Project 1 Team Contract

Alex Chernyakhovsky, Charles Liu, Lauren Stephens

1 Goals

• What are the goals of the team?

The goals of the team are three-fold: the first is to attain an A on the assignment. The second is to create a working, tested abc player that is simple to use (and possibly can be shown off to non-MIT friends who should be duly impressed). The third goal is to work together and have fun as a team. While we are interested in the end product, we also want to ensure that everybody contributed and had a good attitude. We want the experience a positive one.

- What are your personal goals for this assignment?
 - Lauren Stephens:

I second the team goals, and want to add that I will make an emphasis to pull my weight on the team because while I have not worked with Charles much, I have worked with Alex and understand he is currently more technically advanced than I am.

- Alex Chernyakhovsky:

In addition to the team goals, I look forward to working with Lauren and Charles, in which I hope to work on my technical and non-technical communication skills, to allow the team to work coherently. I also am interested in working on the design of the system itself, focusing on modularization and abstraction, that will allow the team to work independently initially, and then focus on the final integration as we approach completion.

- Charles Liu:

In addition to all the team goals, one of my goals is to develop my abilities at working on a software project in a team. I'd like to be a good team member by carrying my own weight, providing good input to the overall picture while knowing when other people have better ideas, and ensuring that the finished project is of high quality. I'd like to take advantage of the opportunity to learn how to code better by learning from Lauren and Alex. Finally, this project relates to something that interests me, so I'd like to have fun with it!

• What kind of obstacles might you encounter in reaching your goals?

The first obstacle is in design determination. We want to ensure that each person agrees with and supports the overall design decisions and do not want to spend time trying to implement two different solutions or continually arguing about which architecture to use. We will use a semi-democratic system to determine between conflicting designs presented by team members. If two (or three) team members cannot agree on design patterns that bridge more than one person's work, we will first vote on which design pattern to use. If the losing party is unhappy with the result, he or she has the right to ask for outside moderation. In this case we will go to our TA and make our respective cases for each design pattern and let our TA help us decide.

The second obstacle is in actual implementation. We will assign the implementation of code to individuals however each individual should feel free to seek help from other group members. If the whole group cannot figure out a particular problem that arises, we once again turn to our magic fixer: the TA.

The third obstacle is time. As a group we will set deadlines for having pieces of the work done. If an individual cannot meet a deadline, they will be expected to inform the group early enough that we can decide what needs to be done and how to reassign work if necessary. If a group member is consistently late we may resort to the procedures for one team member doing less work, but not without ample warnings.

- What happens if all of you decide you want to get an A grade, but because of time constraints, one person decides that a B will be acceptable?
 - In this case, a meeting will be held to determine if the remaining team members still want to achieve the original goals. If they do and the third person is not contributing towards these goals, see next section for procedures.
- Is it acceptable for one or two team members to do more work than the others in order to get the team an A?

It is not acceptable for it to be excessive (work is very hard to divide exactly evenly). It is acceptable for team members to specialize in what they do best, however everyone should try to work on at least a little bit of each stage. It is also acceptable for some team members to have to email, nag, badger, and peer pressure another team member to do their part should a team member decide they do not want to do their work. Ultimately if all social pressure fails or a team member has extenuating circumstances that prevent them from working on the project (my parents died, I am sick, etc.) the team will meet with a TA to discuss this. If no resolution can be made that is satisfactory to all team members, a note will be attached to the final project indicating the respective amounts of work done. It will ideally be signed by all team members. Also the reflections section of the project will contain similar indications. Clearly work is hard to divide exactly evenly, but we want to make sure that it is not overly unfair.

2 Meeting Norms

• Do you have a preference for when meetings will be held? Do you have a preference for where they should be held?

- Lauren:

I prefer meetings on the sixth floor of Simmons (Alex and I live next to each other) however would be willing to accommodate meetings elsewhere on the MIT campus. I have commitments to crew and classes and prefer the meeting not be held during crew practice (5-7) or class hours (with the exception of 6.005 time) unless I have given prior approval.

- Alex:

I agree with Lauren that the sixth floor of Simmons is very convenient, and would prefer meetings there. However, I recognize that Charles may have other obligations that make Simmons an inappropriate meeting place, and suggest the fifth floor of the Student Center, either in the Athena Cluster or SIPB Office as an alternative location. Other than the 6.005 class time, I cannot meet before 5pm.

