

# WP05 - WinJS in Windows Phone 8.1



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<http://blogs.aspitalia.com/>

# Grazie a



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# Agenda

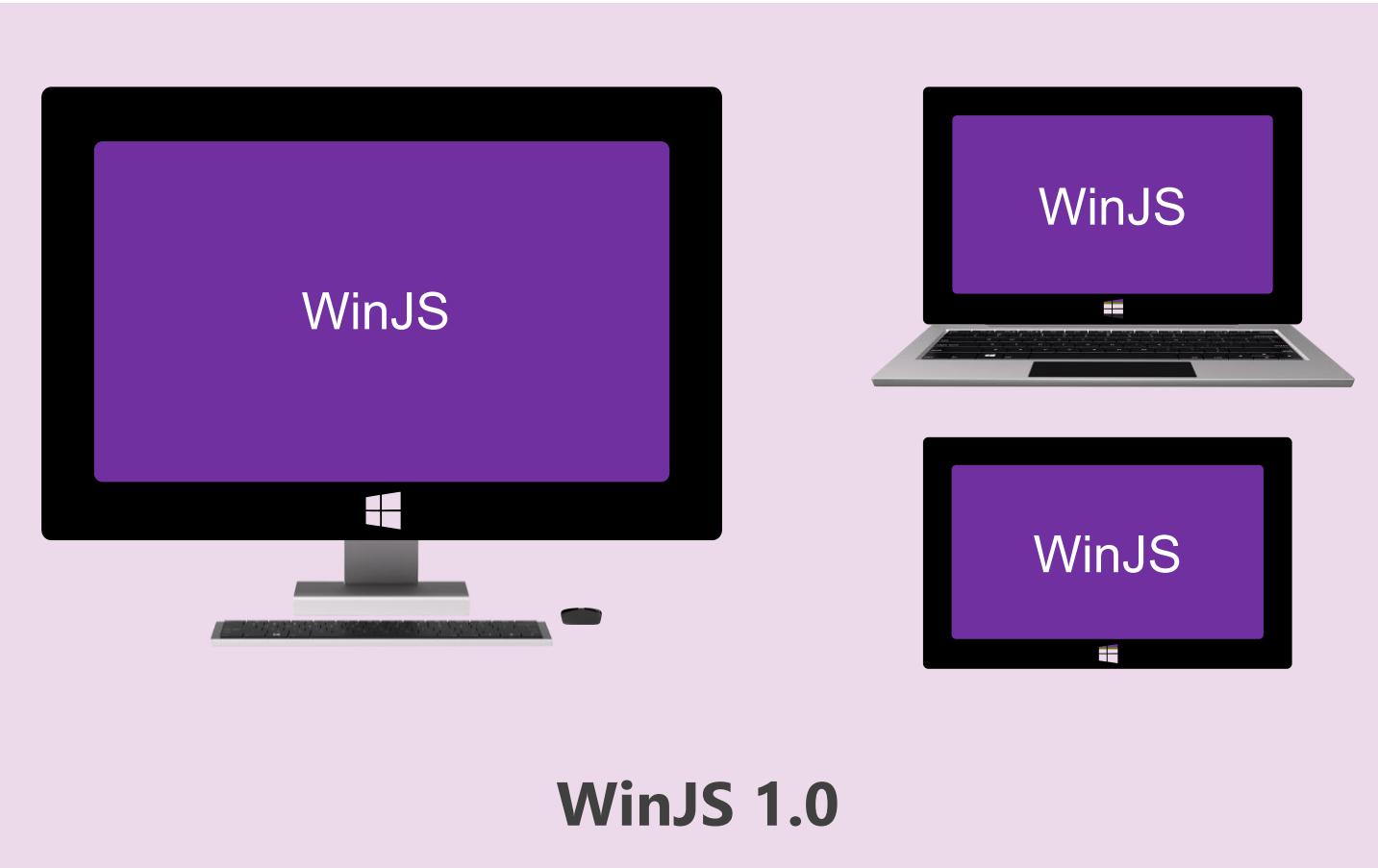
- WinJS story
- Big picture of what's new
- Deep dive on new features
- Multi-Device Hybrid Apps Dev with Cordova
- References



# WinJS story



# WinJS yesterday

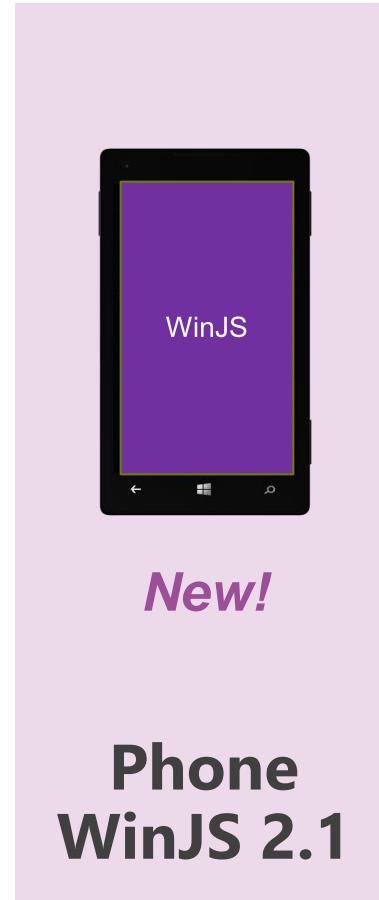
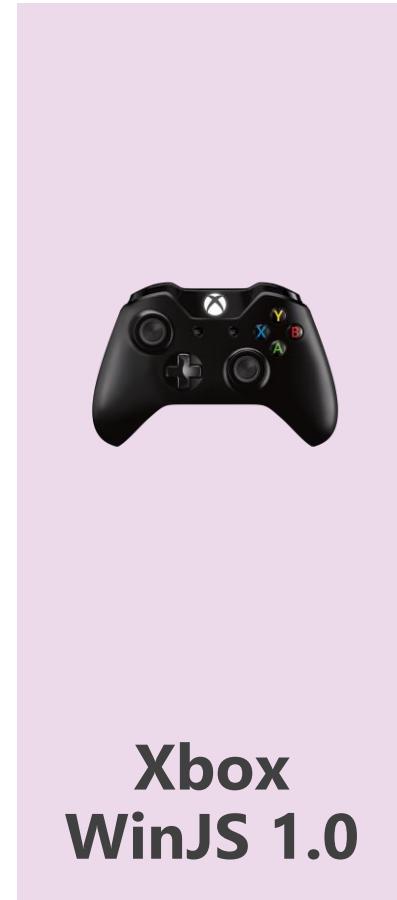
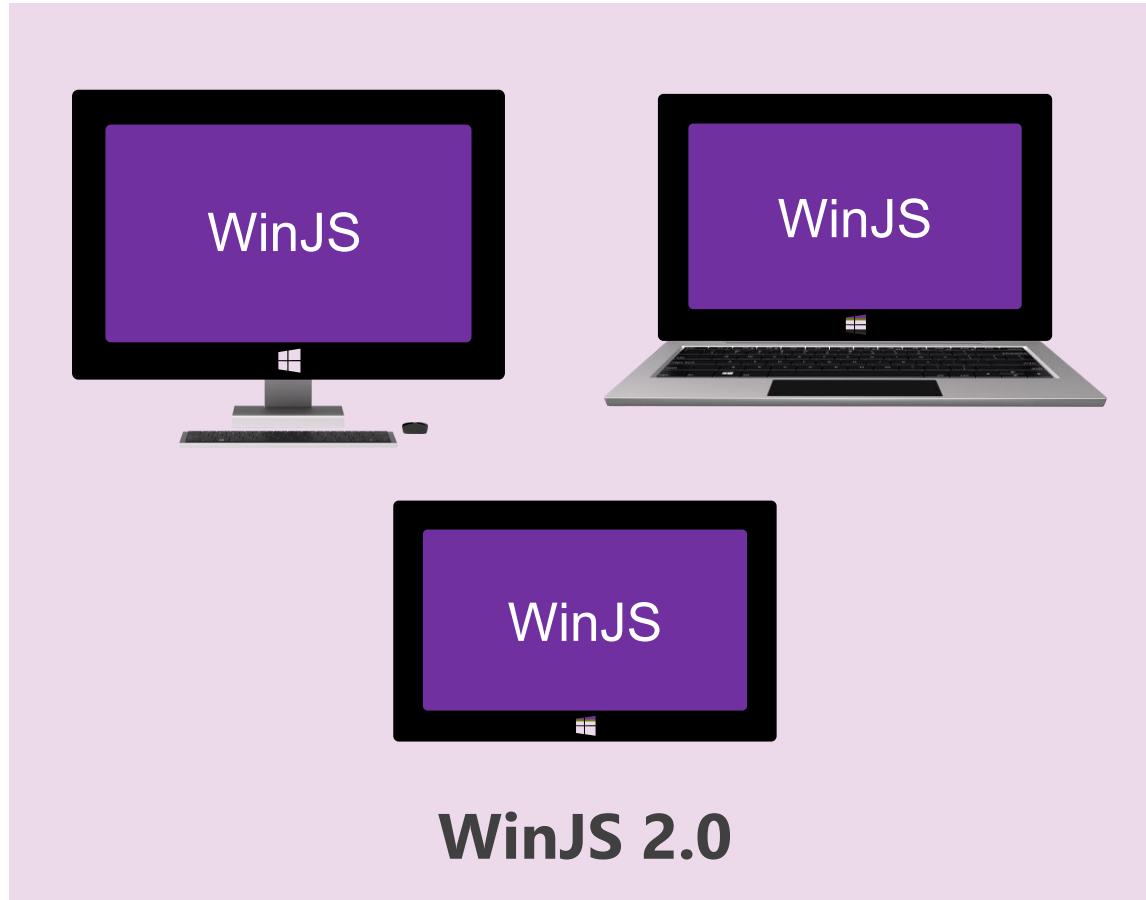


