1 Completed Work

We have spent most of our time so far researching the problem. We have done this by looking at PioSolver, and have been in communication with them about their project. As a refresher, PioSolver is the same system that we are building, but we are designing our system for a high powered computer. After some research, we have found that there is more work that needs to be done than our initial ideas of just implementing a min-max tree. Instead, we will have to calculate the maximum possible EV given each players range and the traverse the game tree until we have achieved a certain EV that is within a bound of the optimal EV. We have also been strongly considering reducing our move set to only being able to raise once or twice, as this would reduce the computational space greatly.

2 Updated Project Schedule

There was more to learn about GTO holdem than we had expected before being able to start implementing. However, we feel that we are better prepared to jump into our implementation so that it is much more than just a naive start. Because of this, we still feel that we will meet our initial schedule outlined in the proposal.

3 Deliverables and Competition

For the competition the best case is if we optimize our system for real time use. However, this is very unlikely as speeds this high would break poker. One thing we could do is show post river as the demonstration, because that would be able to be computed very quickly.

4 Issues and Concerns

One issue we have is not being able to come up with some of the optimizations that PioSolver utilizes to make its program reasonably timed. Even if we execute
our with perfect parallelism, if we do not come up with a good enough solution sequentially then parallelizing it well will still not give us a solution that would be feasible to present.