10:24:44.982] Loading application Photo Album ...
[2016-02-10 10:24:45.230] Application loading finished.
```

Mobile Testing

Easy, automated functional testing for all
your mobile apps

Web, hybrid, and native app testing on iOS, Android, and
Windows Phone

The screenshot displays the Telerik Platform web interface. The top navigation bar includes 'TelerikPlatform', 'User', 'Workspace1', 'Project Name', and links for 'Downloads', 'Feedback', and 'Help'. The main content is divided into two panels: 'Test Lists' on the left and 'Tests' on the right.

Test Lists Panel:

- PROJECT HEALTH:** A summary showing 5 TOTAL tests, 3 FAILED, and 2 PASSED.
- TEST LIST NAME | LAST RUN:** A table listing test lists and their last run times.

TEST LIST NAME	LAST RUN
Test List A	Today @ Noon
Test List B	Yesterday @ 3PM
Test List C	Never
Test List D	August 10 2013
Test List E	July 5 2013

Tests Panel:

- Run Tests:** A section with checkboxes for Test Suite A, Test Suite B, Test Suite C, and Test Suite D. Test 1 under Test Suite A is checked.
- Add Agent:** A dropdown menu showing options: Desktop Web, Mobile Web, and Mobile App. Mobile Web is selected.
- Refresh Agents:** A button to refresh the list of agents.
- Agents Table:** A table listing available agents with columns for icon, name, version, and status.

	DETAILS	STATUS
Desktop Web	7.0	
Mobile Web		
Mobile App		
iPhone 5S	7.0.2	Connected
iPad 2	6.1.4	Connected
Galaxy S4	2.2	
Chrome	30.0	Connected
Firefox	22.3	Connected

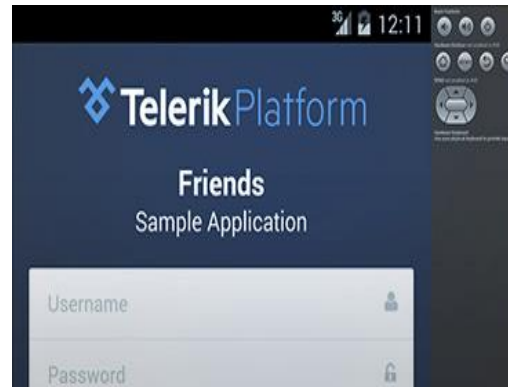
At the bottom of the Tests panel, there are two entries for 'August 11 2013', each preceded by a green checkmark and a right-pointing arrow.

Running Your App



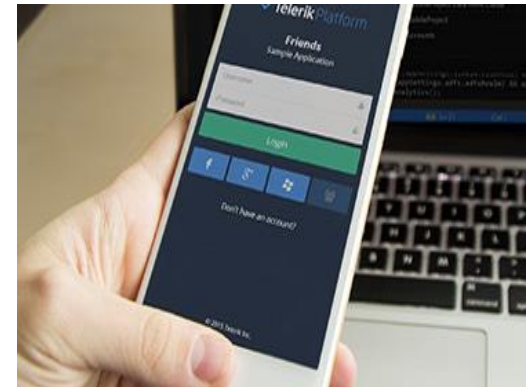
Simulators

Web tool that simulates how the app and includes debugging tools.



Emulators

Compatible with the testing tools from iOS, Android and Windows Phone.

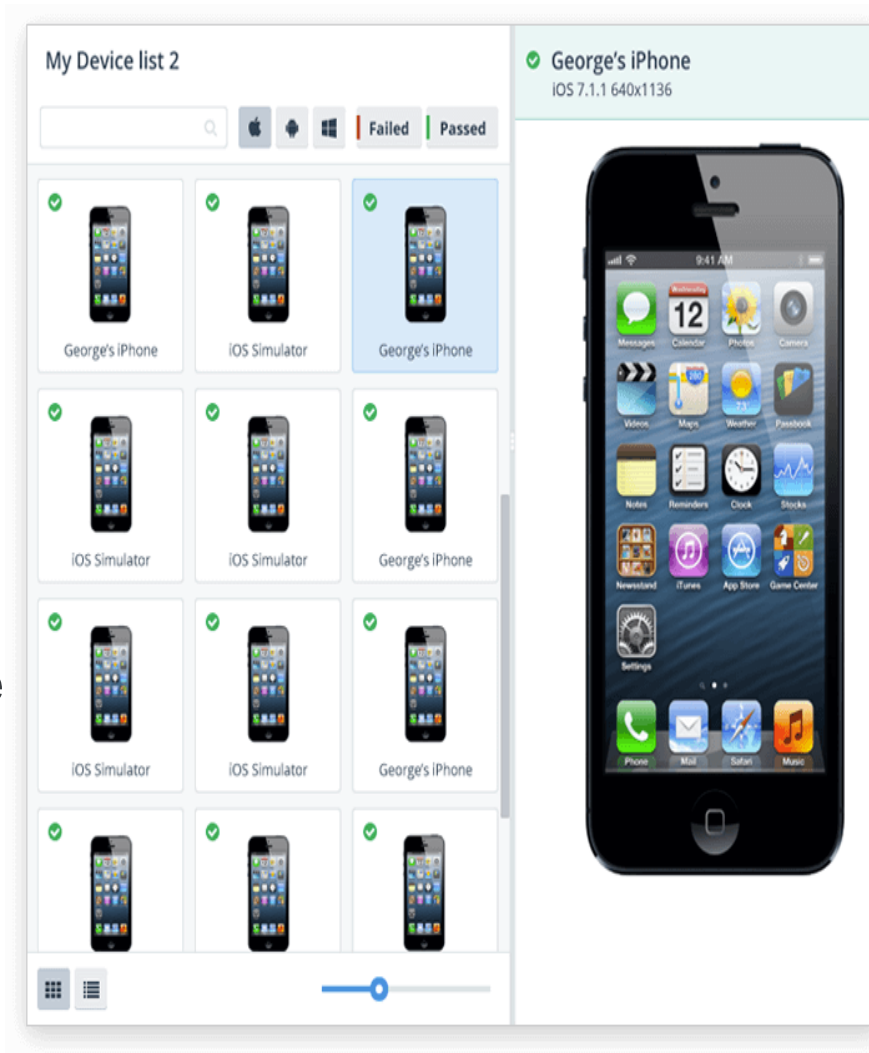


On-Device

Deploy your app to your physical devices or side-load your app.