WinJS 1.0

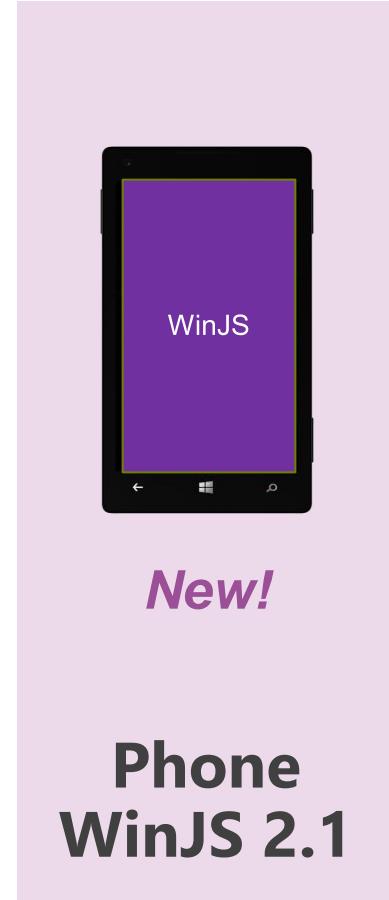
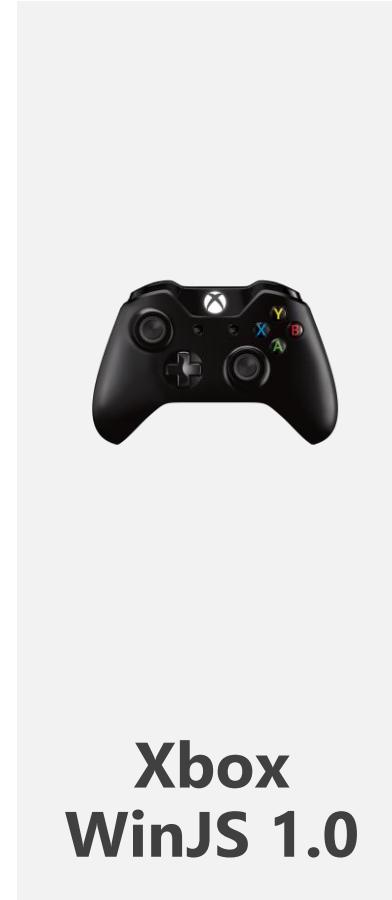


