Code information

1. **Cataract\_detection.ipynb**

The code uses two datasets to predict if an image has cataract or not. The model is trained using 3 pretrained models Xception, InceptionV3 and Densenet201 and custom layers. Achieved 95% accuracy.

1. **diabetic\_retinopathy\_5class\_detection.ipynb**

The code uses diabetes retinopathy dataset to predict 5 severity levels of the disease. The model is trained using 3 pretrained models VGG16 and VGG19 and custom layers. Achieved 85% accuracy.

1. **glaucoma\_detection.ipynb**

The code uses glaucoma datasets to predict if an image has glaucoma or not. The model is trained using 3 pretrained models Xception, InceptionV3 and Densenet201 and custom layers. Achieved 96% accuracy.

1. **Myopia\_classification.ipynb**

The code uses myopia datasets to predict if an image has myopia or not. The model is trained using 3 pretrained models Xception, InceptionV3 and Densenet201 and custom layers. Achieved 97% accuracy.

1. **OCDiR model combine.ipynb and OCDiR\_changed.ipynb**

The above models are integrated together using stack ensemble and the output is concatenated.

1. **gly+cat+myo.ipynb**

Classification layers were applied to the concatenated models and the combined dataset of three diseases was used to train the classifier. Achieved 87% accuracy.

1. **gly+cat+myo+dia.ipynb and gly+cat+myo+dia\_semi\_finals.ipynb**

Classification layers were applied to the concatenated models and the combined dataset of all four diseases was used to train the classifier. Achieved 80% accuracy.