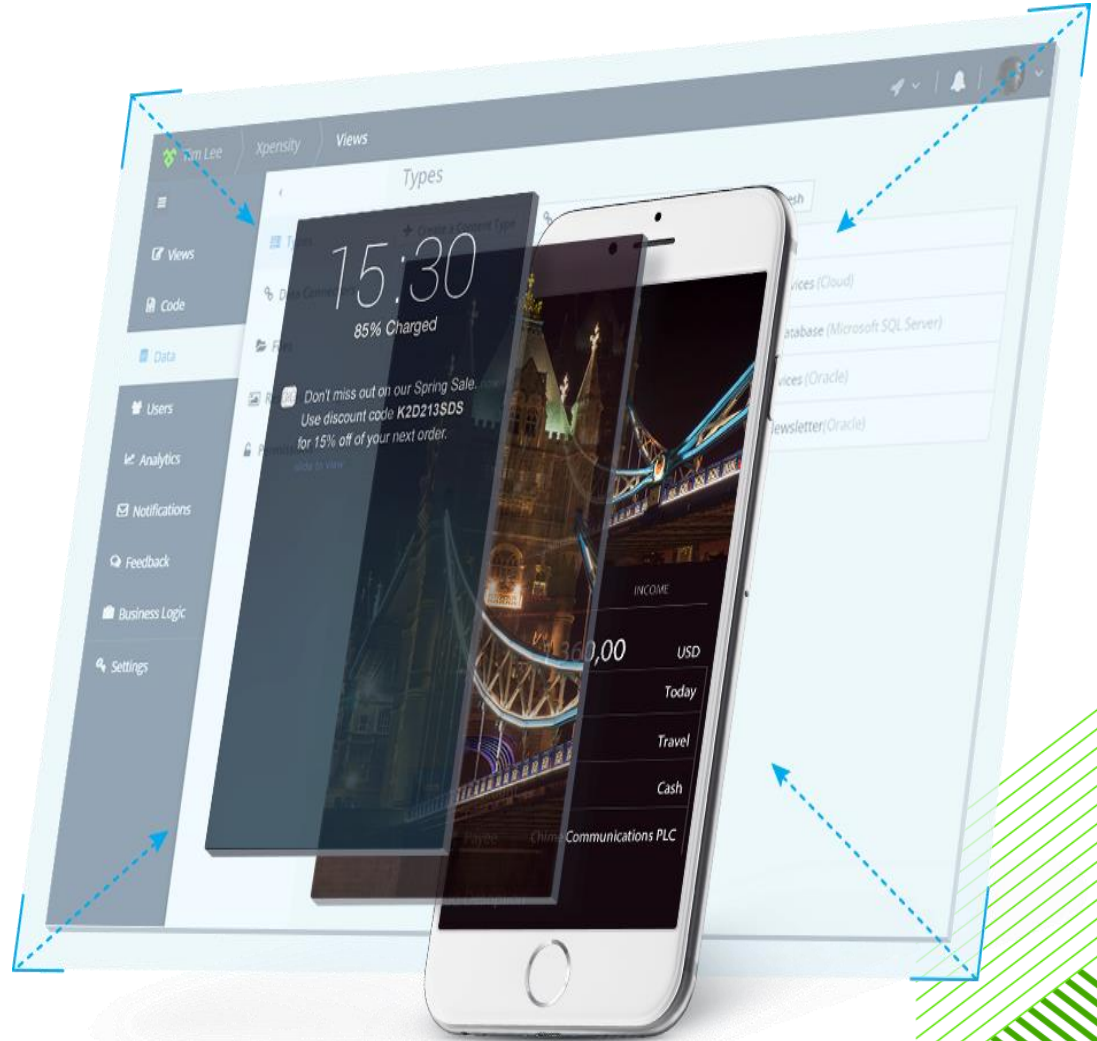
Test on Every Device Imaginable

- Automated Mobile Testing
- Record and Playback Tests
- Load Testing
- Test Using The Device Cloud



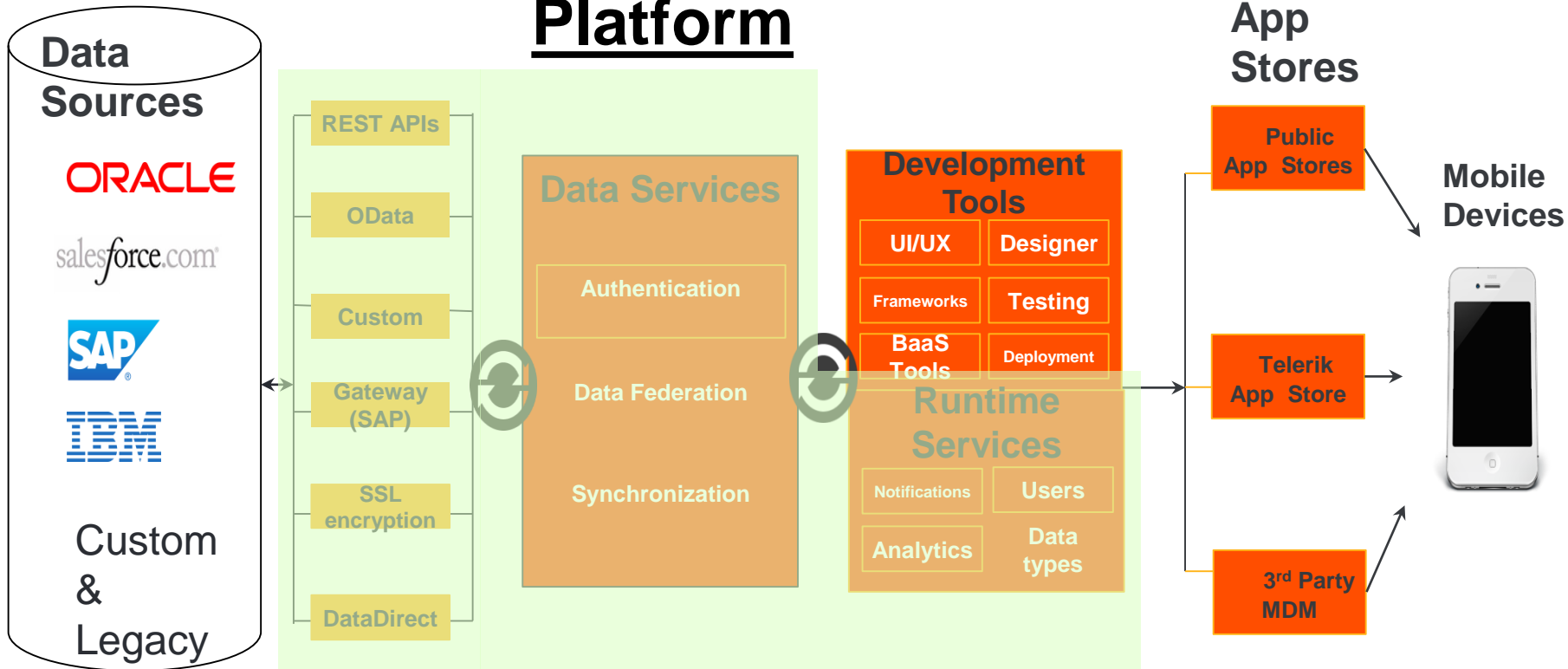
Mobile Backend Services (MBaaS)

- Data Connectors
- User Authentication
- Notifications (e.g. emails, push notifications, SMS)
- Offline sync
- Cloud Storage
- Security & Encryption



MBaaS Architecture

Telerik Platform



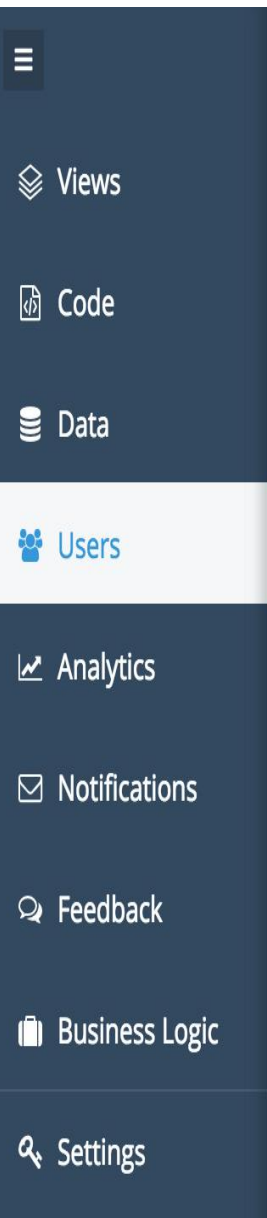
Telerik Platform Backend Services