Xbox  
WinJS 1.0

# WinJS today



# WinJS today



# WinJS today

Windows app *and/or* Windows  
Phone app



WinJS

WinRT

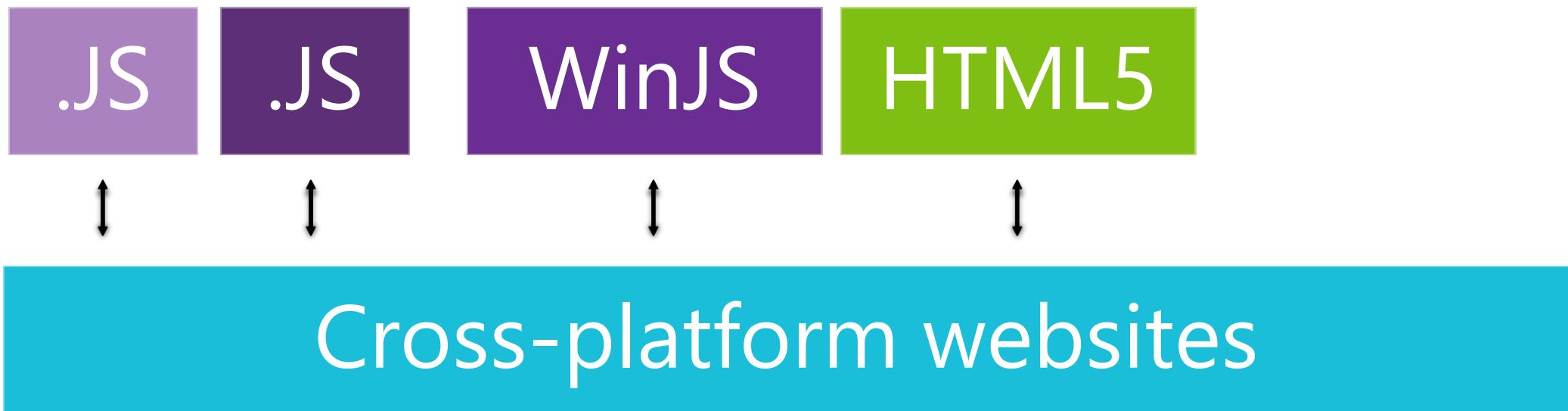
HTML5

# Windows developer

Universal Windows Apps



# Web developer



# Windows & web developer

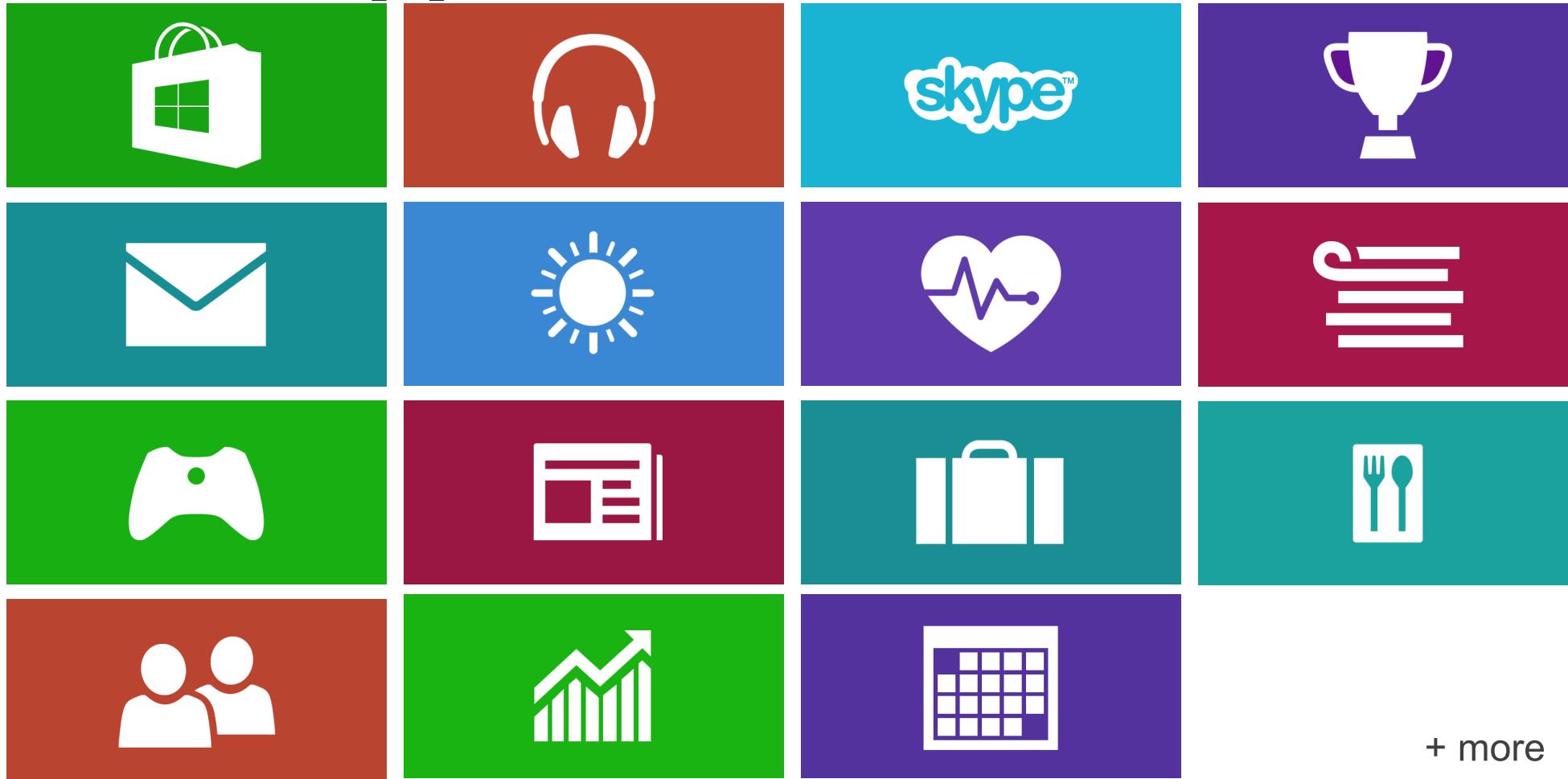
Universal Windows Apps



Cross-platform websites



# WinJS apps



+ more

# Big picture of what's new



**Enable true Phone experiences**



**Enable true Phone experiences**  
**Built with native performance**

Enable true Phone experiences  
Built with native performance  
**Share code across PC and Phone**



Enable true Phone experiences  
Built with native performance  
Share code across PC and Phone  
**Works great with the community**

**Enable true Phone experiences  
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# Deep dive on new features



# Making the switch from PC

- All core capabilities and utilities are available
- Controls migrated and improved
- New platform specific features



