

MAJOR PROJECT B1

HUMAN SKIN TONE DETECTOR

Working Manual/ Instructions

- *Opening an existing project*
*You can start opening it by going to **File → Open → Project/Solution***
- *Opening a folder*
*If you just want to edit code for an existing project without using Visual Studio's project and build systems, you can open a folder through **File → Open → Folder**.*
- *Running code*
 - *To run the project code, click the **Go Live** button in the toolbar.*
 - *You can either run the project code by clicking the right mouse button and go with the option called **Open with live server**.*
 - *Or you can Right click and copy the code path and paste it in the server and run it.*

After you run the project successfully, you will be landing on the Home page.

Home Page

It is also known as the start page. A home page is generally the primary web page a visitor navigating to a website from a search engine will see, and it may also serve as a landing page to attract visitors. Thus good home page design is usually a high priority for a website. Our Home page includes three contents in the nav-bar that is as follows:

- 1. Home*
- 2. About*
- 3. Contact-Us*

*Landing page includes a "**Get Started**" Button if click then it will redirect you to options for uploading the image by system or via URL/Image address. Our Landing/Home page also includes Footer which has the content of contact details.*

Options for uploading the image:

- *By system*

If you opt for this option then you can upload the image through your system or your device. It will then upload the image and verify the skin tone by the help of Machine-Learning mechanism and give you the result about the skin tone of the particular image.

- *Image address*

Here you can easily just copy the image address and paste it in the text-box and then the image will be displayed of that particular address. It is useful when you don't have the image in your device. Here also there is an use of Machine-Learning mechanism to show you the result about the skin tone.

About Page

This page consists of sections about the general information of various factors of skin tones.

Contact Us

This page is useful for the customers if they have any queries. If you want to register a query then you have to fill three text boxes that are:

1. *Your Name*
2. *Your Contact Number*
3. *Your Query*

If you fail to leave any text box empty then your query will not register in the data base. After filling up the text boxes you just have to click on the "Submit" button and then your query will be registering successfully. After the submission of the query, you will be landing on "Thank You" page.

NOTE :

- Install PHP for backend execution.
- Install all packages that we've used for the ML part which are as follows: numpy, cv2, sklearn.cluster, Kmeans, Counter, imutils, matplotlib, pyplot, sys, requests, urllib.
- Use the following link to see the locally hosted website : <http://skintone.c1.biz/>
- Link for uploading pic via URL (use this link for skin tone detection) : <http://13.233.18.59/>
- This project can also be run with the server link which is given in the "major project server link" file.