Connect to Enterprise Data

Powered by  **PROGRESS** DataDirect



User Authentication



User

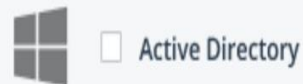
User Management

Create a new user account manually using the Telerik Backend Services portal or implement user registration in your application.

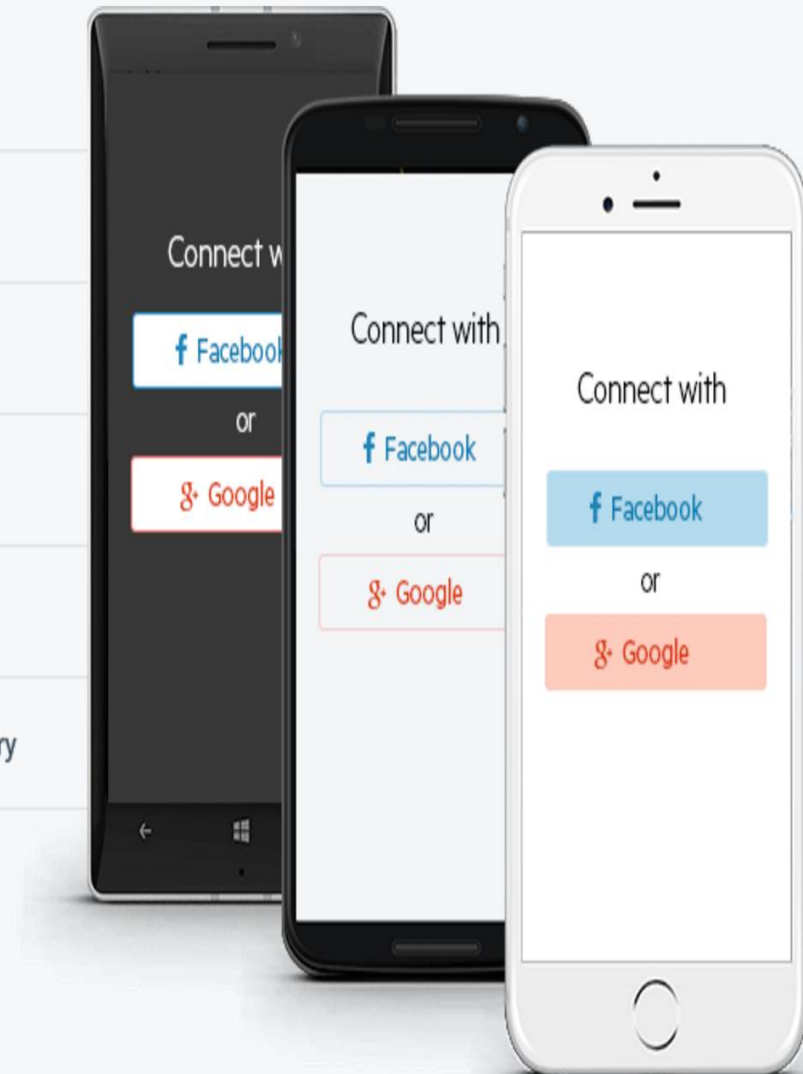
Make Your App Sociable

Add user authentication, authorization, and management to your app with Facebook, Google+, Twitter, Microsoft LiveID and Active Directory.

