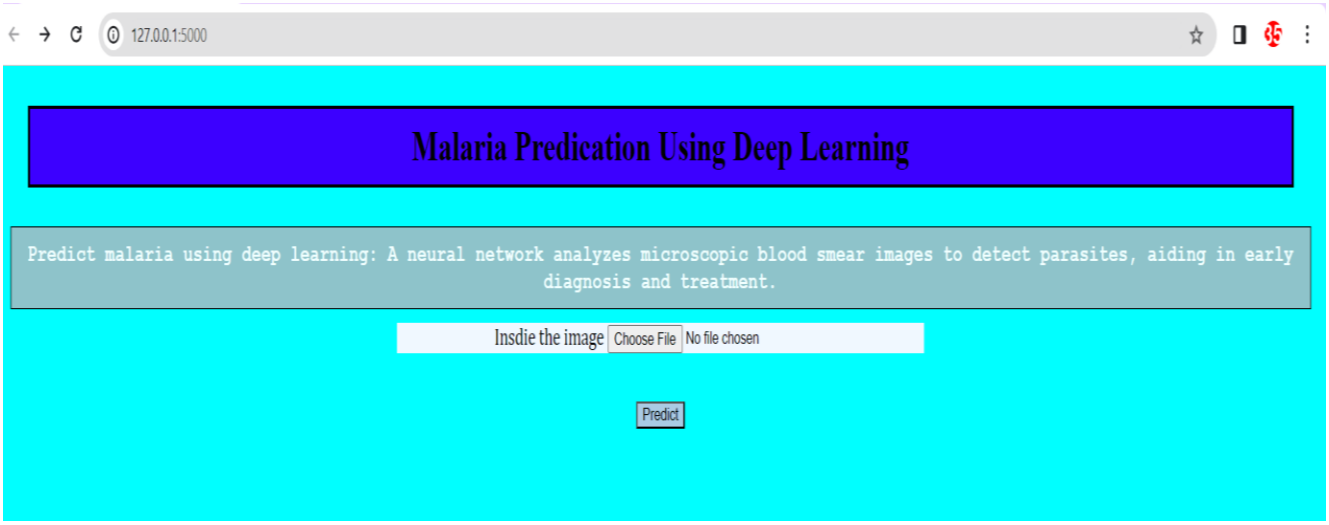
Malaria Predication Using Deep Learning

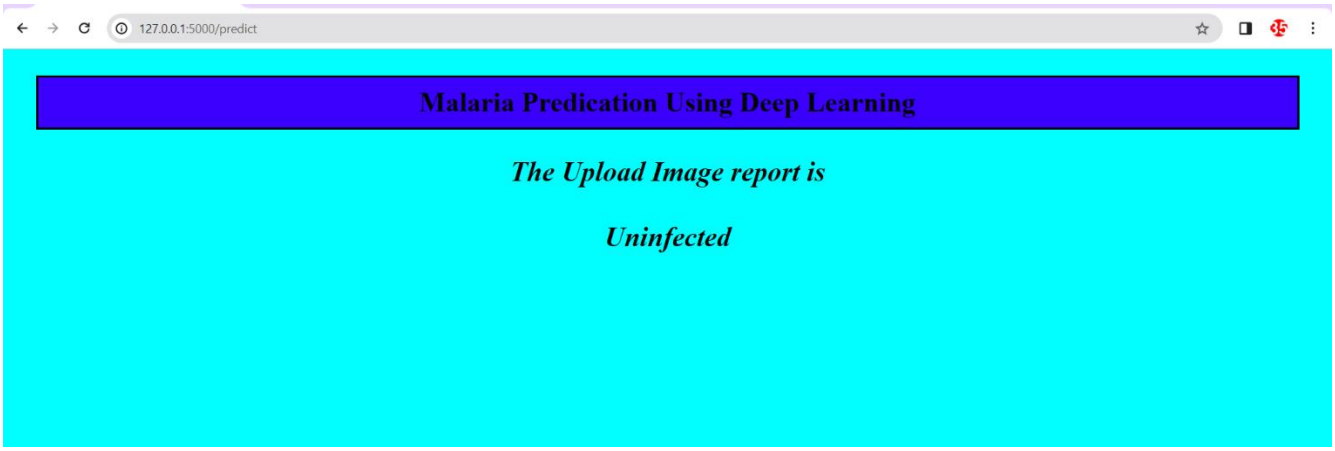
Report and steps to use it

- Run the app.py python file in any Python idle tools, command line, or terminal using the command **python app.py**.
- When a user clicks on the URL example: http:127.0.0.1:5000 which is provided by Flask after running the code in the compiler; or the user can type the URL in any browser.
- URL link will take the user to home.html where the user will upload the image of the tested blood cell to know whether the blood is parasitized or uninfected by Malaria



