COMP261 Assignment 2

Student:

Marker:

Mark:

Minimum out of **40**:

- Has a way of specifying the start and end of a route.

- Has a priority queue of appropriate elements (node, parent, costToHere, totEstCost).

- Uses an appropriate cost measure (sum of segment lengths).

- Uses an appropriate heuristic.

- Uses the appropriate graph structure of segments from a node.

- Prints out the roads on the route.

- Correctly selects shortest paths.

Core out of **35** (up to **75**):

- Finds articulation points in one part of the graph.

- Uses the correct graph structure, i.e. ignores one way.

- Displays the selected nodes.

- Finds articulation points in all components of the graph.

- Uses the iterative version of the algorithm

- Do they have a report with pseudocode of their algorithms in it?

Completion out of **10** (up to **85**):

- Uses one-way roads correctly in the route-finding.

- Highlights the route on the map as well as printing it.

- Removes duplicate roads from the printout, and give the right lengths and total length.

Challenge out of **15** (up to **100**):

- Allows user to select distance or time, and find fastest route, using road class and speed limit data, and using an admissible heuristic.

- Can they explain and justify their cost function and heuristic?

- Takes into account restriction information.

- Takes into account intersection constraints such as traffic lights to prefer routes with fewer lights.