Sprint 2 – A Gesture Based Tool for Sterile Browsing of Radiology Images
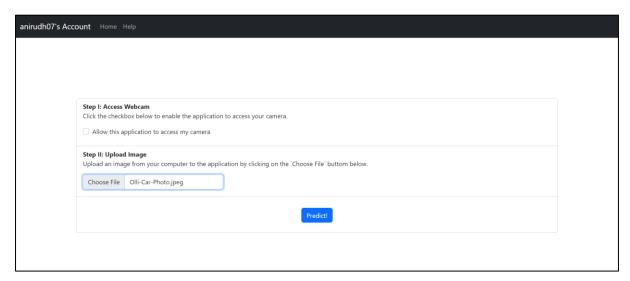
Team ID: PNT2022TMID53060

Team Members: A Anirudh, Karthik D, Nestor Ingarshal J, Pugalarasu K

Code: Updated on GitHub in the Sprint-1 folder under Project Development Phase.
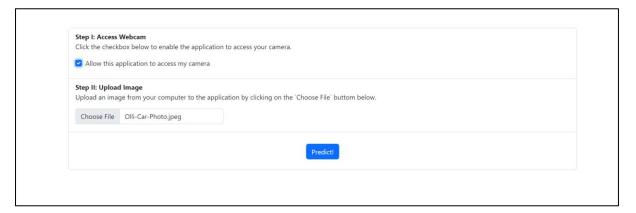
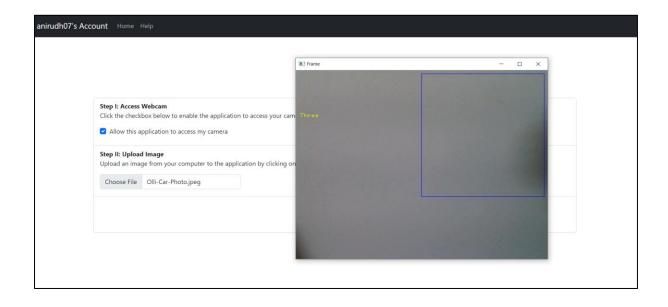**Description of USN and Screenshots:**

USN-4:

As a user, I can upload an image of my hand that can be manipulated according to the classified gestures.

USN-5:

As a user, I can access my webcam for gesture classification.

USN-6:

As a user, I can view my dashboard to see the classified gesture and corresponding change to the uploaded application.

USN-7:

As a user, I need a Deep Learning model that can recognize hand gestures with a low error.

Deep Learning Model:

- A convolutional neural network was deployed for gesture classification
- The CNN has 6 Hidden Layers:
  - Two sets of 2D convolution layers and max pooling layers
  - Flatten Layer
  - Dense Layer
- Image Data Generators were used to augment images for training and testing

```
[53] print("Accuracy: ", acc)

     Accuracy:  0.9333333373069763

[54] print("Loss: ", loss)

     Loss:  0.8366926908493042
```