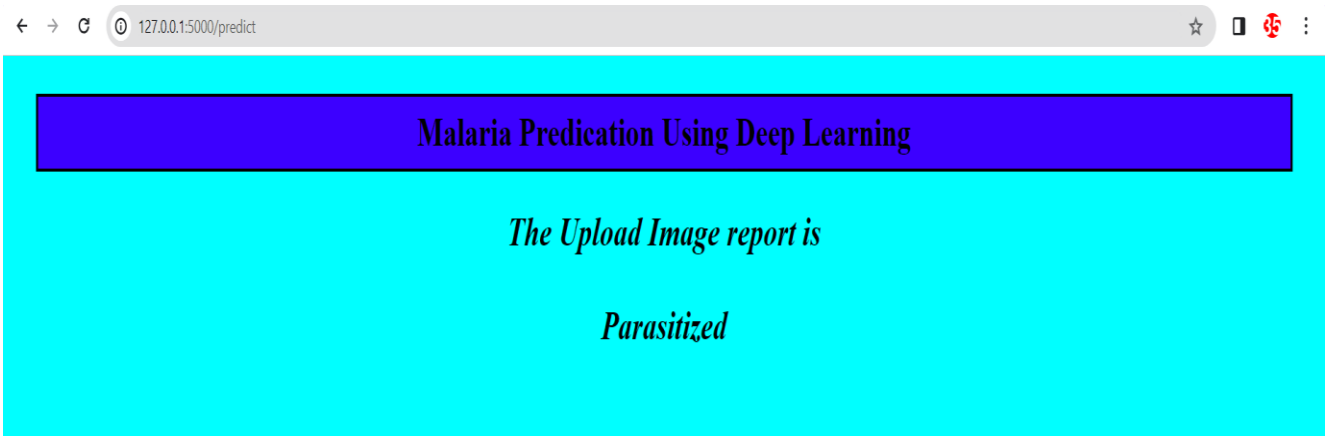
1. Click on the Choose File button to upload the image that the user wanted to predict
2. Click on the Predict button so that it will go to result.html and show the result status of the uploaded image

- Once clicked on the Predict button on the home.html page it redirects to the Result.html page where the Predict result will appears.



1. When the user uploads the tested blood cell in the home.html page it will redirect to the result.html

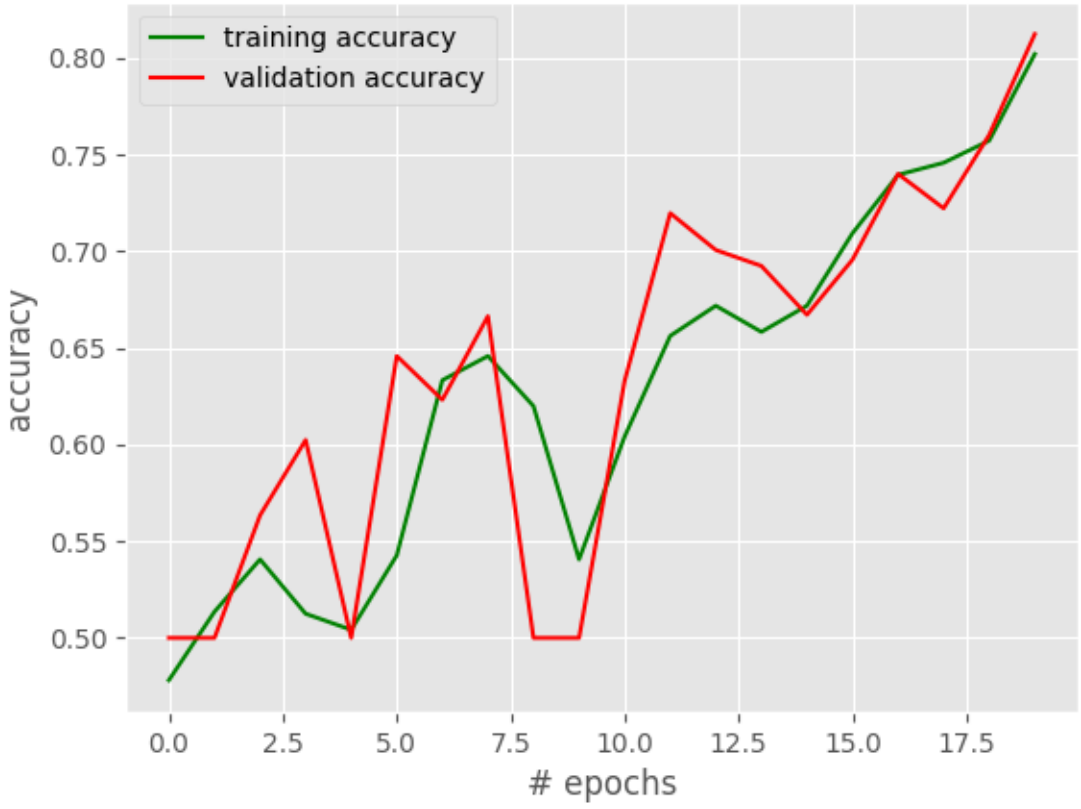
2. Here the result is **Uninfected** because the uploaded image of the blood cell is not affected by Malaria.



