System and Unit Test Report
Product Name: Automatic Cell Counting
Team Name: Cell Counting Project
Date: 05/31/2021

Sprint 1, User Story 1: As a lab researcher, I want to have a nice easy to use UI so that I don't get lost or can learn it easily.

Scenario:

1. Start Cell Counting app
2. User should see a text box to specify a path to a relative or absolute path to an image
3. After uploading, the User should see an image, and some hard coded report on the cell count should be visible as a proof of concept for when we connect the model to the UI

Sprint 2, User Story 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 redoing past results.

Scenario:

1. Start Cell Counting App
2. Upload an image to process (now done through a button)
3. After uploading the image, the User should see a button that downloads a mock CSV file of data with hard coded values as a proof of concept for when we connect the model to the UI.

Sprint 3, User Story 1: 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.

Sprint 3, User Story 2: As a lab researcher, I don’t want to count specks of dirt or other visual clutter.

Scenario:

1. Start Cell Counting App
2. Upload an image to process
3. User should see predictions for their image that, to the best of the model’s ability, identifies cells without mislabelling debris

Sprint 4, User Story 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 redoing past results.

Scenario:

1. Start Cell Counting App
2. Upload an image to process

3. User should see predictions for their image
4. User should see an option to download a CSV file containing data about the cell count, as well as an option to download an image labelling each cell that the app identified

Sprint 4, User Story 2: As a lab researcher I want to be able to count the cells on multiple images at once.

Scenario:

1. Start Cell Counting App
2. Users should see an option to upload a single image and an option to upload a directory.
    a. If the directory option is selected, the app will process each image in the directory individually. User should see a button next to the image to go to the next image in the directory, in addition to the buttons to download the prediction image and CSV
    b. Non-images in the directory will be ignored

Sprint 4, User Story 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.

Scenario:

1. Users should read the README file, which instructs them to download python 3.1.X - 3.7.X and all requirements in the file requirements.txt. This can be done manually, or by running “pip install requirements.txt” in the command line. It also lets them know how to run the app.