

**Faculty of Engineering and Technology**

**Computer Science Department**

**COMP338**

**Project 1 1st - 2021/2022**

**Project Description**

Develop a simulation program (in JAVA) that takes as ***input*** (Ramallah City map, current town, goal town), and ***returns*** the path to the goal (shown on the screen), and the algorithm’s time and space complexities.

* The simulator should ***implement*** the A\* algorithm.
* The size of the map should include: >30 nodes, branching >2, and depth >6.
* Each student should work alone, which should include:

1. **Source code** (in JAVA), with used dependences/libraries.

2. **Places.csv** the list of towns, and the coordination (x, y) of each town on the screen.

3. **roads.csv** the list of roads/links between towns, and the distance between them.

The program must be ***fully*** running, partial implementations will not be considered, and it is assumed that each student writes every single line in the code by him/herself.

**Evaluation**: the discussion of the project will be online or Face-2- Face (with the instructor and the TA),

**Deadline: 21/4/2022 at 11:59 PM (in ICT)**

Please the map at <https://www.ramallah-gis.ps/RamallahBaseMapV01/>