# Phone WinJS 2.1 highlights

New controls

Pivot

Improved controls

ListView

AppBar

Jump List

+ more

Building blocks

Animations

User themes

Accessibility

+ more



# Phone WinJS 2.1 highlights

Not fully supported

AppBar

What's missing

Flyout

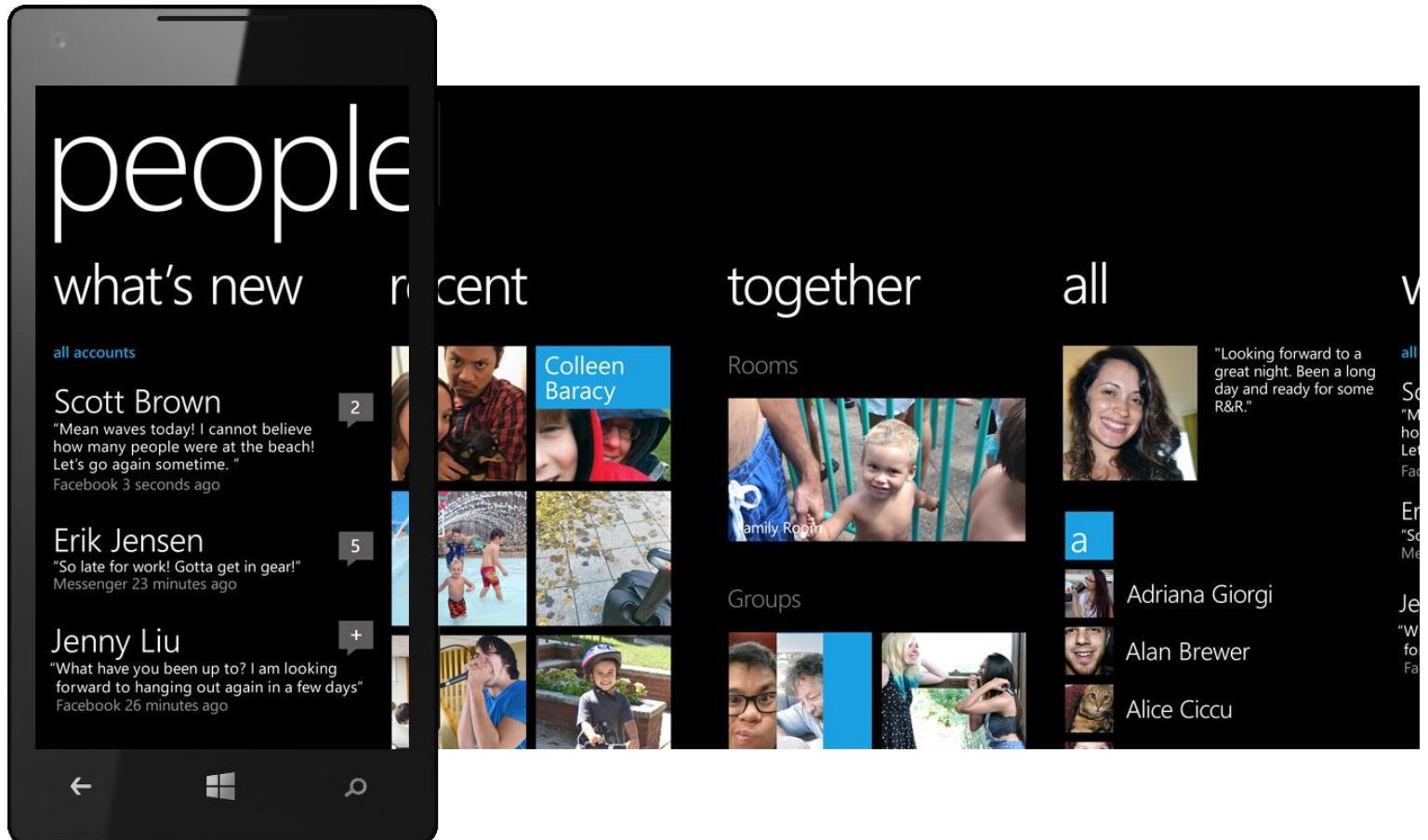
SettingsFlyout

Hub

+ more



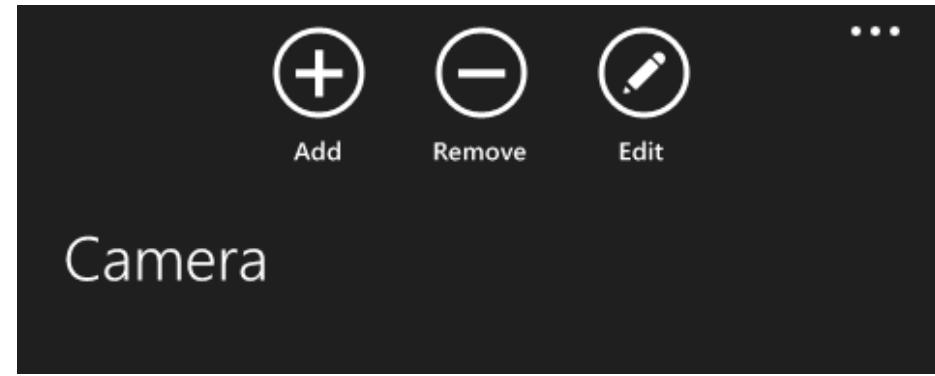
# Pivot control



# demo

Pivot





# Appbar on Phone

# Using AppBar on Phone

```
<div id="createAppBar" data-win-control="WinJS.UI.AppBar">

    <button data-win-control="WinJS.UI.AppBarCommand"
        data-win-options="{id:'cmdAdd', label:'Add', icon:'add'}">
    </button>
    <button data-win-control="WinJS.UI.AppBarCommand"
        data-win-options="{id:'cmdRemove', label:'Remove', icon:'remove'}">
    </button>
    <button data-win-control="WinJS.UI.AppBarCommand"
        data-win-options="{id:'cmdCamera', label:'Camera', icon:'camera',
                           section:'selection'}">
    </button>

</div>
```

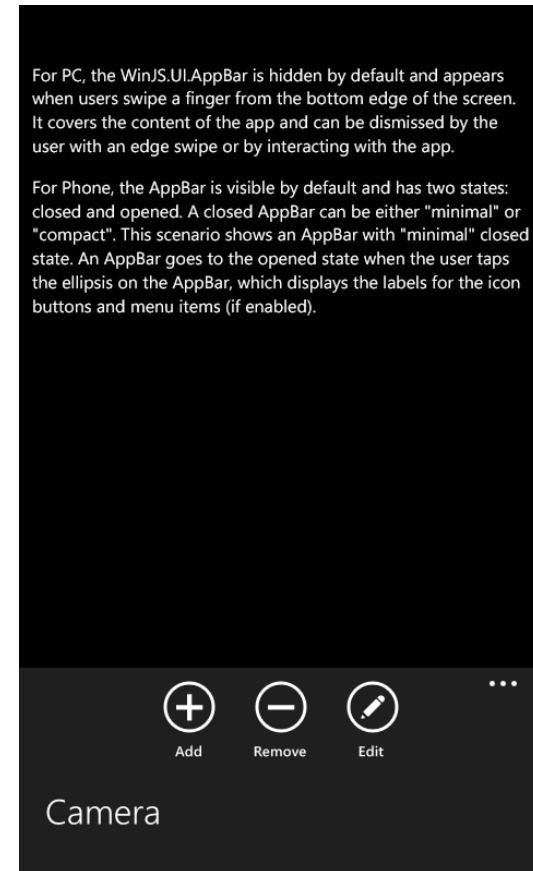
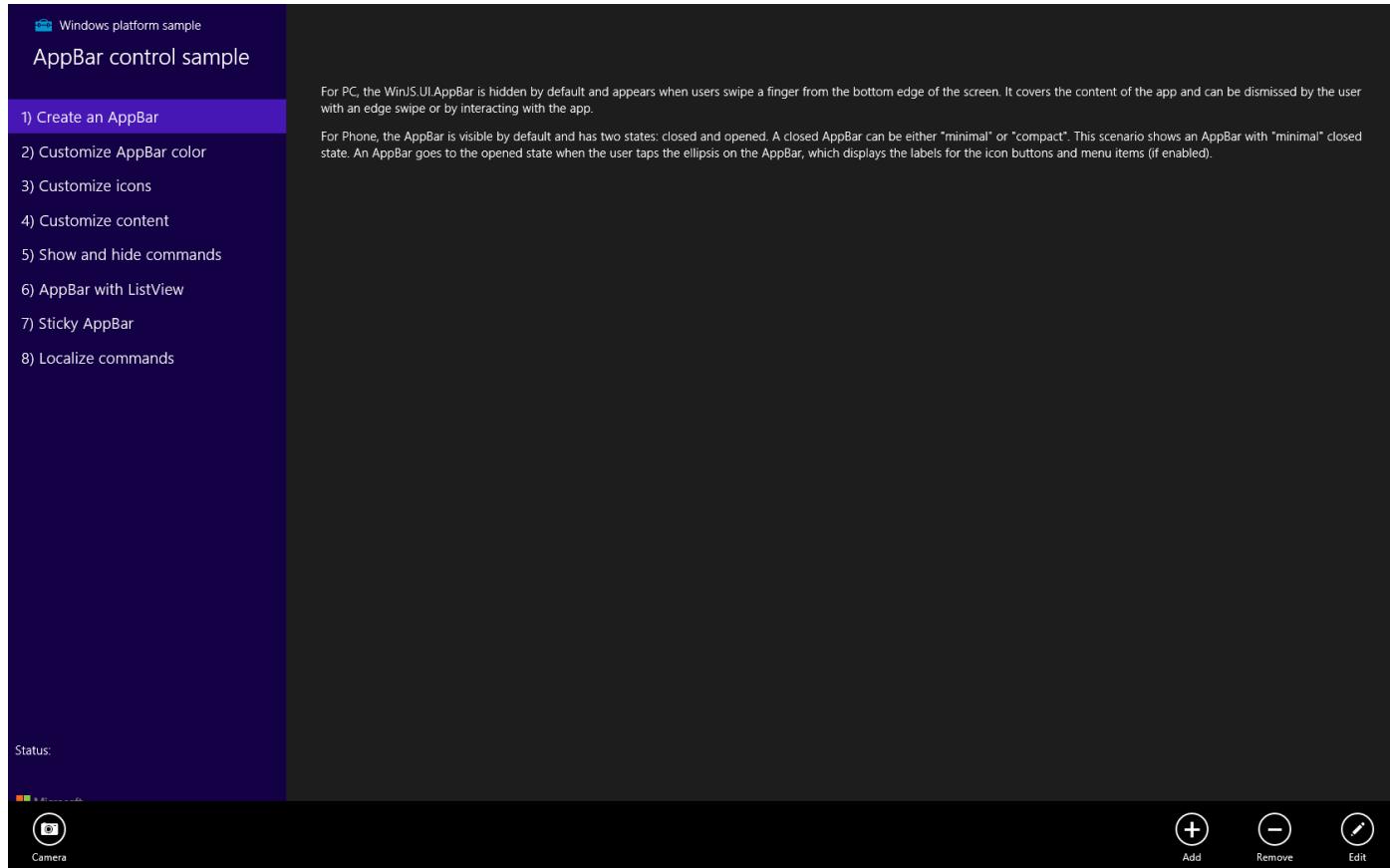
# Using AppBar on Phone

```
<div id="createAppBar" data-win-control="WinJS.UI.AppBar"  
    data-win-options="{closedDisplayMode:'minimal'}">  
  
    <button data-win-control="WinJS.UI.AppBarCommand"  
        data-win-options="{id:'cmdAdd', label:'Add', icon:'add'}">  
    </button>  
    <button data-win-control="WinJS.UI.AppBarCommand"  
        data-win-options="{id:'cmdRemove', label:'Remove', icon:'remove'}">  
    </button>  
    <button data-win-control="WinJS.UI.AppBarCommand"  
        data-win-options="{id:'cmdCamera', label:'Camera', icon:'camera',  
                        section:'selection'}">  
    </button>  
  
</div>
```

