

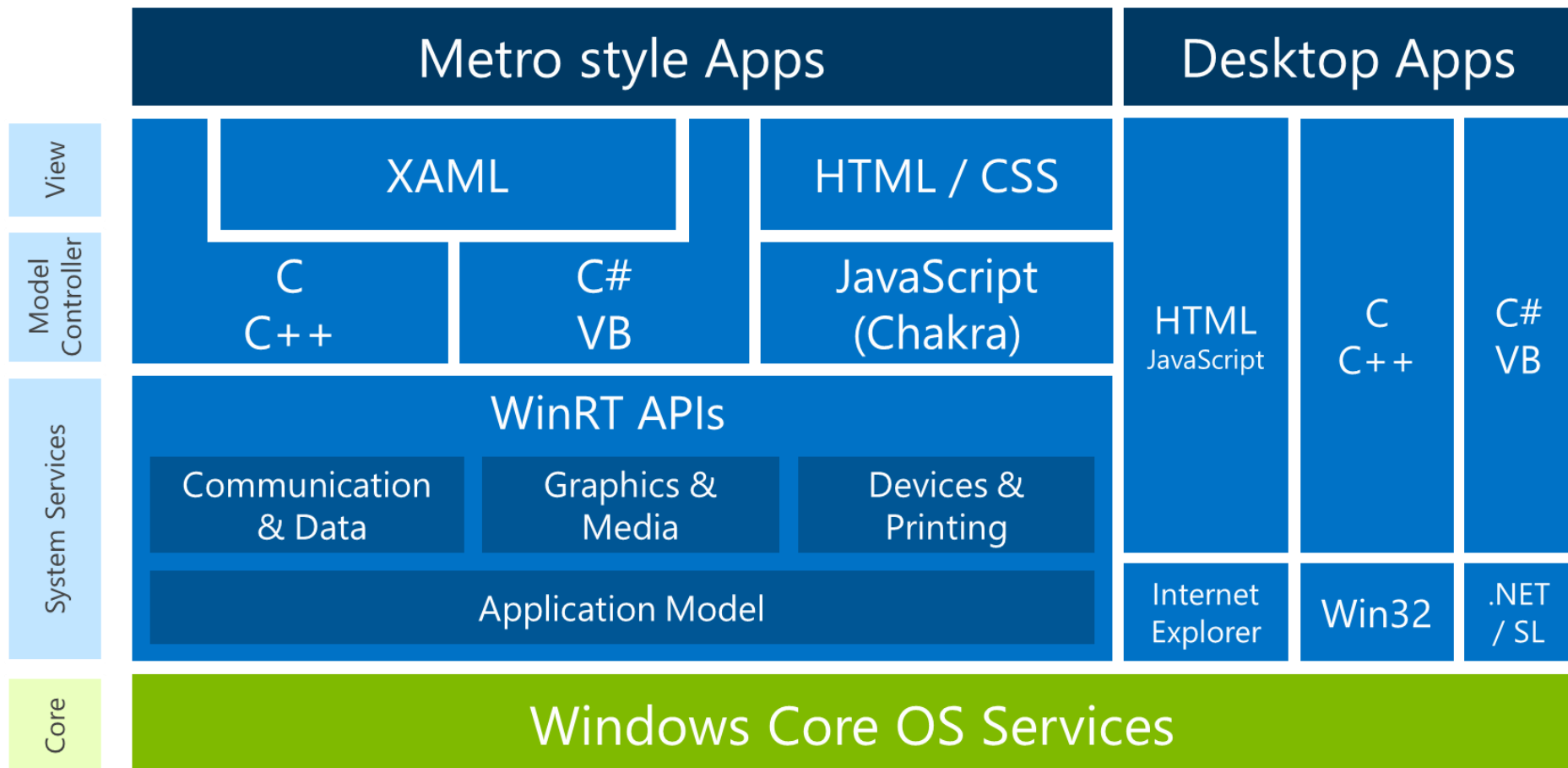
Javascript as language for native apps?