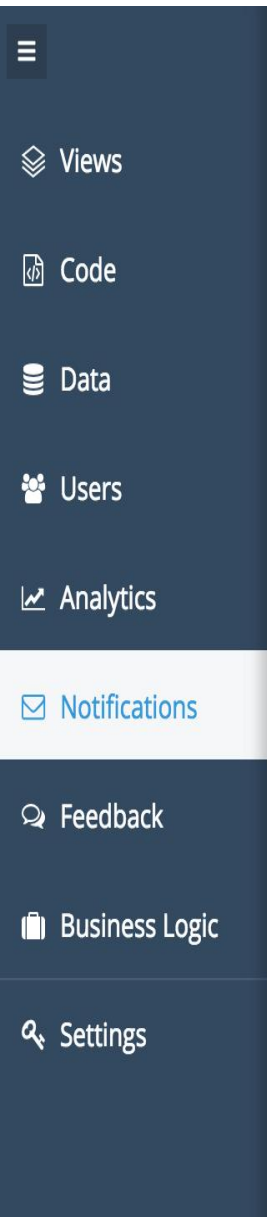
Authentication



Enable Users



Notifications



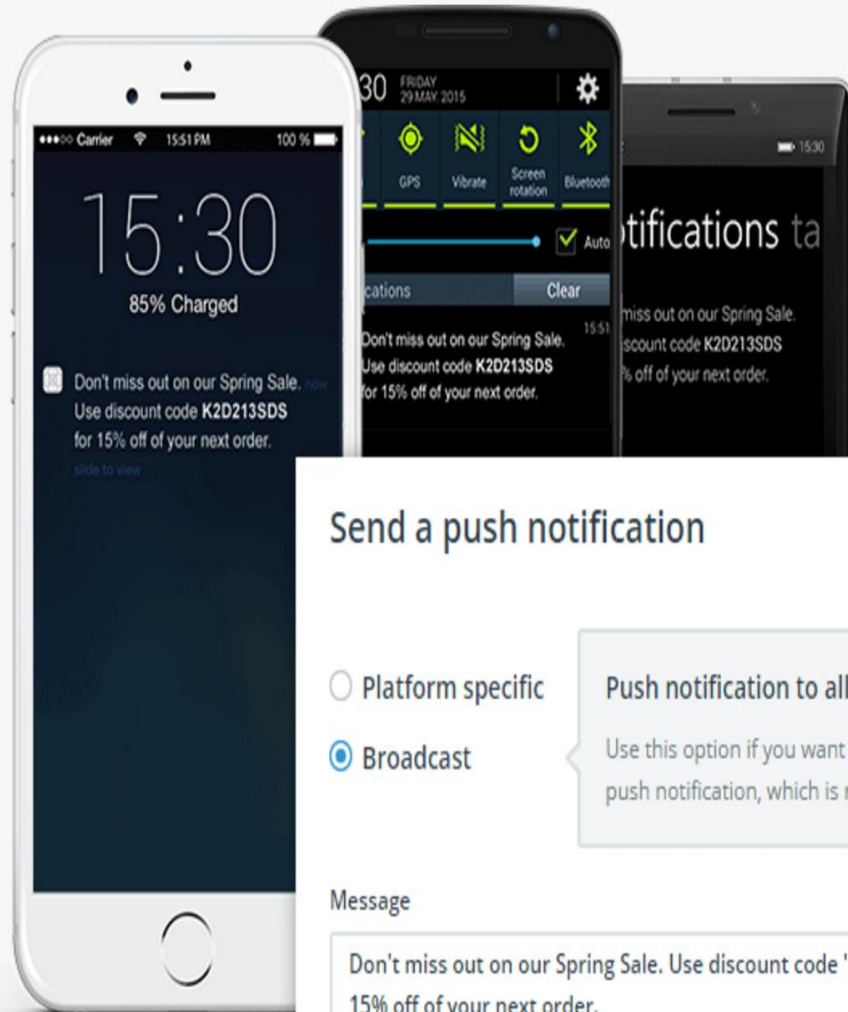
Notifications

Keep Your Users Engaged with Notifications

Send push notifications to iOS, Android, Windows Phone, and Windows devices. Send SMS messages with Twilio.

Send automated or on-demand emails with email templates.

Enable Notifications



Send a push notification

- ☐ Platform specific
- ☒ Broadcast

Push notification to all devices

Use this option if you want to send generic push notification, which is not device specific

Message

Don't miss out on our Spring Sale. Use discount code 'K2D213SDS' for 15% off of your next order.

Business Logic

Business Logic

Custom Logic and Validation Rules

Execute custom business logic and validation rules straight on our servers. Define the server-side logic required by your app using Cloud Functions, Cloud Code for Data, and Stored procedures.

Scheduled Jobs

Execute your app's business logic automatically on predefined intervals. Schedule executions for the future, ensuring that your business logic is executed at the right time.