# Using AppBar on Phone

```
<div id="createAppBar" data-win-control="WinJS.UI.AppBar"  
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    <button data-win-control="WinJS.UI.AppBarCommand"  
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        data-win-options="{id:'cmdRemove', label:'Remove', icon:'remove'}">  
    </button>  
    <button data-win-control="WinJS.UI.AppBarCommand"  
        data-win-options="{id:'cmdCamera', label:'Camera', icon:'camera',  
                        section:'selection'}">  
    </button>  
  
</div>
```

# Using AppBar across form factors

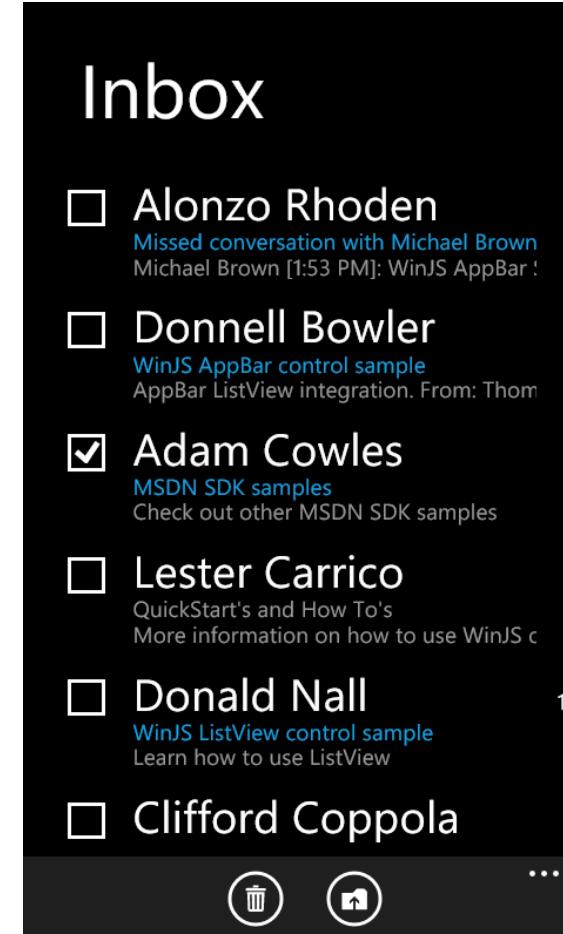
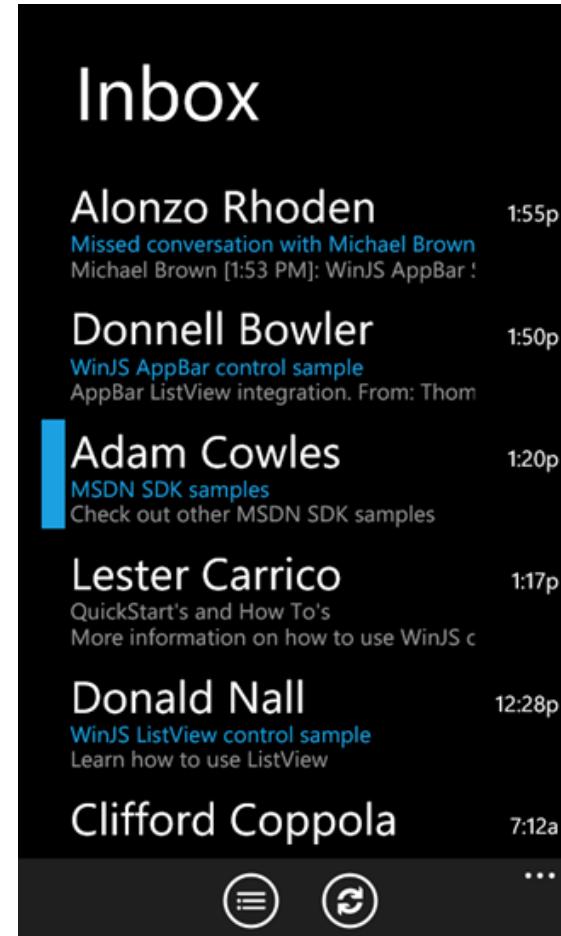
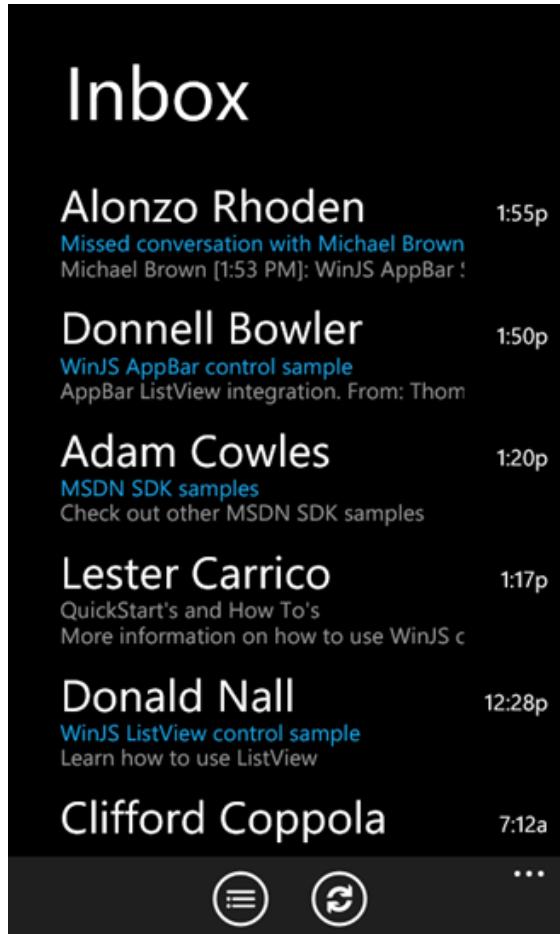