• How will you use the in class time?

We may use the in class time for team meetings as it would allow us to meet together with minimal schedule disruption. If we are not meeting as a team, individual members are free to use the time as they see fit as long as they have fulfilled their obligations to the group

• How often do you think the team will need to meet outside of class? How long do you anticipate meetings will be?

As a team we will meet as often as necessary but hopefully at least every other day. The meetings will probably be about 30 minutes of actual work and about 30 minutes of small-chat and bubble tea and hanging around. Obviously, team members may skip the unimportant 30 minutes if they need to.

- Will it be okay for team members to eat during meetings?
 - Yes, in fact Lauren is expecting bubble tea at all meetings held in Simmons (thanks Alex!)
- How will you record and distribute the minutes and action lists produced by each meeting?

Lauren has volunteered to be the secretary and will record the minutes and actions lists in a Google document with the help of Alex and Charles. This Google document will be shared among all team members to remind them of what went on in the meeting.

3 Work Norms

• How much time per week do you anticipate it will take to make the project successful? We expect the project to take about 15 hours a week per team member. This is a rough estimate and may vary on skill, how hard the project actually is, and how much time is spent actually working.

• How will work be distributed?

The work will be distributed first on a volunteer basis. In a perfect world people will volunteer for their fair share and we don't have to worry. In absence of a volunteer for a particular part, we will have a rotating system with the order based on a dice roll. If someone does not seem to be doing a fair amount of work, the issue will be raised and suggestions for a better distribution will be voted on democratically finally we have magic TA moderation.

• How will deadlines be set?

Deadlines will be set both by the individual doing the work ("I can get it done by...") and by the group ("we need it done by...") If no resolution can be reached, we will try to put two people on the assignment or offer help.

• How will you decide who should do which tasks?

Volunteer, rotating, democratic, magic TA. If volunteering fails we will use the rotating system. If the rotating system fails or work is not being distributed evenly, we will use a democratic system. If that fails we get our magic TA. Also testing, implementing, and reviewing will not be done by the same person for a given method.

- Where will you record who is responsible for which tasks? Recorded on a shared Google Docs.
- What will happen if someone does not follow through on a commitment (e.g., missing a deadline, not showing up to meetings)?

We will first try to resolve the dispute internally so that all group members are satisfied work is being done equally and mostly equally well. If this fails we will try to offer a compromise "make-up work" (i.e. you missed a meeting, you take notes at the next; you missed a deadline you agree to do more work for the next deadline). If all else fails resort to procedures for one team member doing less work.

• How will the work be reviewed?

For each method we will split up the implementation, testing, and review. The implementer will write the code and state that it is good (possibly performing their own simple checks). The tester will write full tests for the method such that if the method passes their test, they are satisfied the method works. Finally the reviewer will read over both the code and the tests to confirm.

- What happens if people have different opinions on the quality of the work?

 Try to resolve internally be debating the quality of the work. If no consensus can be reached take a democratic vote. If all this fails, then bring in the magic TA,
- What will you do if one or more team members are not doing their share of the work? Team members may have to email, nag, badger, and peer pressure another team member to do their part should a team member decide they do not want to do their work.

Ultimately if all social pressure fails or a team member has extenuating circumstances that prevent them from working on the project (my parents died, I am sick, etc.) the team will meet with a TA to discuss this. If no resolution can be made that is satisfactory to all team members, a note will be attached to the final project indicating the respective amounts of work done. It will ideally be signed by all team members. Also the reflections section of the project will contain similar indications.

• How will you deal with different work habits of individual team members (e.g., some people like to get assignments done as early as possible; others like to work under the pressure of a deadline)?

We expect team members to meet all group—set deadlines, other than that, they can work as they please.

4 Decision Making

- Do you need consensus (100% approval of all team members) before making a decision? We need at least two team members to make a decision. If the third team member believes that this is the absolutely wrong decision, the third team member has the right to demand magic TA moderation. We hope this will not have to happen.
- What will you do if one of you fixates on a particular idea?

 Again, if one person is extremely unhappy will the group decision, he or she can demand