Enable Business Logic

```
Everlive.CloudFunction.onRequest(function(request, response, context) {
    //Get parameters from the request
    var fromCurrency = request.queryString.from;
    var toCurrency = request.queryString.to;
    var amount = request.queryString.amount;
    //Get the exchange rate from an external service
    var url = "http://rate-exchange.appspot.com/currency?from=" +
        fromCurrency + "&to=" + toCurrency;
    Everlive.Http.get(url, {}, function(error, httpResponse) {
        if (error) {
            //Write the error in the response
            response.body = "Error while executing third-party";
        } else {
            //Calculate and write the response of the cloud function
            var rate = httpResponse.data.rate;
            var amountInNewCurrency = amount * rate;
            response.body = amount + " " + fromCurrency + " are worth " +
                amountInNewCurrency + " " + toCurrency + " each";
        }
        //Call done to end the execution of the cloud function
    });
});
```



Deploy Apps & Manage Access

Publish

1234

Select target store

Telerik AppManager

Build your app for the selected platform and publish it in your private app store.

☐ Auto publish to AppManager users

Google Play

Build your Android app for publishing in Google Play.

App Store

Build your iOS app for publishing in App Store.

Windows Phone Store

Build your Windows Phone app for publishing in Windows Phone Store.

Cancel

App Store

After the build completes, you need to upload application package in iTunes Connect. You can use Xcode or Visual Studio for Mac to build your application package and upload it manually to iTunes Connect.

