Sprint 1 Report
Product Name: Automatic Cell Counting
Team Name: Cell Counting Project
Date: 04/20/2021

Actions to stop doing:

- Stop trying to make everything the *best possible* solution, and just make one that works. We get too caught up on the small details that don't have a large enough effect on our end product.
- Avoid working on tasks that depend on a spike. We ended up having to re-do some of our data annotation tasks because we changed our decisions on what model we were going to use.

Actions to start doing:

- Check in with people who actually know stuff about machine learning projects and models. There were a couple times when we were either confused about the findings in our research or came to incorrect conclusions.
    - Ask TA for advice more often. Akila has a ton of really useful prior knowledge about these kinds of projects
- Reconsider our user story points every so often. We were a little inaccurate in terms of how long we thought some tasks would take and how much time we would have to commit to the project.
- Keep task scope small and simple.
- Keep the trello clean and updated. We left it un-updated after some of our scrum meets. We really need to make sure that information is accurate because some of the tasks we wrote down there got neglected.

Actions to keep doing:

- Daily scrum meetings are within the time limit. We were good at summarizing our progress and needs while getting all necessary information across.
- Important documents and other notes are in the Drive for everyone to use. It's well organized and there has been very little confusion as to where documents are located.
- Using the Trello to organize our tasks. We did have a very good organization on Trello during the times we did use it. It helps keep the whole sprint in perspective and helps keep us from getting lost in the weeds.

Work completed:

- A minimal UI prototype was completed
- Research on models. We haven't come to a final decision as of the time this report is being written, but we are almost there (a 1 hour meeting is probably all that is required), and will be finished by the time the sprint is over.
- Format fix for the images. We converted the images from file formats that were only useable and accessible by the microscope softwares that they were taken on, to more readily useable file formats.

- Looking for the “better images”. We sorted out some of the images that will be a good initial data set to train our model on for minimal functionality.
- We have compiled the counts for some images in our data set. This task is not fully completed yet.

Work not completed:

- We have not decided on a model. This will be done extremely early into sprint 2.
- We have not compiled our data into a machine-usable format. We need to put the annotated images into some kind of database/file system that our training algorithm can access.
- We need to do annotation on much more of our images in preparation for feeding them into our model for training.

Work completion rate:

User stories completed: 1
Total number of estimated ideal work hours: 47
Total number of days in past sprint: 14
User Stories/Day: 1/14 = 0.07
Ideal Work hours/Day: 47/14 = 3.36

- We overestimated the number of hours we could put into the project since we did not consider the extra work such as RAC1, RAC2, Sprint Reports, Presentation, Release Plan modifications, etc. Which are not counted in this chart but that we spent many hours working on. For the next sprint we will try to take other work into account and modify the amount of hours available for the project accordingly.