Access the following URL's and familiarize yourself with:
the Apple Phone:  http://en.wikipedia.org/wiki/Apple_phone
the Android Phone:  http://en.wikipedia.org/wiki/Android_phone
the Windows Phone:  http://en.wikipedia.org/wiki/Windows_Phone

CH1-Assignment

This assignment is intended for you to put into practice what you have read about in this chapter. Specifically, the objective is to enable you to define usability and user experience goals and to transform these and other design principles into specific questions to help evaluate an interactive product.

Find an everyday handheld, movable or stationary device, e.g. TV remote control, vacuum cleaner, digital camera, thermostat, microwave oven, DVD player, automobile dashboard controls, etc. and examine how it has been designed, paying particular attention to how the user is meant to interact with it.

a. From your first impressions, write down what first comes to mind as to what is good and bad about the way the device works.
b. Give a description of the user experience resulting from interacting with it.
c. Based on your reading of this chapter and any other material you have come across, compile a set of usability and user experience goals that you think will be most relevant in evaluating the device. Decide which are the most important ones and explain why.
d. Translate each of your sets of usability and user experience goals into two or three specific questions. Then use them to assess how well your device fares.
e. Finally, discuss possible improvements to the interface based on the answers obtained for (d).

Guidelines: This assignment is meant to enable you to begin exploring and understanding the usability and user experience of interactive products. Instead of simply saying 'nice cell phone, lovely to use' or 'awful interface, really bad design' you should now be equipped (having studied chapter 1 and associated reading) with a set of terms and concepts that can help you describe what is good and bad about an interactive product's design in terms of its usability and user experience.

How do you go beyond simply saying 'product X is easy to use, remember and to learn'? You need to examine in more depth why you think something is usable or not, in terms of X,Y or Z. In so doing, you may find that while the basic functions are easy to learn, many of the more advanced functions are fiddly or difficult to learn and remember. Hence, a product's usability and how desirable (or undesirable) it is will vary depending on the nature of the task, the context in which it is being used, and who is using it. Setting specific questions for each of the usability and user experience goals and the design concepts and usability principles can help you to start articulating in more detail what is and isn't usable about a product (and why this is the case). In addition, asking someone else to try doing a range of tasks and observing them can be very revealing, showing you aspects that you would overlook yourself or take for
You should also try to avoid seeing usability in terms of 'black and white', i.e. a product is either easy to use or it is not, it is efficient or it is inefficient to use. What is often much more interesting are the grey areas, where it may not be obvious at first that there is a problem but only after careful examination are you able to identify a specific usability problem (or set of problems).

Try also to avoid the checklist approach, where you simply run through the set of usability and user experience goals, and design principles and compare them with the product in front of you. Use the goals and principles more as guidelines, by which to uncover problems (or not) with a product. Always explain why you think something is easy to use or difficult to remember, illustrating your answers with actual examples of tasks when using the product.

When thinking about making changes to a product, based on your usability evaluation, it is important not to think about them as isolated improvements but in relation to each other. For example, consider the design recommendation for a hypothetical cell phone: 'remove the help icon at the top of the display screen'. The reason for the suggestion is it has been noted that when doing a usability evaluation it takes up too much real screen estate. Instead, the suggestion is to make it a hard-wired function, using one of the physical keys on the phone. The rationale is that it will still maintain visibility of the help function at all times, but will also free up some display space.

Now think about what the consequences and trade-offs might be for the rest of the tasks the user has to do at the interface. In this case, dedicating a hard button to be the help button means one less key available for doing other tasks. Does this now mean that some tasks will need to be done by switching between modes, which wasn't the case before? Is this preferable? What is gained and lost in proposing this design change? Also think about why a particular way of doing something was designed like that in the first place (e.g. why was the help button put on the display?). What do you think the designer was up to and why did they make that decision? Did the designer have a choice, was it an arbitrary decision or was it a compromise?