SDP Individual Performance Report 4

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1 Introduction

For the fourth milestone, I identified problems with the current Strategy code and discussed possible fixes with Chris, I was involved in rewriting the Control code to adapt to the needs of the Strategy code and fixing and investigating issues that came up with this new Control code, and I helped Darie, Laurie, and Dale with their attempts to prepare a solution for the milestone.

2 Contribution

●**New Control code**: New opcodes were introduced, the packet structure as well as the way to prepare packets for sending were changed. Various issues appeared (or reappeared with yet another "sewed with a hot needle" milestone solution) and were investigated (e.g. a bluetooth lag), and some of them were fixed.

●**Strategy problems**: The Strategy code has been fairly complex with several places that did not follow standard coding practices and it was not clear if they reliably did what they were supposed to do. I identified these bits of code that could cause us problems and discussed with Chris how this can be improved, so that the code is easier to be read as well as potential problems are prevented (e.g. a better thread lifetime management using java.util.concurrent utilities).

●**Help with Milestone attempts**: Darie and Laurie worked on a provisional mode for the Milestone 4 within the current Strategy code, so I helped them to adapt the new Control code to their needs. Later, Dale made a simpler and possibly more effective mode which I helped him with a bit.

3 Areas that need improvement

●**Overall system integration**: At the moment, there are many issues in all sub-systems and for some issues, it is not clear where exactly it goes wrong due to the complexity of the Strategy code that sits on top of everything.

4 Points

I believe I earned either 7 or 6 for this milestone. I suggest Rado to be awarded for exceptional work, because he contributed to several important areas, for example he added sliders and wrote guidelines for setting up the Vision thresholding (so, now, all of us, and possibly SDP students in 2013 who decide to re-use our Vision code, are able to quickly adjust the settings to different lighting conditions) and fixed many bugs in the arc-generation code.