Sprint 4 plan

Product name: Automated Cell Counting
Team name: Cell Counting Project
Release name: ACC alpha v1.0
Release date: 06/04/2021
Revision number: 1
Revision date: 05/19/2021

This sprint we would like to make predictions easier to perform. Once it is predicting without masks then we want to connect it to the UI and train the model further.

Task Listing:

- (5) As a lab researcher, I want to be able to not have to manually count the cells so that I can use my time for something else.
    - Learn how to use our decided model (5 hours)
    - Write a skeleton pipeline that handles basic I/O interfacing with our application (3 hours)
    - Hook up the backend of the program to the UI (2 hours)
    - Total Hours: 10 hours
- (3) As a lab researcher, I don't want to count specks of dirt or other visual clutter.
    - Annotating more data (2 hours)
    - Tune training hyperparameters (2 hours)
        - Re-training the model to exclude the specs of dirt from the count
    - Total Hours: 4 hours
- (1) As a lab researcher, I want to be able to save previous images and the data I got from them so that I can look at them later and not have to spend the time to redo past results.
    - Getting the count from the prediction and writing it to a CSV file (1 hour)
    - Total Hours: 1 hour
- (5) As a lab researcher I want to be able to count the cells on multiple images at once.
    - Have a way for the user to specify multiple files or a folder (1 hours)
    - Loop prediction on the files (1 hour)
    - Total Hours: 2 hours
- (3) As a lab assistant I want to know how to use the product without much outside help so that other people in the lab can spend more time doing other work instead of teaching others how to use the tool.
    - Figure out how to run it locally (3 hours)
    - Write Readme on how to use the program (1 hour)
    - Total Hours: 4 hours
- (13) As a lab researcher I want to know the average size of the cells so that I can have more information on the data.
    - Using the mask to calculate how big the cell is in pixels (2 hours)

- ○ Give the user the average size of the cell (10 hours)
- ○ Total Hours: 12 hours

Team Roles:

- ● Jorge Tapias Gomez: Product Owner
- ● Sriram Ramesh : Developer
- ● Aaron Swoiskin : Developer
- ● Dhruv Tummala : Scrum Master

Initial Task Assignment:

- ● Jorge Tapias Gomez:
  - ○ (5) As a lab researcher, I want to be able to not have to manually count the cells so that I can use my time for something else.
    - ■ Hook up the backend of the program to the UI (2 hours)
- ● Sriram Ramesh:
  - ○ (5) As a lab researcher, I want to be able to not have to manually count the cells so that I can use my time for something else.
    - ■ Hook up the backend of the program to the UI (2 hours)
- ● Aaron Swoiskin:
  - ○ As a lab researcher, I want to be able to not have to manually count the cells so that I can use my time for something else.
    - ■ Learn how to use our decided model (5 hours)
- ● Dhruv Tummala:
  - ○ As a lab assistant I want to know how to use the product without much outside help so that other people in the lab can spend more time doing other work instead of teaching others how to use the tool.
    - ■ Figure out how to run it locally (3 hours)

Initial Burnup chart:
The chart will be kept track of at [this link](). Below is a screenshot of the chart after our first scrum meeting.

