Phase 1: Getting the ROI

Dataset

Obtaining the ROI from each image in the dataset

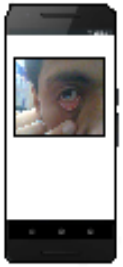
Change parameters accordingly

Testing the model

Building the model

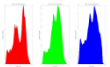
Phase 3: sHEMO App

Patient



Captures eye image using sHEMO app installed on smartphone

Image analysis by FANIAD algorithm



Measuring blood Hgb value based on the RGB values from the extracted ROI

Display blood Hgb value

Phase 2: Performance Measure

Blood hemoglobin level measurement algorithm (FANIAD algorithm)

Saving the model

Converting .py model to .apk

Implemented in real life as sHEMO App