For more information, click [here](#).

Tim's Account

Apps

Dashboards

Distribution

Team

Subscriptions

Apps

Users

Groups

Settings

iOS

Windows Phone

E-mail templates

+ Add new app

+ Add new version

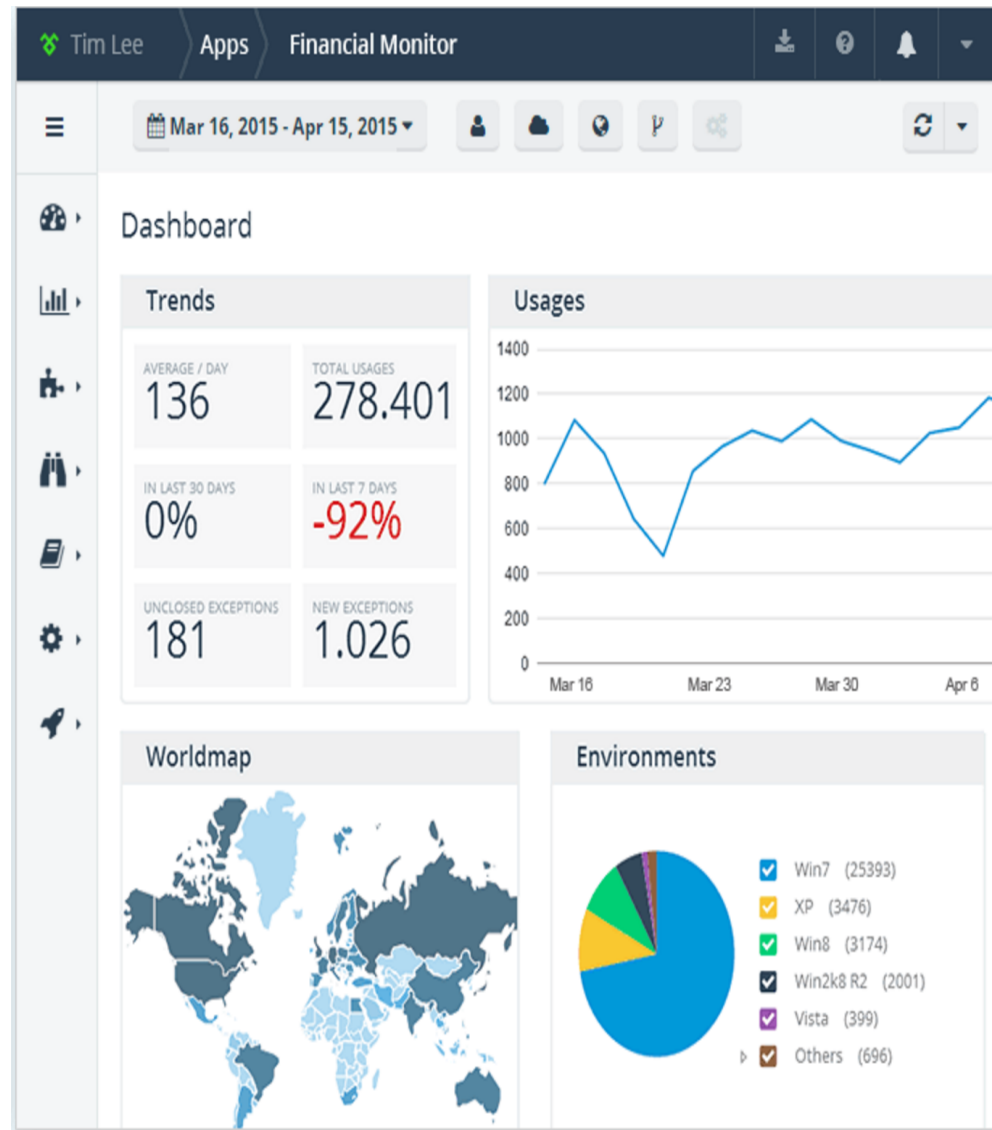
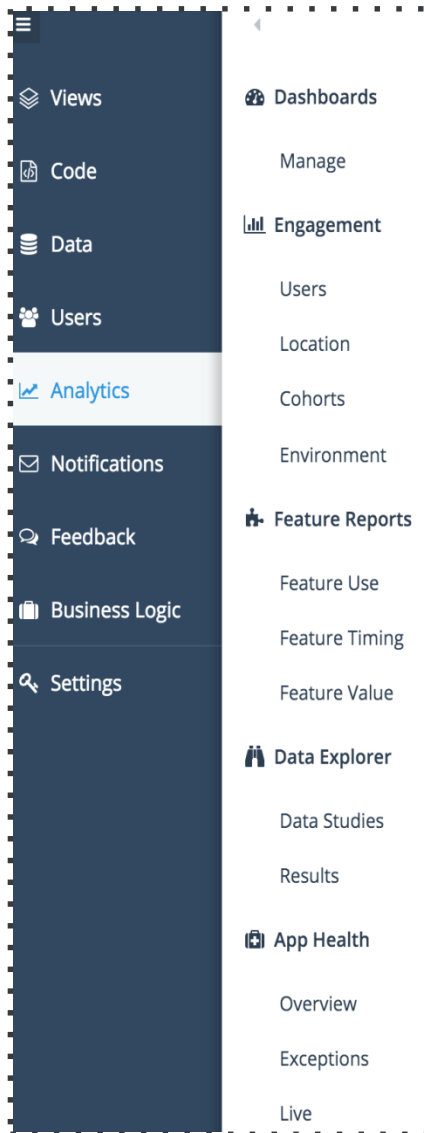
Publish

Edit

Resend

APP VERSIONS ^	GROUPS ^	DEVICES ^
▼ Infinity Blade III		
<input type="checkbox"/> Apple Version 3.2.6	Managers, Sales	Phone, Tablet
<input type="checkbox"/> Android Version 3.2.1	Developers, Managers	Phone, Tablet
<input type="checkbox"/> Android Version 2.1	Operations, Security, QA	Phone
> Facebook		
▼ Twitter		
<input type="checkbox"/> Apple Version 1.0.2	Developers, Managers	Phone, Tablet
<input type="checkbox"/> Android Version 1.0	Developers, QA	Phone

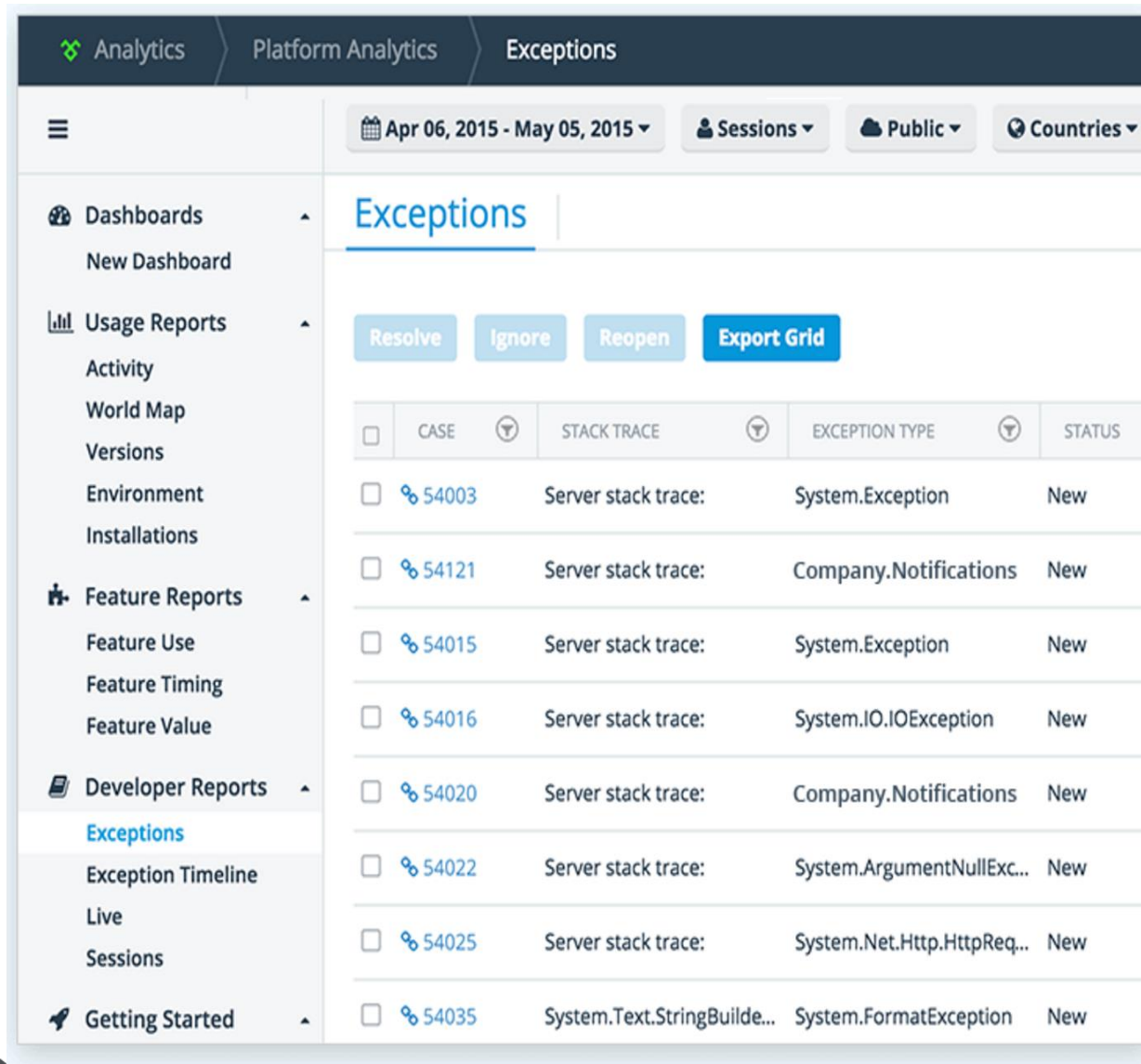
App usage analytics



Key Benefits of Analytics

Cross-Platform	Feature Use Tracking	Easy Integration	Performance Measurement	Anonymous & Secure User Monitoring	Real-time Reports and Alerts
Not only mobile: + Web + Desktop app monitoring	Track most used features	Only two lines of code to integrate in your app	Crash reports Time tracking	Track individual users without privacy violation	Ad hoc reports Report subscriptions Notifications

Crash performance reports

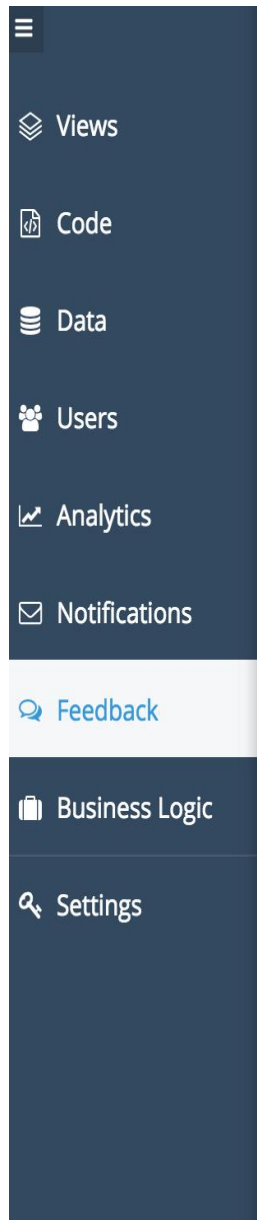


The screenshot shows the 'Exceptions' page in the Progress Analytics interface. The top navigation bar includes 'Analytics', 'Platform Analytics', and 'Exceptions'. Below the navigation bar, there are filters for the date range 'Apr 06, 2015 - May 05, 2015', 