Štěpán Bechynský

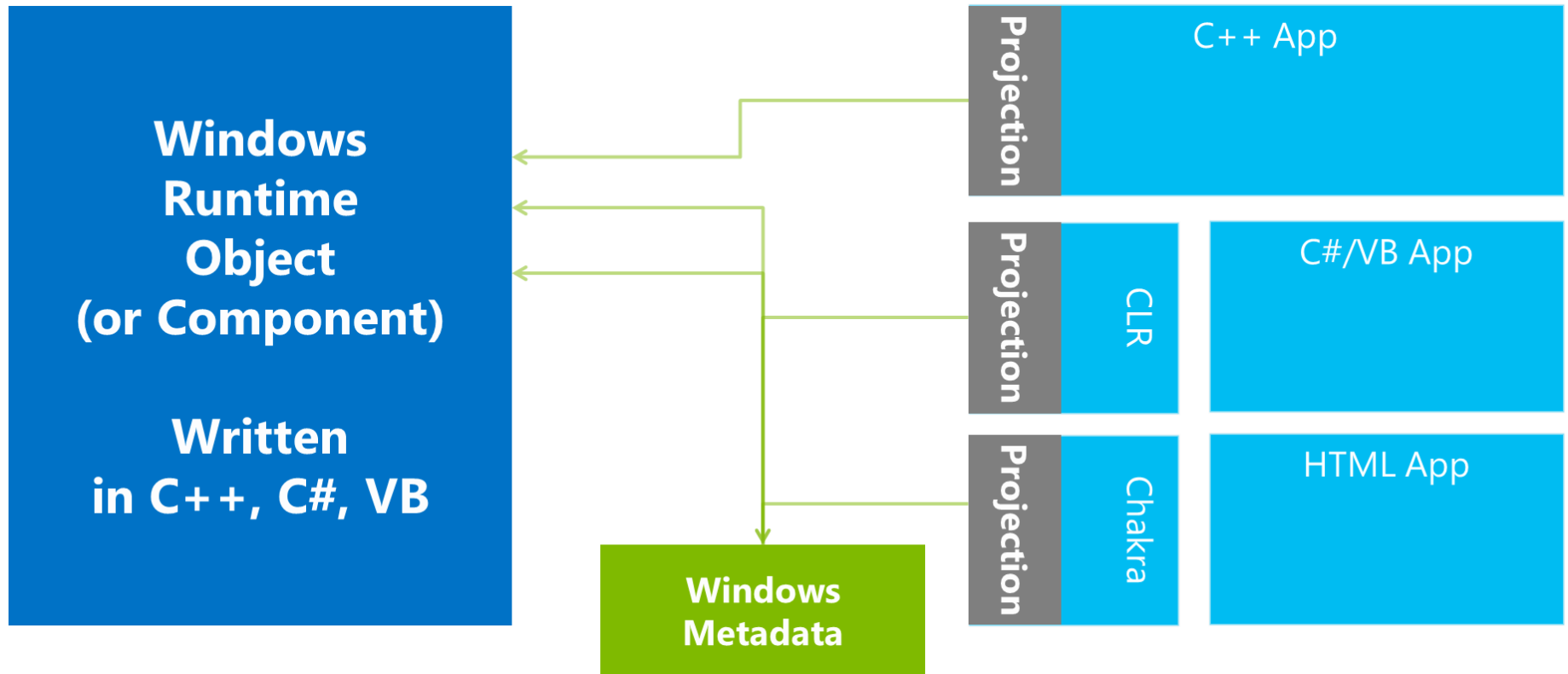
Windows 8 Champ

Microsoft

Windows 8 Platform



Language Projections



HTML5 Support

CSS 2D Transforms

CSS 3D Transforms

CSS Animations

CSS Backgrounds & Borders

CSS Color

CSS Flexbox

CSS Fonts

CSS Grid Alignment

CSS Hyphenation

CSS Image Values (Gradients)

