6.172 Project 3 Team Contract

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1 Goals

Our team's goal is complete the project and achieve runtimes of at least the threshold for an A, if not better on this project.

We expect to face some obstacles in implementing our work, but given the background provided by 6.172 lectures and homework, our collective knowledge, office hours, and online help, we expect to be able to resolve questions quickly to be able to progress on our project. We plan to hold discussions within our group at in-person meetings should other obstacles arise as well.

2 Meeting and communication norms

We will likely meet outside of class quite often, generally in the evenings when both of us are free. Our plan is to meet on the afternoon or evening starting on Friday through to the submission deadline. For the final submission, we will likely plan the exact meeting dates and times closer to the middle of next week, where our schedules are more well-defined. For the most part, these meetings will occur in either in one of our dorms (Next House or Burton Conner) or other convenient working locations such as Stata or the Student center. Outside of meetings, we will use Facebook Messenger to communicate.

If someone on the team decides to drop the class, said individual has obligations identical to those agreed upon in this contract for the remainder of the project.

3 Work norms

We expect to put in about 15 hours a week, i.e. for each the beta and final submissions, each to make the project successful. Although we will spend time working on the project separately, if either of us has important ideas, we will ensure that we meet in person or communicate extensively online to discuss the logistics and merits of these changes prior to performing an all-encompassing implementation.

If any individual on the team writes a piece of code, all individuals are responsible for the correctness of said code. Therefore, code review will be key to the success of this project. Code review will take place after any individual has completed a functioning unit of code. At this time, all individuals will perform a read-through of the code to search for apparent errors and then together design a test suite to ensure that the code remains accurate, even upon the implementation of performance enhancements. As such, the code review process will act as a filter to prevent the introduction of non-functioning code to the team project.

Branches will be useful for the writing of new experimental code, such as major rewrites of our algorithm(s). To help ensure code correctness and enable easier reverts to stable version of our code, we will use branches to develop major changes, i.e. a new algorithm or idea.

We will make a spreadsheet to track project progress and time spent. We will also detail our ideas as they evolve over the duration of the project, and moreover, we will keep a record of the experimentation that guides these ideas.

If someone does not follow through on a commitment without an excusable reason (i.e., getting sick), the team members will discuss the situation and attempt to address the root cause of the problem. If the problem persists, then the individual who fails to meet deadlines will need to explain the issue to a course or MIT administrator in order to achieve a fair outcome for the other individual(s) on the team.

If someone does become unable to follow through on commitments for an extraordinary reason, such as falling severely ill, we will communicate with the 6.172 staff and S^3 to get an extension on the project or otherwise offset the issue.

As we understand that this project is a major undertaking, we plan on allocating time in such a manner that the work will not accumulate around the time of the deadline but will rather be completed according to a regimented schedule that places internal checkpoints significantly in advance of any external checkpoints.

4 Decision Making

We will require 100% consensus in order to proceed with an idea. Since the team is so small, if an idea is good, consensus should easily be reached.

If one person fixates on a particular optimization ideas, we will discuss, as a team, the pros and cons of each, and reach a consensus on how to prioritize our ideas before moving on.

It is not acceptable for team members to not do equal amounts of work. If it turns out that certain parts of the project end up taking far longer than others, we'll communicate and redistribute the work appropriately. We don't anticipate changing our aim in delivering an A-level product but plan to meet to discuss any related issues if they somehow arise. We also acknowledge that some pieces of code (although shorter number of lines) may involve more thought, and thus

firmly agree that solely changed lines of code (given as a metric on GitHub) should not be a measure of group members' contributions.

5 Signatures

We sign this contract with our full names in lieu of a signature.

Albert Yue

Cindy Yang