'Sessions', 'Public', and 'Countries'. The left sidebar contains a menu with categories like Dashboards, Usage Reports, Feature Reports, Developer Reports, and Getting Started. The main content area is titled 'Exceptions' and features a table of crash reports. Above the table are buttons for 'Resolve', 'Ignore', 'Reopen', and 'Export Grid'. The table has columns for 'CASE', 'STACK TRACE', 'EXCEPTION TYPE', and 'STATUS'. The data rows show various exceptions such as 'System.Exception', 'Company.Notifications', and 'System.FormatException'.

<input type="checkbox"/>	CASE	STACK TRACE	EXCEPTION TYPE	STATUS
<input type="checkbox"/>	54003	Server stack trace:	System.Exception	New
<input type="checkbox"/>	54121	Server stack trace:	Company.Notifications	New
<input type="checkbox"/>	54015	Server stack trace:	System.Exception	New
<input type="checkbox"/>	54016	Server stack trace:	System.IO.IOException	New
<input type="checkbox"/>	54020	Server stack trace:	Company.Notifications	New
<input type="checkbox"/>	54022	Server stack trace:	System.ArgumentNullExc...	New
<input type="checkbox"/>	54025	Server stack trace:	System.Net.Http.HttpReq...	New
<input type="checkbox"/>	54035	System.Text.StringBuilde...	System.FormatException	New

- Track when app crashes on different devices in different situations
- Get stack trace for fixing code
- Filter by different dimensions

Gather contextual, in-app user feedback

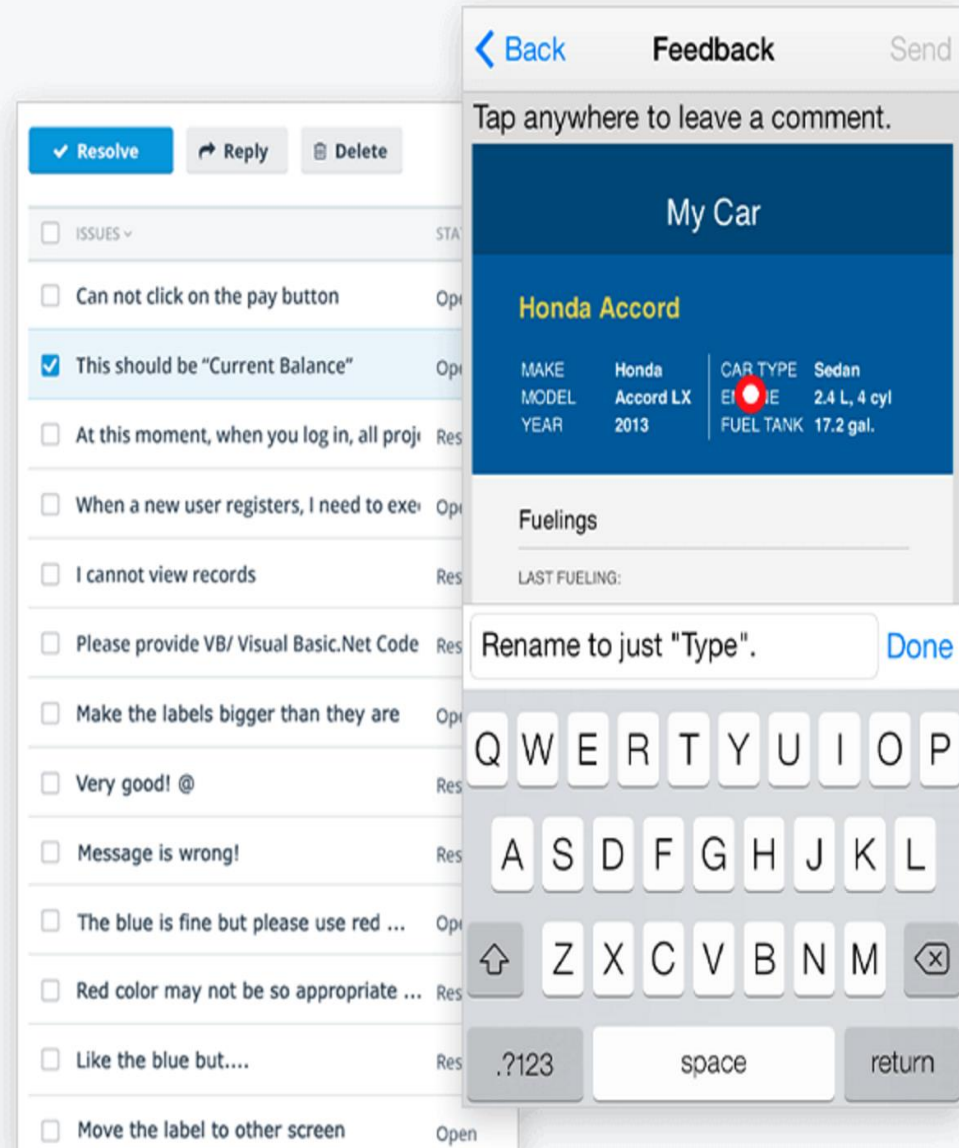


Feedback

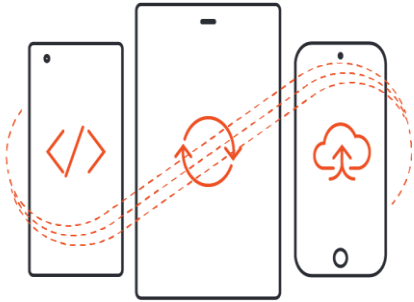
Get In-App User Feedback

Enable users to shake their device, point to the problem and send in-context feedback to the development team.

