



UCL Department of Computer Science  
CS M038/GZ06: Mobile and Cloud Computing  
2010–2011, Term 2  
Kyle Jamieson and Brad Karp

**One-pager: Horatio (Smaldone et al., 2009)**

**Due: Start of lecture, 18th March 2011**

*Instructions: in your own words, answer the following question as succinctly as possible (in 200–500 words, but shorter answers within this range are encouraged). Quoting figures or text from the assigned reading or from any other source is specifically prohibited.*

In Table 1, the authors compare several alternative architectures for portable computing. One architecture unmentioned by the authors is that of *cloud-based applications*, such as Google Docs, in which an application is written in JavaScript, made available by a web server, and runs within the web browser’s execution environment (in a JavaScript interpreter) on a client PC (either a laptop or desktop). Such cloud-based applications offer long-term storage of the user’s documents within the cloud, but store the working copy on the client while the user is using the application.

Which column within Table 1 do cloud-based applications match, and why? Or if they match no column, what column entries correctly describe cloud-based applications’ characteristics? In your answer, focus on a text editor like Google Docs.

Finally, consider all the applications given as examples in Section 2.2.1. Does the cloud-based application model work well for all these applications? Why or why not?