Cole Hopkins
CSCI 490
Professor Siewert
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Design & Development Update with Key Requirements

1) Progress

I have made very good progress on my project. I had to change one key ascept of my project, going from 4 classes that I test to 3 classes. This is because of the lack of images that are available for monkeypox, which was causing the model to not be able to train itself properly, leading to low accuracy and large FP and FN results. The model itself has passed all the constraints I have left for it. The app development is going well, and I think I have made great progress so far. I am able to use tensorflow effectively and import my model, as well as capture images to process, I am just running into issues getting the results to process and display. However, I don't believe there are any blocking issues, and I should be able to get a working app in the coming week, as I believe I am very close. Below is a link to the code for both my model and current progress on the app.

https://colab.research.google.com/drive/1II5O5yeaUz2JPTYIIkuMqU2J6bFGbVxa?usp=sharing

https://github.com/Cole-Hop/Capstone

Here are the updated key requirements

1) R1 - Users should be able to install the app on Google Playstore
2) R2 - Users should be able to choose an image from their phone to process
3) R3 - Users get information about the result of their image
4) R4 - Model is at least 70% accurate on all predictions (test set evaluation)
5) R5 - Dataset has 200 images for the 3 classes (measels, chickenpox, shingles)
6) R6 - Model should have a loss value of less than 0.8 (test set evaluation)

2) Blocking Issues

The only blocking issues that can occur is through the app development itself. I am determined to get it working, but have no blocking issues as of now.

3) Final Plans

I plan to work on the app mostly, and getting it hosted onto google playstore. I also might tweak the model to get better results, but my time should be solely focused on being able to use the model through an application. I am also short on some images for my dataset for shingles and measles, so making sure i have 200 each to satisfy my requirement.