Enable Feedback

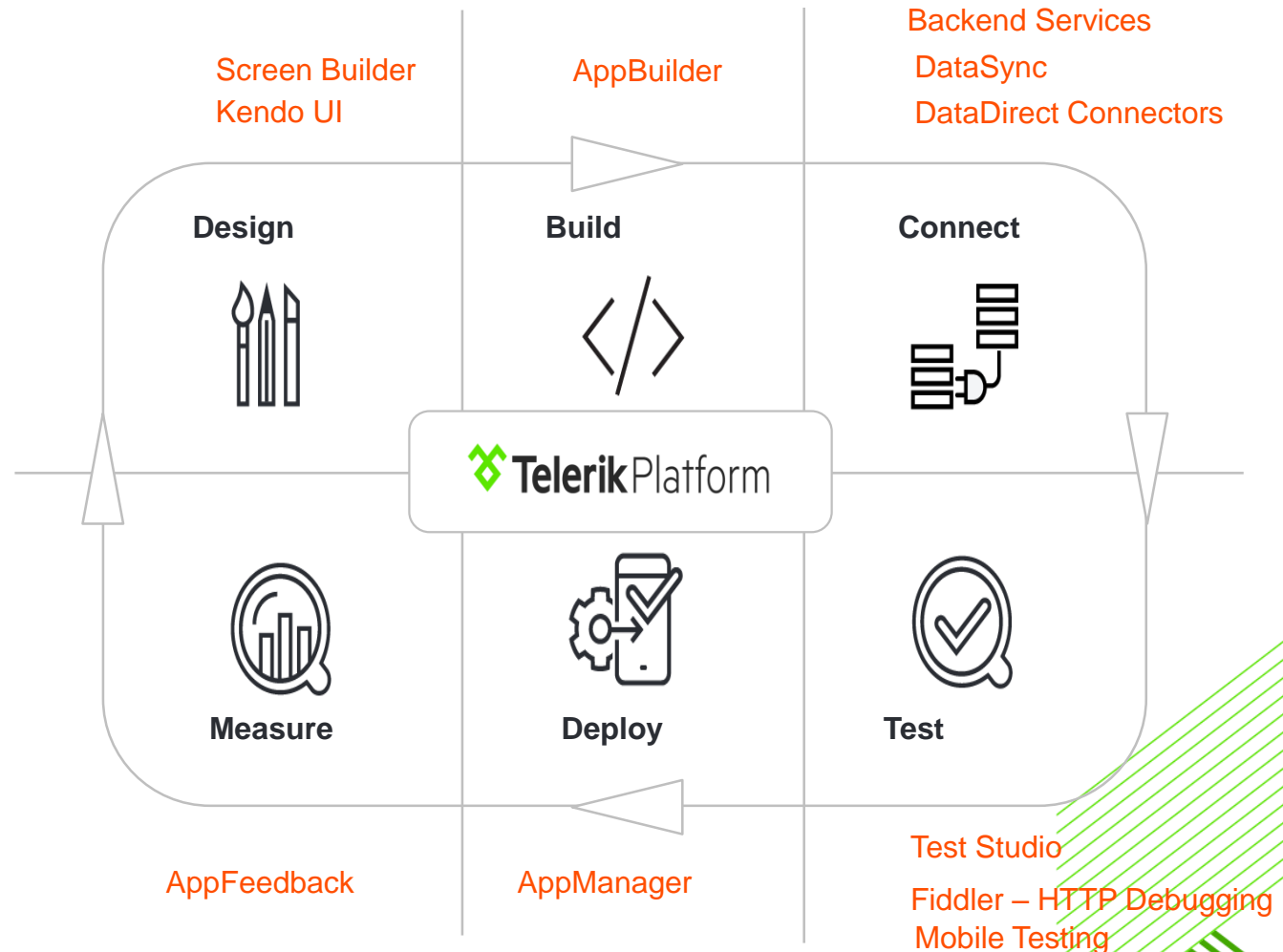


Telerik Platform for OpenEdge



Telerik Platform for OpenEdge

- All Telerik Platform Business Edition features
- Analytics 6 month data retention
- Kendo UI
- ScreenBuilder JSDO support
- AppManager LiveSync



Java Script Data Object (JSDO)

Benefits

- Simple **access from JavaScript** to ABL logic via CRUD & invoke ops
- **Transactional operations** with optional before-imaging
- **Local data caching** for performance and offline support
- Open source for **extensibility**
- **Easy to connect mobile devices**

