The last few years have seen a remarkable proliferation of handheld devices such as Personal Digital Assistants (PDAs) and Palm PCs. Although there are a few other alternatives, the two largest classes of these devices are based either on 3Com’s PalmOS operating system (e.g., the Palm III, IIIx, IIIe, V, Vx, VII, Handspring Visor, …) or on Microsoft’s WinCE operating system (e.g., Philips Velo, Casio Cassiopea, …). When compared with 3Com, Microsoft has arguably more expertise in designing and marketing operating systems, and has significantly more influence with both hardware manufacturers and third-party software developers. Despite these perceived advantages, WinCE has not become the success Microsoft would have liked it to be, instead losing significant market share to Palm OS-based devices.

In this assignment, your mission is to produce a 2-page write-up that summarizes the key reasons for the success of PalmOS-based devices and the lackluster performance of WinCE-based devices. To help organize your writing, you might want to think about the following issues:

1. To what extent does the operating system influence usability of a handheld device? How do handheld operating systems differ from desktop operating systems?

2. How important is the user-interface aspect of such devices? How is it that the same operating system that enjoys a user-interface advantage in the desktop market cannot match the same success in the handheld market?

3. WinCE is supposed to be a trimmed-down version of Windows NT. To what extent has this helped or hurt WinCE (as compared to PalmOS)?

4. WinCE is definitely more portable than PalmOS: it runs on devices comprising hardware from several different manufacturers. One would have thought that such portability would be an advantage, yet it seems to have hampered WinCE’s acceptance. Can you speculate why?

5. How important are the tools/applications that accompany the operating system on such devices? For instance, does PalmOS have an advantage with respect to its utilities for synchronizing with desktop mail and calendar programs?

Guidelines:

The 2-page limit is a strict one, so budget your writing accordingly. Your text on each page should be at most 6.5 inches wide and 9 inches high and be single-spaced with a font size of 10pt or larger. Shorter write-ups are preferred. You are free to organize the write-up any way you want as long as it addresses the above issues, and you use complete, grammatically correct sentences. Please also make sure that you acknowledge your sources (for web-based sources, please list the URLs): you can use a maximum of 1 additional page to do this.

Finally, unlike the programming assignments, each of you needs to do this assignment on your own. Feel free to discuss the issues with each other, and share information sources but the final write-up should be your own. Please also try and avoid copying verbatim what you find on the web: you can be sure that some of your other classmates will try and do the same.

The write-up should be turned-in in class on the due date. Make sure that you remember to put your name down on the write-up.