Mobile Application Development

Session 1 – Activities

1. Mobile Devices and Platforms

This activity should be done in groups of 4 or 5.

Compare and contrast the mobile devices of the students in your group. Before doing this each student should first complete the *device profile table* from this session's resource section in Moodle.

Note any variations in the following:

- Device type.
- Platforms, platform versions
- Screen sizes, screen types screen resolutions, aspect ratios
- Navigation Methods
- Available sensors (e.g. accelerometer, compass, gyroscope)
- Geolocation availability, geolocation methods
- Connectivity methods (e.g. 3G, 4G, Wi-Fi, Bluetooth)
- Browser, browser version, browser type, HTML 5 compatibility

2. JQuery Mobile Compatibility

Check your platform/browser configuration against the <u>JQuery</u> <u>Mobile supported platforms and browsers</u> criteria to determine the level of support for your setup.

3. Mobile Apps

The organisations below have a web version and a native version of their app:

Native app	Web app
easyJet (Android, IOS,	http://m.easyjet.com/m2p-ej/s/
Blackberry)	
PrimeLocation (Android,	http://m.primelocation.com/
IOS, Blackberry, Windows	
Phone)	
Facebook (Android, IOS,	http://m.facebook.com/
Blackberry, Windows	
Phone)	
BBC News (Android, IOS,	http://m.bbc.co.uk/news
Blackberry, Windows Phone	
Wikipedia (Android, IOS,	http://en.m.wikipedia.org/wiki/Main_Page
Blackberry, Windows	
Phone)	
Bet365 (Android, IOS)	https://mobile.bet365.com

- 1. Choose one of the organisations. Download and install their native app on your mobile device. Then load the web app into your browser.
- 2. Compare and contrast the two versions of the App. How different or similar are the two apps in terms of:
 - a) Layout
 - b) Navigability
 - c) Functionality available
 - d) Speed
 - e) Graphics quality
 - f) Use of screen real estate
 - g) Integration with device (e.g. use of GPS, camera, device storage, etc.)
- 3. Turn off your network connection(s) on your phone (e.g. turn on flight mode). To what extent do the native and web apps you are evaluating work in offline mode? Do they work at all?