Computer Architecture - Project 20%

Requirements

This is a group project to be completed with your lab partner(s). Max group size of 3.

You are required to upload your code not later than **Monday 22th of April @ 09.00.**

Failure to meet this deadline will result in a 15% deduction of marks achieved for each day late.

You must demonstrate you code/bot navigating the maze in person. Failure to demonstrate will result in a 0% grade being awarded for the project. Demonstrations will take place during the week beginning 22th of April. Further details to follow.

Your will write code that will allow your bot to;

Navigate its way through a maze, as per the example below. However the logic behind your code should take account of any similar maze design. There is only one entry point and one exit point.

You are required to use the whisker code to detect the obstacles/turns. When a whisker encounters an obstacle it should light up an LED and emit a bleep through the speaker before turning. If your bot reverses, it should emit a series of beeps whilst reversing.

This assignment is worth 20% of your marks, therefore the code used should be well structured with maximum use functions and loops throughout. The code must be well commented throughout.

Each **individual is required to upload a copy of the code independently** even though you are working on it with your lab partner. The code must include a comment at the top with the following details;

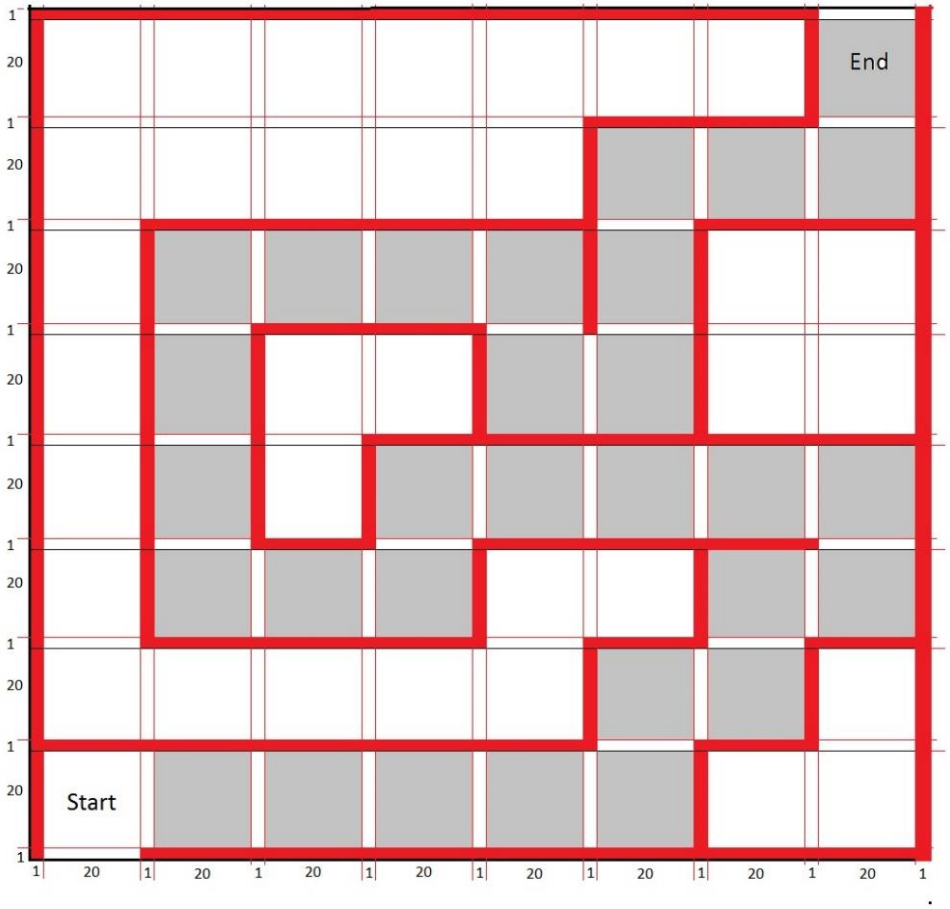
Group Members

Student Name: **Student Number:**

Student Name: **Student Number:**

Lab group number:

<u>Sample Maze below</u>


End
Start
1
20