I am working as both the team leader and AI programmer. Though the AI is not being actively used for the first milestone (as the robot's actions are pre-determined), I feel I have contributed heavily. I have worked on the technical specification which involved both high-level decisions such as the modules required, as well as lower-level decisions on the precise data which should be exchanged between the modules.

I believe that two of the key ways for us to be able to work efficiently are through good code practice which will maximise compatability between modules, and through good working methods. I've tried to promote this in meetings, where possible. I also designed the AI and wrote a skeletal structure for it. Since then, I have implemented the A* algorithm and started on linear extrapolation.

I feel the highlights of my contributions were:

- <u>Test early, test often philosophy</u>. I consider that the AI will ultimately be a large system and debugging it will be complex. As such, I've decided to heavily test each element as it is written, using a series of unit tests. This has helped find some obscure bugs already.
- <u>Implementing the A* algorithm</u>. I have now completed and heavily tested an A* implementation. This will need to be improved upon further in order to specialise it for the task, but I believe it's already at the minimum stage necessary for milestone 2.
- <u>Leading the group</u>. At meetings, I have helped to organise the team, promoted discussion and worked to identify the key areas which need more work. I believe that this has kept me aware of what all the sub-teams are working on and allowed me to guide the team in delivering on the first milestone.

In terms of improvements we could make, I believe that the team has worked extremely well in delivering on the first milestone. I don't believe we have any weak links. I think it is important that we can continue this momentum into the second milestone and quickly produce & finalise a design using the holonomic wheels. This will give the Navigation team enough time to produce a solution for moving the robot effectively.

For the first milestone, I believe I deserve a mark between 3 & 4. This is because whilst I feel that I have put a lot of effort into helping the project off the ground, I have not yet been under pressure to deliver a complete AI solution. As this will be required for the second milestone, I look forward to working hard and feeling fully-deserving of a 4.

There are some team members who in my mind are fully-deserving of a 4, without any doubt:

- <u>Iain Richardson</u>: Iain's organisational skills are exceptional and he has been vital in helping to get the project off the ground. He has also successfully led the Communications team in producing an effective solution for the first milestone.
- <u>Pavel Abrosimov</u>: Pavel is a very competent programmer, both in practical terms and when discussing strategy, in which he has been key. He has quickly gotten the GUI & inter-process communication working and has also assisted other subteams at important times.
- <u>Ian Johnston</u>: Ian has a passion for building Lego robots and has shown extreme dedication and enthusiasm in producing a robot for the first milestone. He has also quickly acquired holonomic wheels for use in a future design.

It is worth noting though, that I would not rate any team member below a 3 as I believe that all have made a meaningful contribution in their sub-teams and already proven themselves highly competent.

Richard Williams – SDP Group 8 (INFINITY)