# Windows PhoneGap Integration

* Vaadin Touchkit currently supports only iOS and Android

Windows Phone support coming soon 🡪 Vaadin Touchkit 4.0, Beta planned for mid April, Final planned for early May, current version: 4.0.0.alpha2 (supports IE)

* Vaadin Touchkit only works in WebKit-based browsers  
    
  “TouchKit is designed for mobile browsers and supports currently only WebKit-based browsers at the moment. WebKit-based desktop browsers, such as Safari and Chrome, can be used for testing.   
  A TouchKit user interface will not work in non-WebKit browsers. To make the application working for such users, you can define a *fallback application* and widget set. These are defined with the fallbackApplication and fallbackWidgetset parameters in web.xml.”  
    
  <http://demo.vaadin.com/vornitologist/VAADIN/tutorial/touchkit-tutorial.html>
* 4.0 should support IE also
* PhoneGap Build only supports Windows Phone (& Android & iOS)
* You can create a Windows 8 App with Cordova (PhoneGap).
* Windows is about to merge Windows Phone and Windows application development, announced April, 2014  
  They’re developing WinJS, which is used to create a Windows App (additional to HTML5 & CSS) and is advertised to support cross-plattform development.  
    
  “Eines der für Entwickler interessantesten Merkmale der [heute vorgestellten](http://www.heise.de/newsticker/meldung/Microsoft-Windows-Phone-8-1-mit-Sprachsteuerung-Cortana-zweites-Update-2160823.html) Version 8.1 von Microsofts Smartphone-Betriebssystem Windows Phone dürfte sein, dass sie die Laufzeitumgebung Windows Runtime (WinRT) enthält. Damit laufen Apps, die für die Touch-Oberfläche von Windows 8(.1) erstellt wurden, unverändert auch auf Windows-Handys.“  
  <http://www.heise.de/newsticker/meldung/Universal-Apps-fuer-Windows-und-Windows-Phone-2160982.html>  
    
  There will be an update for Visual Studio.  
    
  “Als Programmierplattformen für Universal Apps steht alles zur Verfügung, was man von Store-Apps für Windows 8 kennt: mit XAML gestaltete Bedienoberflächen, hinter denen C#- oder Visual-Basic-Code steckt, natives C++ und – erstmals unter Windows Phone 8.1 – auch Apps, die in HTML5 und CSS designt sind und mit JavaScript-Code zum Leben erweckt werden. Die dazu verwendete JavaScript-Bibliothek WinJS hat Microsoft übrigens heute unter die quelloffene Apache-2.0-Lizenz gestellt und auf GitHub [veröffentlicht](https://github.com/winjs/winjs).“
* Camera and GPS can be accessed via Vaadin Touchkit directly. PhoneGap however allows for more device specific features to be integrated.
* For us, there are two options mainly:

1. Use Vaadin Touchkit and go without the conversion to a native Windows app with Phonegap. Use the Vaadin Touchkit webapp instead (with iOS-like appearance), which can be run by a WebKit browser only, such as Chrome, Safari, etc.   
   Hopefully, Vaadin Touchkit will support IE soon.  
   🡺 no native Windows app, only webapp for WebKit browser (maybe IE soon)
2. Do not use Vaadin Touchkit for the Windows application. Build a native Windows App with the help of Cordova (PhoneGap).  
   /\*It doesn’t matter how we develop the Windows application as we can define any application as a fallback (e.g. Vaadin, plain HTML5/CSS/JavaScript, or a conventional programming language, such as C++, C# or Visual Basic (VB.NET) and XAML).  
   mgwt wouldn’t work on non-WebKit browsers either.\*/  
   🡺 develop two applications at the same time