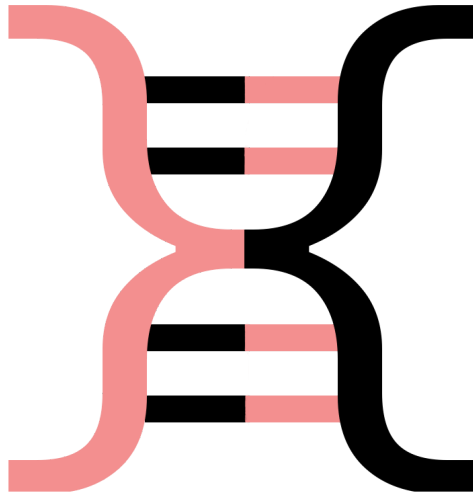# Standards Document

27 September 2018

Team PathLab

Sponsor:
Viacheslav Fofanov
Mentor:
Isaac Shaffer

Team:
A. Turan Naimey
Alexandre Lacy
Chance Nelson
Austin Kelly

Introduction

The goal of this document is to facilitate effective communication between team members by detailing specific expectations of each member and for team members as a whole. This document aims to be clear, concise, and unambiguous to minimize misinterpretation. It must also be agreed upon by all members, so that all believe in a fair working environment. This document is subject to change, when agreed upon by all members of the team, to add missing information and implement reformed team structure based on our experiences.

Team Members and Roles

Turan Naimey: Team Leader, Client Contact and Software Architect
Chance Nelson: Version Control Admin and Release Manager
Alex Lacy: Documentation Manager
Austin Kelly: Front-End Specialist

Team Meetings

Weekly Mentor Meeting Time: To be decided on a weekly basis
Weekly Team Meeting Time: To be decided on a weekly basis

Agenda Structure:

1. Tabled Items
    a. Discussion
    b. Solutions
    c. Division of Labor
2. Critical Items
    a. Discussion
    b. Solutions
    c. Division of Labor
3. Non-Critical Items
    a. Discussion
    b. Solutions
    c. Division of Labor

Minutes:

Minutes will be kept digitally via Google Docs, and will be titled: PathLab Minutes: X, MM/DD/YYYY where X is the meeting number.

Decisions:

Decisions will be made using Alternative Vote method, and ties will be settled by the Team Lead. In short, this means that each member votes on all solutions they agree with, and the solution with the most votes wins. In addition, to encourage participation, each member will be required to vote at least once.

Attendance:

Attendance is mandatory. Absences must be communicated via Slack at least 2 hour prior to the meeting. Being more than 10 minutes late without the 2 hour notice counts as an absence. After 2 absences that are not excused in such a manner, or 4 total absences, including all excused, all other members may choose to vote to take disciplinary action against the tardy member. This vote may be carried out once per additional absence and needs a ⅔ majority to pass. After the first vote passes, additional details of disciplinary action will be decided as per normal team decision making rules, except that the member under question may not vote.

Conduct:

The Team Lead will be responsible for ensuring that meetings follow the agenda structure previously outlined.
1. Any misbehavior during meetings should be addressed by the Team Lead 1 on 1 with the offending party before the next meeting. Should the behavior persist, follow guidelines for repeated task incompletion as described below.
    a. If one feels that a member is misbehaving in some way, let the Team Lead know privately so that he may address it.
2. Should a task not be completed as expected, the un-completed item will be added to the agenda under an appropriate section, and discussion of the solution, and division of labor will be addressed at the appropriate time. After the meeting, the Team Lead is to ask the offender 1 on 1 outside the meeting why it happened and provide support.
    a. Should a member not complete a task again, follow the above protocol except add an item to the next meeting's agenda to discuss why this is happening and what to do to prevent it in the future.
    b. Every future such offense by a member will not only warrant a meeting discussion, but will be written up and presented to the team mentor. After 3 such written warnings, the non-offending members may vote ⅔ majority

to take disciplinary action for each additional warning. After the first vote passes, additional details of disciplinary action will be decided as per normal team decision making rules, except that the member under question may not vote.

3. Additionally, should the Team Lead be the one found to be at fault in one of these ways, other members must decide on one of themselves to fill the Team Lead's disciplinary role in the above protocol.

Tools and Document Standards

Version Control:

We have created a repository on Github and all members have been given access to. Git/GitHub will be used primarily to store our codebases. Each member is expected to follow certain Git Standards to ensure the integrity of our codebase and keep the commit tree clean.

