I feel that the highlights of my contribution to Milestone 2 were as follows:

- Path smoothing. I wrote and iteratively improved a path-smoothing algorithm to provide more realistic pathing from the A* algorithm. I also worked on path reduction (as requested by the Navigation team) which simplifies paths of hundreds of points down to just a handful, by removing redundant points on straight lines.
- Plotter. I have written a custom plotting solution which allows us to visualise the entire output of the AI; including linear extrapolation, destination finding, path finding and path-smoothing. This has been very useful in testing and debugging the AI, particularly when a lot of work has to be done in isolation from the robot itself.
- Integration. I have integrated the AI with the shared memory, ensuring that it reads from and writes to the communal area. I have also added a small amount of code to the shared memory to support the AI sharing its output. I worked particularly heavily towards the end of the milestone, continuing to support the integration and debugging issues which appeared.

However, I also feel that there are several improvements to be made for the future:

- Last minute tweaking. I believe that the difficulties with the milestone demonstration were largely due to last minute tweaking. Several hours before the deadline, we could have been confident of receiving 4 points. The team are all highly-competent and particularly after the success of the previous milestone, there was a desire to receive another high mark. Pursuit of the dribbling task meant that major code changes were being made minutes before the deadline which reduced the predictability of the system. In hindsight, I realised that a lockdown should have been enforced several hours before.
- Testing methodology. Though the AI's individual algorithms are thoroughly unit-tested, there was previously no way to test it as a whole. As such, some flaws and bugs were exposed when integrating with the rest of the modules, which led to the process being less smooth than it should have been.
- Finalising details. The team's strategy so far has often been to use temporary measures for the milestones, particularly the robot design. Whilst this has at times been convenient, it has prevented us from producing a firm foundation of software to continue building on, as a lot of work has been tailored to robots which will be disassembled after the milestone. To rectify this, we've set firm deadlines for when the basics of the system must be finalised.

There are certain team members whom I feel excelled and are worthy of particularly high grades:

- George Ivanov worked tirelessly to get the Navigation ready for the milestone, in addition to being very involved with integrating the modules and testing the robot.
- Georgi Koshov & Stefan Sabev clearly worked very hard on the Vision system, readying it for the milestone.
- Pavel Abrosimov was key in integrating the modules and directing the team in my absence.

Personally, I feel I deserve a 3. Whilst I feel I've contributed a lot to the milestone and maintained contact with the team through my absence, I also feel that it prevented me from being as 'in the thick of it' as I would have liked.

As previously, I would not have given any team member less than a 3.