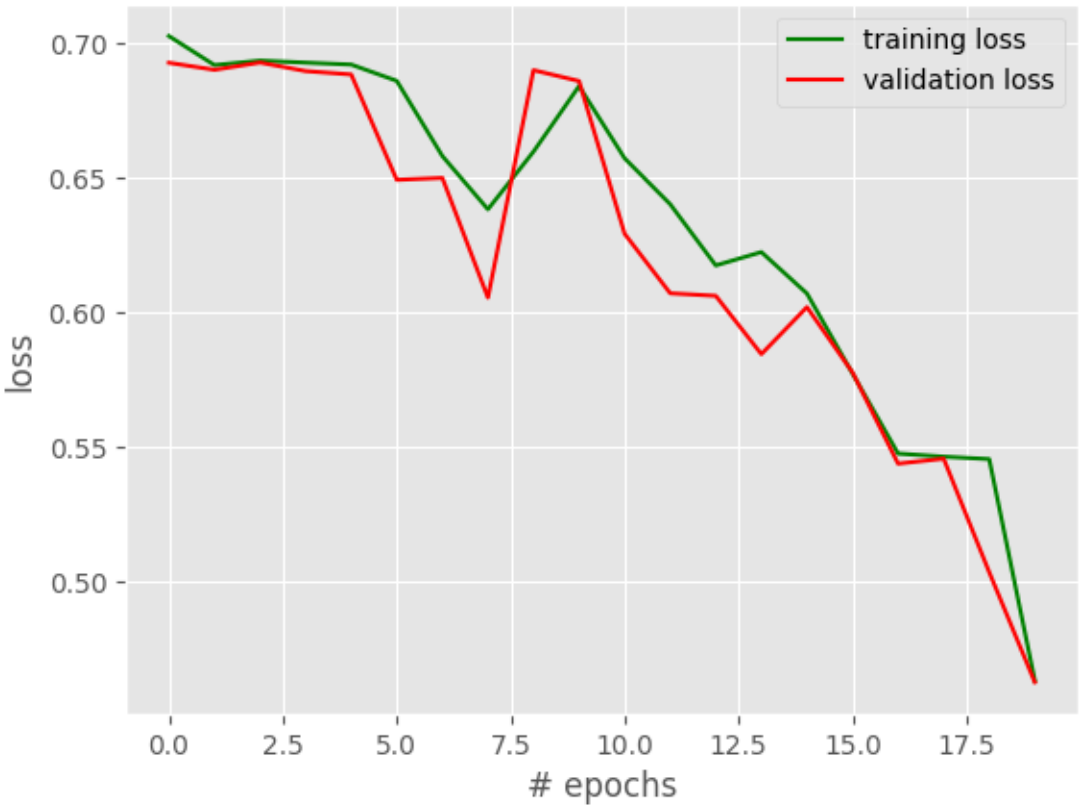
3. Here the result is **Parasitized** because the uploaded image of blood cell is affected by Malaria.

Visualizations report

The malaria prediction model is built by using Deep learning it is trained by using a Convolutional neural network (or CNN) algorithm. While training the dataset accuracy and actual accuracy is very good a



As you see we have trained the model 20 time x-axis #epochs so that the Gain training accuracy is 84.33% and Validation accuracy is 89.92%



As you see we have trained the model 20 time x-axis #epochs so that the Gain training loss is 15.33% and the Validation loss is 10.08%.

Overall Accuracy 84.33%