# demo

Appbar across form factors



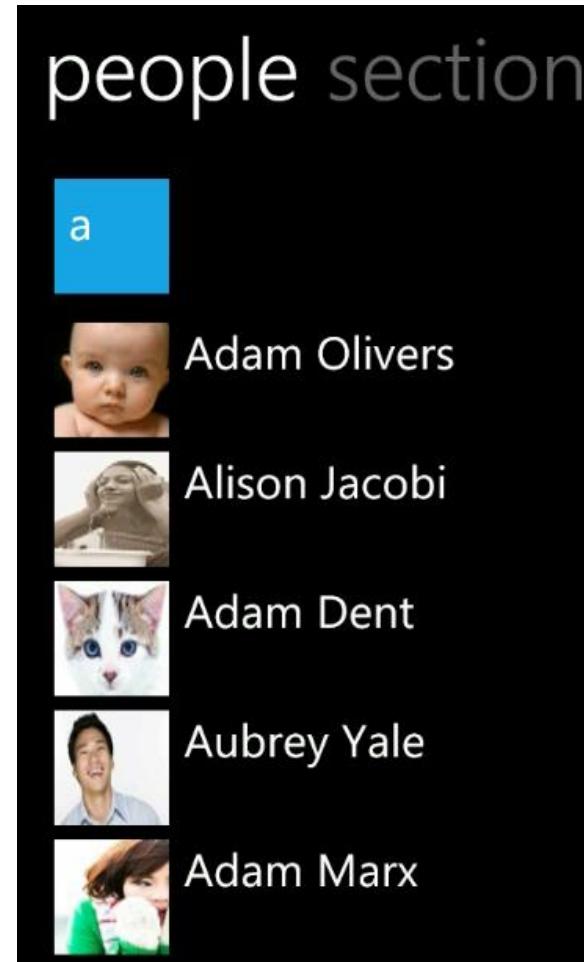
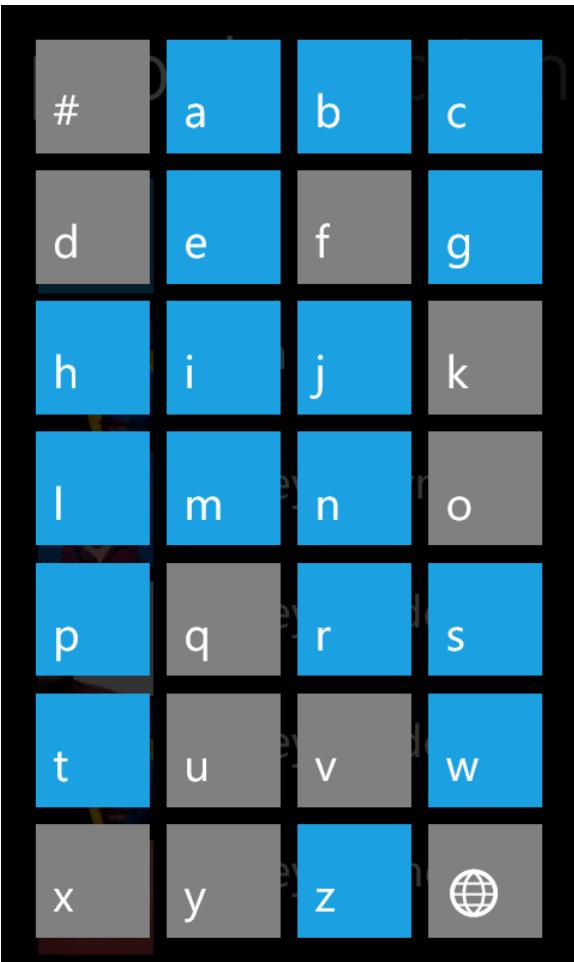
# ListView



# Using ListView control

```
<div data-win-control="WinJS.UI.ListView" data-win-options="{
    itemDataSource: myDataSource,
    layout: { type: WinJS.UI.ListLayout },
    itemTemplate: myItemTemplate,
    selectionMode: 'multi',
    tapBehavior: 'toggleSelect'
}">
</div>
```





# Using Semantic Zoom to build Jump Lists

```
<div id="inGroupTemplate" data-win-control="WinJS.Binding.Template" style="display:none">
    <div class="groupHeader" data-win-bind="innerText: title"></div>
</div>

<div id="outItemTemplate" data-win-control="WinJS.Binding.Template" style="display:none">
    <div class="groupHeader" data-win-bind="style.backgroundColor: color; innerText: title"></div>
</div>

<div style="width: 480px; height: 640px" id="sezoRoot" data-win-control="WinJS.UI.SemanticZoom">
    <div style="width: 480px; height: 640px" id="zoomedInLV" data-win-control="WinJS.UI.ListView"
        data-win-options="{itemTemplate: inItemTemplate, groupHeaderTemplate: inGroupTemplate,
        layout: {type: WinJS.UI.ListLayout}}">
    </div>

    <div style="width: 480px; height: 640px; padding-top: 60px"
        id="zoomedOutLV" data-win-control="WinJS.UI.ListView" data-win-options="
        {itemTemplate: outItemTemplate, layout: {type: WinJS.UI.GridLayout}}">
    </div>
</div>
```

