

UCL Department of Computer Science CS Mo38/GZo6: Mobile and Cloud Computing 2011–2012, Term 2 Kyle Jamieson and Brad Karp

One-pager: GPSR (Karp and Kung, 2000) Due: Start of lecture, 17th January 2012

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.

Suppose you compared two versions of GPSR: one that uses the GG planarization when forwarding in perimeter mode, and another that uses the RNG planarization when forwarding in perimeter mode. On paths where perimeter-mode forwarding must be invoked, which planarization would on average yield shorter paths in hop count: the GG planarization or the RNG planarization? Justify your answer by explaining exactly what about the two planarizations' definitions is responsible for this difference, and why.