- Commit Messages
  Commits need to follow the convention below to keep the commit history clean and neat.

  API: an (incompatible) API change

  BENCH: changes to the benchmark suite

  BUG: bug fix

  DEP: deprecate something, **or** remove a deprecated object

  DEV: development tool **or** utility

  DOC: documentation

  ENH: enhancement

  MAINT: maintenance commit (refactoring, typos, etc.)

  REV: revert an earlier commit

  STY: style fix (whitespace, PEP8)

  TST: addition **or** modification of tests

  REL: related to releasing

- Branches
  There will only be one master branch on our main GitHub repo and no feature branches will be allowed in the main repo. A prototype branch might be added to

the main repo if necessary. Each member will need to use feature branches on their cloned repo to open PRs against the master branch.
- Pull Requests & Code Review
Every PR needs to follow this template and mention any other issues related to the specific code changes being commit.
  - What are you trying to solve?
  - How did you solve it?
Everytime a PR is opened by a team member against the master branch at least 2 other team members need to review and approve the code changes before it can be merged. If you have accidently opened a PR, don't close it without discussing it with the team.
- Reverting Commits and/or Changing History
If a commit is submitted by mistake or contains code that the member did not mean to submit, proper documentation and reasoning should be given in the next commit message to eliminate confusion.
Changing Git history should only happen if the Team Leader and the Version Control Admin deem it absolutely necessary. All members need to take basic git precautions to avoid losing git data. A script will be written to backup the main git repo everyday at midnight to ensure data loss does not happen.
- Documentation & Commenting
Proper documentation in all Git practices are required. Insufficient and poorly described commits/PRs will be subject to denial. Docstrings for each function will be required, but comments inside functions should only be necessary if the code is not overly clear.

Issue Tracking:

GitHub will be the primary issue tracker for this project. Using GitHub's integrated issue tracker will allow us to assign coding tasks to each individual member.
- Use task assignment to determine who's responsible for specific tasks
- Use color-coded labels to categorize issues and track them easily
- Use milestones to associate issues with different phases of the project

Any non-technical issues will be tracked using **Trello**.
- The board will have several tabs and each tab will be represented with an individual note
- The board will have categories for "Backlog", "To Do", "In Progress", and "Completed". Each team member will have a separate "In Progress" tab, to ensure that team members know what work is assigned to them.

Word Processing and Presentations:

The Google online application suite will be used for all of these purposes. Specifically, Google Docs for documents, Google Slides for presentations, and Google Sheets for spreadsheets. Additionally, all such items should be uploaded to the appropriate directory in the team Google Drive folder. Default font for documents will be Georgia 12 pts.

Composition and Review:

All documents have a rough draft due 2 days before it is due to be turned in or delivered. Additionally, all documents must be reviewed by at least 2 other members by the day before submission. This leaves the day of submission for applying final edits.

Short Documents: Short documents of length 1-2 pages might be assigned to a single team member. The team member will come up with a draft and submit it to the rest of the team for review.

Long Documents

For any documents longer than 2 pages, the document will be split into smaller portion and assigned to different team member. Lead Editor will be determined on an assignment basis and the Lead Editor will be in charge of assigning the document portions to other members.

- Lead Editor: The Lead Editor will take the initiative to create the shared document and come up with a structure for the document. The Lead Editor will ensure the progress of the document by checking with the assignees regularly.
- Formatting: The Lead Editor will ensure the format of the document is consistent with formatting of the previous documents.
- Deadline: Deadlines will follow the general document guidelines, except that the Lead Editor may assign separate deadlines to individual contributors.

Printing

The assigned member or lead editor will be responsible for printing the document.

Delivery

For printed documents, the member who printed it is responsible for delivery.
For digital documents, the Team Lead is responsible for delivery.

Team Self Review:

On the first meeting after the 1st of each month, all team members will bring a brief note with them which mentions at least one of each of the following: Things that member did well/poorly, things the team as a whole did well/poorly, thoughts on team's total progress, things other members did well, at most one thing that another member may need to improve.

During the non-critical section of the meeting, members will go around and read there items, allowing for other members to add additional comments if needed. If it is mentioned that a member may need to improve in some aspect, only the one with the original comment is permitted to discuss the issue with the offending member, and other members are forbidden from mentioning the already targeted member as a topic of criticism again, even if they had an issue in their own section. If the issue for improvement is greatly important, then it should be brought up for discussion as outlined in the Conduct section of Team Meeting Expectations.