# Using Semantic Zoom to build Jump Lists

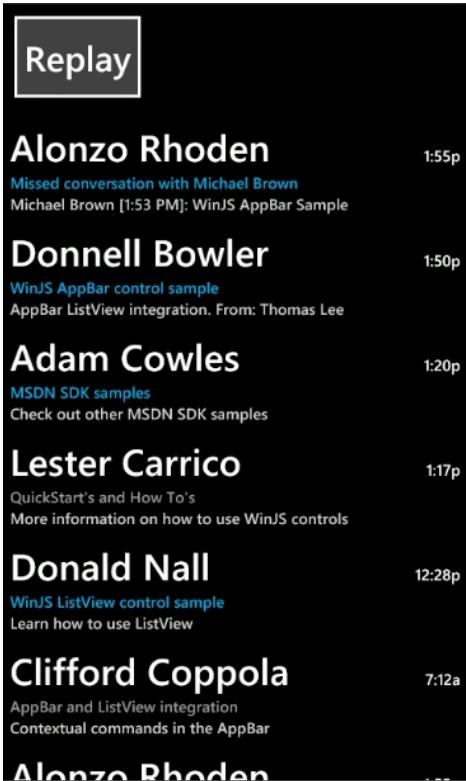
```
var groups = [
    { title: "#", count: 0 }, { title: "A", count: 2 }, // ...
    { title: "Z", count: 0 }
];

for (var i = 0; i < groups.length; i++) {
    outItems.push({ title: groups[i].title, color: (groups[i].count ? "#0094ff" : "#AAAAAA"),
        mapsTo: (groups[i].count ? inItems.length : -1) });

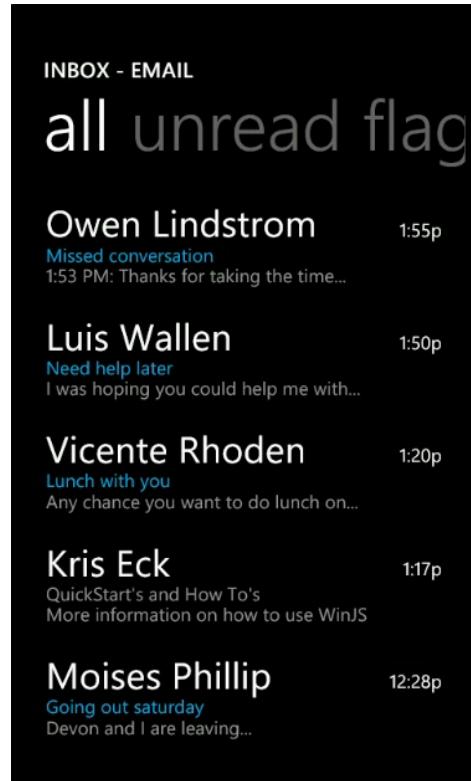
    function inToOutMappingFunction(item) {
        return { groupIndexHint: item.data.mapsTo };
    }
    function outToInMappingFunction(item) {
        return { firstItemIndexHint: item.data.mapsTo };
    }

    outLV.addEventListener("iteminvoked", function (e) {
        var item = data.zoomedOut.getItem(e.detail.itemIndex);
        if (item.data.mapsTo === -1)
            e.preventDefault();
    });
}
```

# Animations



Turnstile



Slide

# Available animations

Add	Expand	Slide left in
Collapse	Fade in	Slide left out
<a href="#">Continuum backward in</a>	Fade out	Slide right in
<a href="#">Continuum backward out</a>	Hide edge UI	Slide right out
<a href="#">Continuum forward in</a>	Hide panel	Slide up
<a href="#">Continuum forward out</a>	Hide pop up	Swipe deselect
Crossfade	Peek	Swipe select
Delete	Pointer	<a href="#">Turnstile backward in</a>
Drag and drop	Reposition	<a href="#">Turnstile backward out</a>
Enter content	Show edge UI	<a href="#">Turnstile forward in</a>
Enter page	Show panel	<a href="#">Turnstile forward out</a>
Exit content	Show pop up	Update badge
Exit page	<a href="#">Slide down</a>	

# Using animations

```
var incoming; // A single element or an array of elements  
  
WinJS.UI.AnimationturnstileForwardIn(incoming);  
WinJS.UI.AnimationturnstileForwardOut(incoming);  
WinJS.UI.AnimationturnstileBackwardIn(incoming);  
WinJS.UI.AnimationturnstileBackwardOut(incoming);  
  
WinJS.UI.Animation.slideUp(incoming);  
WinJS.UI.Animation.slideDown(incoming);
```

# Using animations

```
var listview = document.getElementById("listview").winControl;  
var items = [];  
  
for (var i = listview.indexOfFirstVisible; i <  
    listview.indexOfLastVisible + 1; i++) {  
    items.push(listview.elementFromIndex(i).parentNode.parentNode);  
}  
  
WinJS.UI.AnimationturnstileForwardIn(items);
```



# Themes

## Inbox

<b>Alonzo Rhoden</b>	1:55p
<a href="#">Missed conversation with Michael Brown</a>	
Michael Brown [1:53 PM]: WinJS AppBar !	
<b>Donnell Bowler</b>	1:50p
<a href="#">WinJS AppBar control sample</a>	
AppBar ListView integration. From: Thom	
<b>Adam Cowles</b>	1:20p
<a href="#">MSDN SDK samples</a>	
Check out other MSDN SDK samples	
<b>Lester Carrico</b>	1:17p
QuickStart's and How To's	
More information on how to use WinJS c	
<b>Donald Nall</b>	12:28p
<a href="#">WinJS ListView control sample</a>	
Learn how to use ListView	
<b>Clifford Coppola</b>	7:12a
	...



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	...



# Using themes

```
<!-- At runtime, ui-themed.css resolves to ui-themed.light.css or ui-themed.dark.css based on the user's theme setting.
```

```
This is part of the MRT resource loading functionality.
```

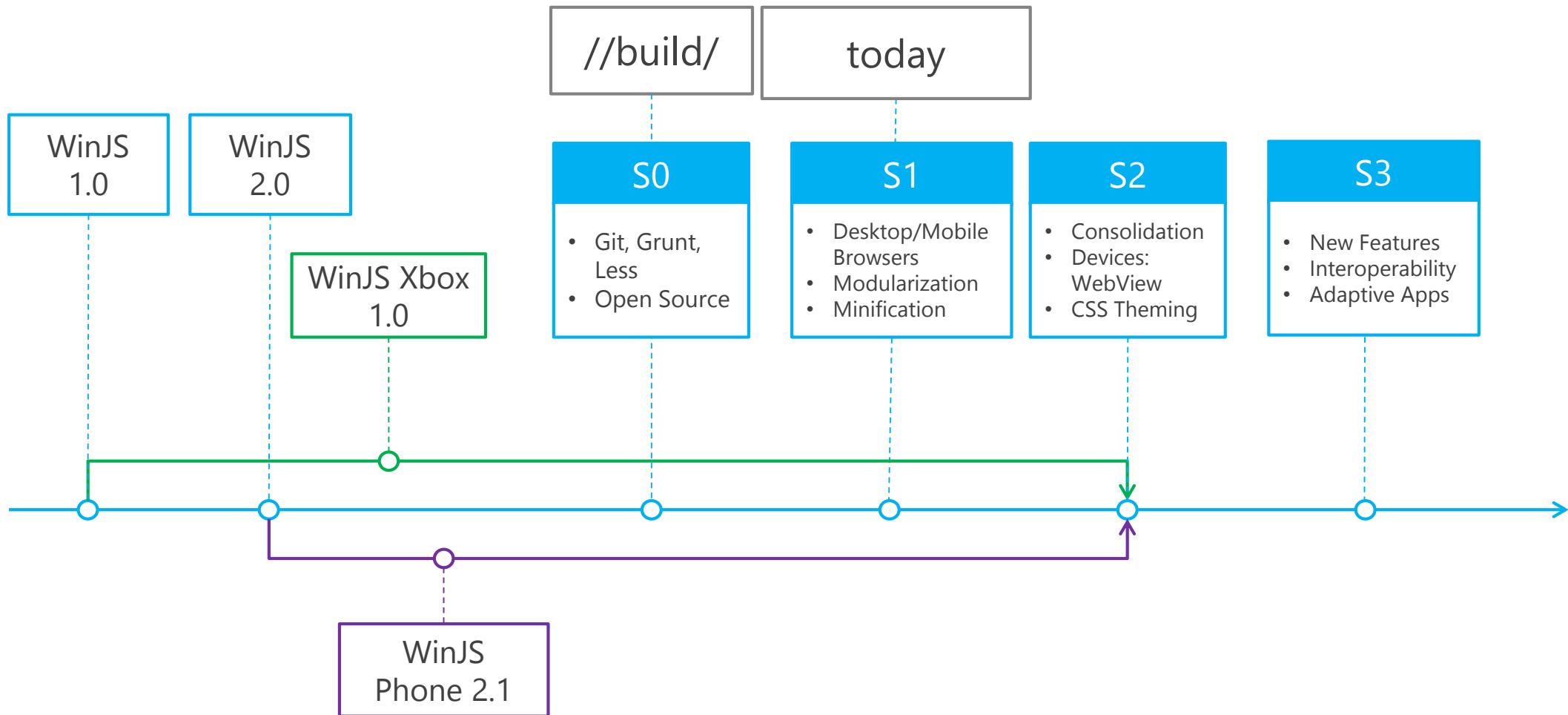
```
-->
```

```
<link href="/css/ui-themed.css" rel="stylesheet" />
<script src="//Microsoft.Phone.WinJS.2.1/js/base.js"></script>
<script src="//Microsoft.Phone.WinJS.2.1/js/ui.js"></script>
```