CSS Media Queries

CSS multi-column Layout

CSS Namespaces

CSS OM Views

**CSS Positioned Floats
(Exclusions)**

CSS Selectors

CSS Transitions

CSS Values and Units

Data URI

DOM Element Traversal

DOM HTML

DOM Level 3 Core

DOM Level 3 Events

DOM Style

DOM Traversal and Range

DOMParser and XMLSerializer

ECMAScript 5

File APIs

FormData

HTML5 Application Cache

HTML5 async

HTML5 Canvas

HTML5 Drag and drop

HTML5 Forms and Validation

HTML5 Geolocation

HTML5 History API

HTML5 Parser

HTML5 Sandbox

HTML5 Selection

HTML5 semantic elements

HTML5 video and audio

ICC Color Profiles

IndexedDB

Page Visibility

**Pointer (Mouse, Pen, and Touch)
Events**

Selectors API Level 2

Filter Effects

SVG, standalone and in HTML

Timing callbacks

Web Messaging

Web Sockets

Web Workers

XHTML/XML

XMLHttpRequest (Level 2)

Windows Library for JavaScript (WinJS)

Helpers for Namespaces,
Constructor Definition

Promises

App Model

Navigation

Page & User controls

Data binding

Controls

Animations

Templates

Utilities

Default CSS Styles

Prefer your own library?

- Adhere to the New UI and Windows personality
- Understand our webcontext & sandboxing model
- Mix & match works fine

Demo

jQuery UI

Built-in Controls

- Implement New UI principles and personality
- Designed for touch, mouse, and keyboard
- Native to HTML
- Native to XAML

Toggle Switch (HTML)

HTML:

Wi-fi networking
On



```
<div data-win-control="WinJS.UI.ToggleSwitch"  
    data-win-options="{title: 'Wi-fi networking'}"  
    id="myToggle"  
</div>
```

JavaScript:

```
myToggle.addEventListener("change", toggleWifi);
```

Toggle Switch (XAML)

XAML:

```
<ToggleSwitch  
    Header="Wi-fi networking"  
    x:Name="MyToggle"  
>
```

Wi-fi networking
On



C#:

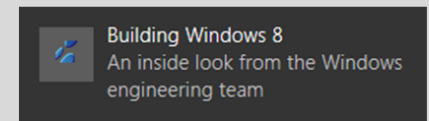
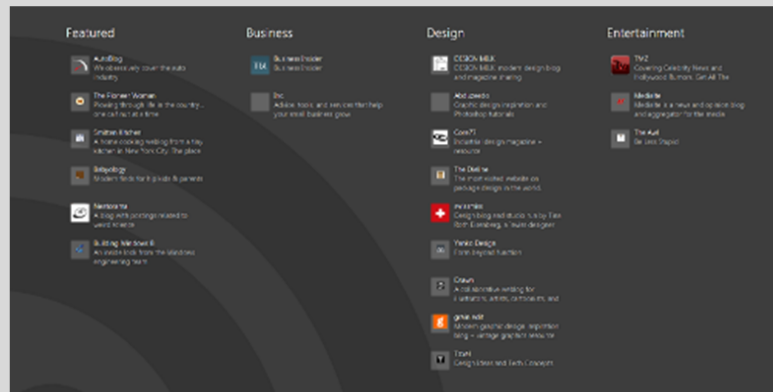
```
MyToggle.Toggled += new RoutedEventHandler(ToggleWifi);
```

Demo

Build-in Controls

ListView

ListView = dataSource + itemRenderer + layout



ListView

```
<div data-win-control="WinJS.Binding.Template" id="myTemplate" >
  <div style="width: 110px; margin: 10px">
    <img data-win-bind="src: picture" style="height: 60px; width: 60px" />
    <input type="button" data-win-bind="value: buttonText" />
  </div>
</div>
```

```
<div height="400"
  data-win-control="WinJS.UI.ListView" id="listview1"
  data-win-options="{dataSource: myData, itemRenderer: myTemplate}">
</div>
```

Demo

ListView

Tiles and Live Tiles

- Tap on tile to launch or switch to an app
- Static default tile specified in app manifest
- Two sizes
 - Square: 150 x 150
 - Wide: 310 x 150
- Both sizes can have live updates
- Tiles updated using pre-defined templates
- Local or cloud updates

Demo

Live Tiles

Working With Sensors

- Windows Runtime give you access to hardware
- Webcam
- GPS
- NFC
- Accelerometer
- Gyroscope

Demo

Webcam