Burnup chart

- Worked hours
- Total hours
- Projected Progress
- Original total hours estimated
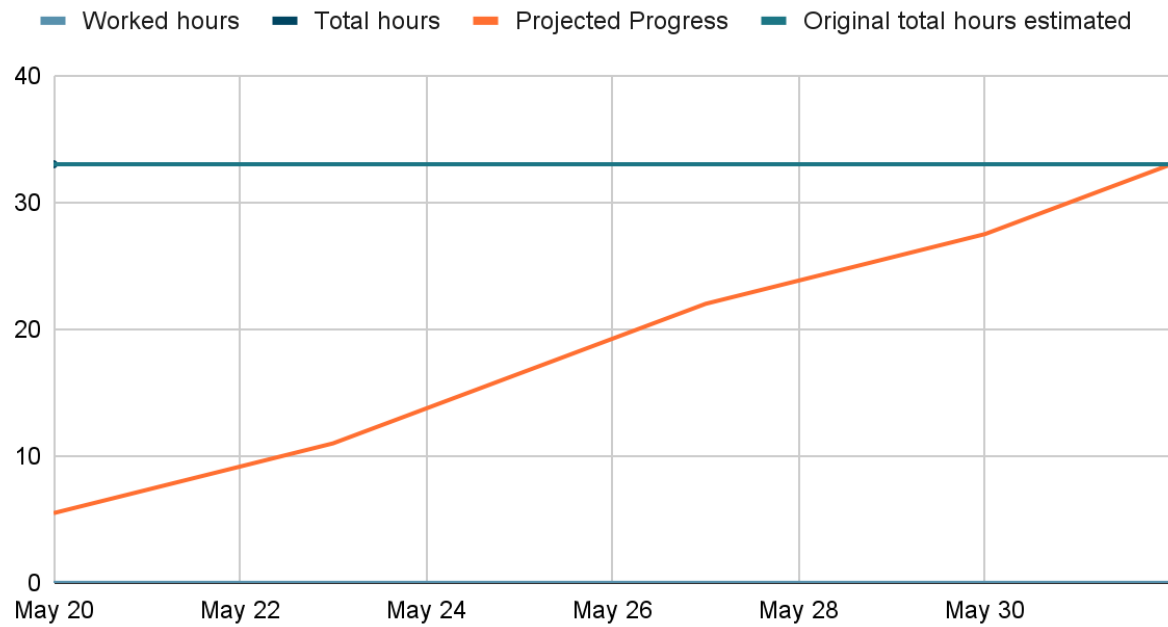
Initial Scrum Board:
The scrum board is made on a trello board at this link. Join to be able to see the board at this link (only click once). Below is a screenshot of the trello board at the start of the sprint.
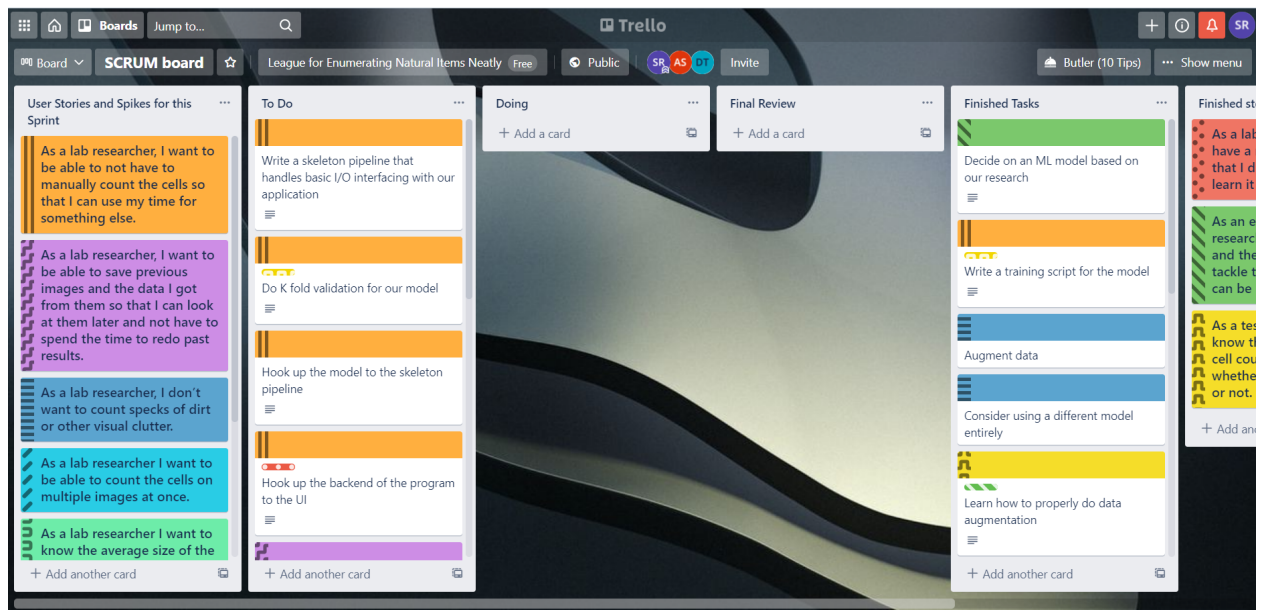
The tasks are color coded with the user stories they correspond to. The user stories are in full color, while the tasks have only a colored header at the top. The time estimates are in the task descriptions. Whether some tasks need to be done hinge on the results of other tasks.

Scrum Times:

Sunday: 5:00pm
Tuesday: 5:00pm <- TA section
Thursday: 5:00pm