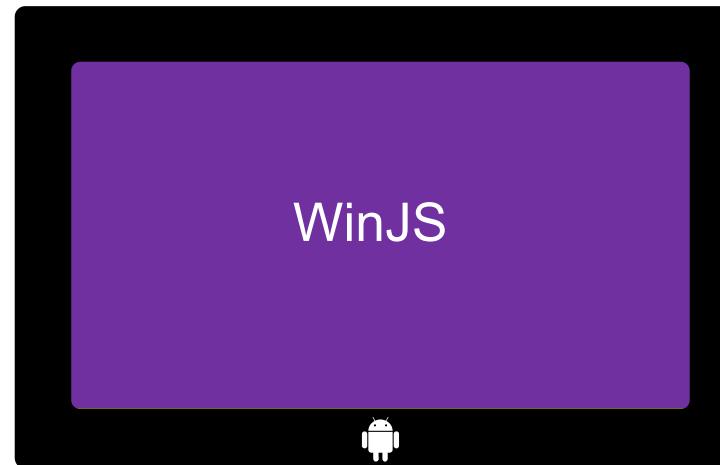
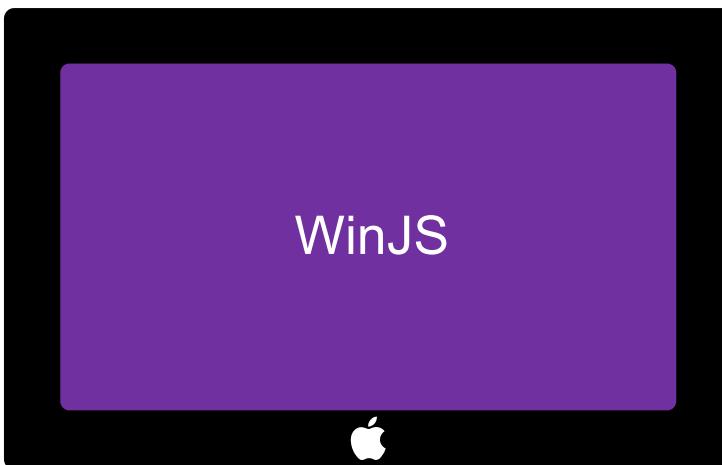
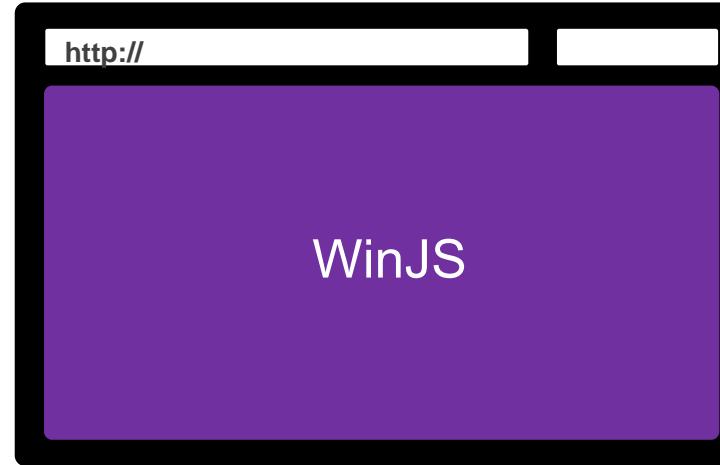
# The road ahead



# Roadmap



# WinJS support



# Extension for Multi- Device Hybrid App Development

Formerly known as Cordova Extension ☺



# Overview of Cordova

- Cordova is still in CTP2, not suitable for production...however!
- Apache Cordova is an open source project, part of the Apache Software Foundation, the project was previously known as PhoneGap.
- Target iOS, Android, Windows Phone, and Windows Store
- All of the code editing features you love in Visual Studio such as IntelliSense, syntax highlighting, and many other features are available. (HTML, Javascript & Typescript)
- Debug: breakpoints, debug Android with Ripple and iOS with the vs-mda-remote
- Easy to install: One single installer takes care of everything. 5GB ☺

# Bits about Cordova

- Universal Apps will be supported in Cordova 3.6
- Cordova != Xamarin
- Tons of Cordova Plugins: <http://plugins.cordova.io/>
- Trustworthy toolchain
- Watch out for «SPACES» inside the project path, Cordova platform doesn't like them.....or wait until Cordova 3.6!!
- No more SLOW Android emulators thanks to Ripple.



# Apache Cordova 3.6: IS OUT!!

- New framework for testing the plugins. This affects plugin developers, not plugin users. Globalization plugin has been cleaned up. Brought the vibration plugin API into alignment with the W3C specification.

<http://cordova.apache.org/news/2014/09/17/plugins-release.html>

- Windows8 platform is now called Windows to indicate the support for windows universal apps. The windows8/windows platform now supports building apps targeting Windows 8.1 and Windows Phone 8.1 in addition to Windows 8 which was originally supported (see documentation for new –win and –phone Command Line switches). For targeting Windows Phone 8.0, the wp8 is still supported. Support for Windows Universal Apps is being added.

• <http://cordova.apache.org/announcements/2014/09/08/cordova-361.html>



# demo

Multi-Device Hybrid App Development.



# References



# References WinJS

Get involved in the project

<https://github.com/winjs/winjs>

Learn more

<http://www.buildwinjs.com>

Try it out yourself

<http://try.buildwinjs.com/>

Porting from a WinRT app

<http://msdn.microsoft.com/en-us/library/windows/apps/dn636144.aspx>

# References Cordova

Multi-Device Hybrid Apps Homepage

<http://www.visualstudio.com/en-US/explore/cordova-vs>

Plugins repo

<http://plugins.cordova.io/>

Cordova @ MS Open Tech

<http://msopentech.com/opentech-projects/apache-cordova/>

Cordova Official Site

<http://cordova.apache.org/>



# Q&A

Tutto il materiale di questa sessione su  
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