**STRUKTUR DATA DAN ALGORITME**

**LAPORAN REVISI INDIVIDU PROJEK AKHIR SEMESTER 2**

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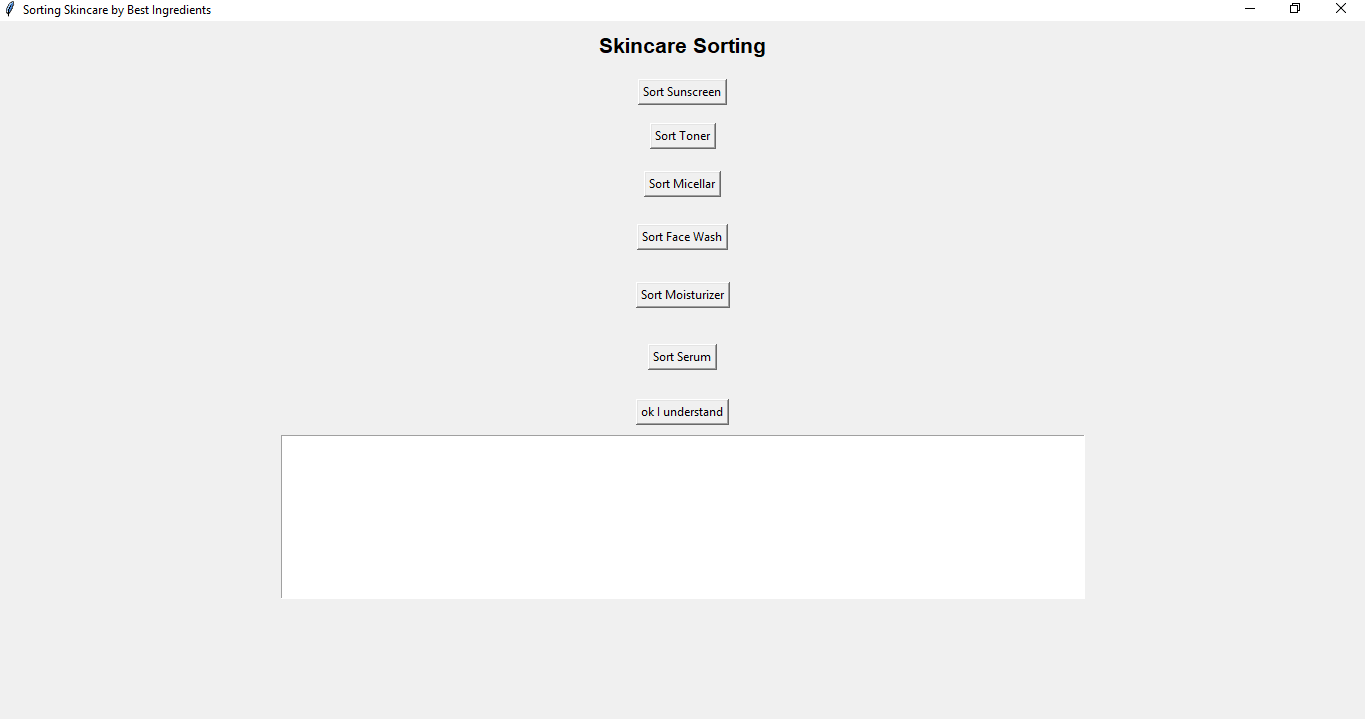
**Nama: Dian Ayu Fauziah**

**NIM : 22031554011**

**Kelas : Sains Data B 2022**

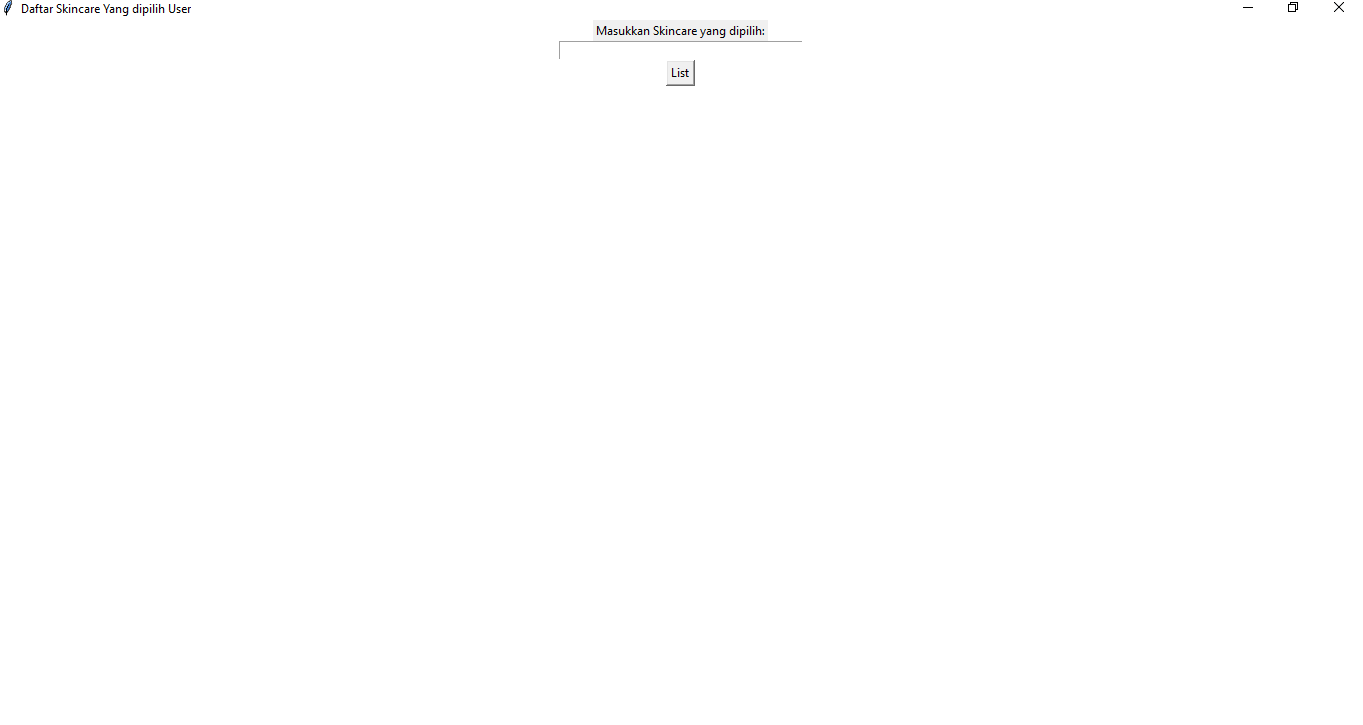
1. **Tugas Revisi**
2. Membuat Button Back pada tampilan akhir
3. Menambahkan Gambar pada halaman yang berisi algoritma dan juga halaman terakhir
4. Menambahkan gambar pada button di halaman yang berisi algoritma
5. **Tampilan Sebelum Revisi**

**2.1**



**Gambar 2.1** adalah tampilan sebelum direvisi, tidak ada gambar pada background tidak ada gambar pada button

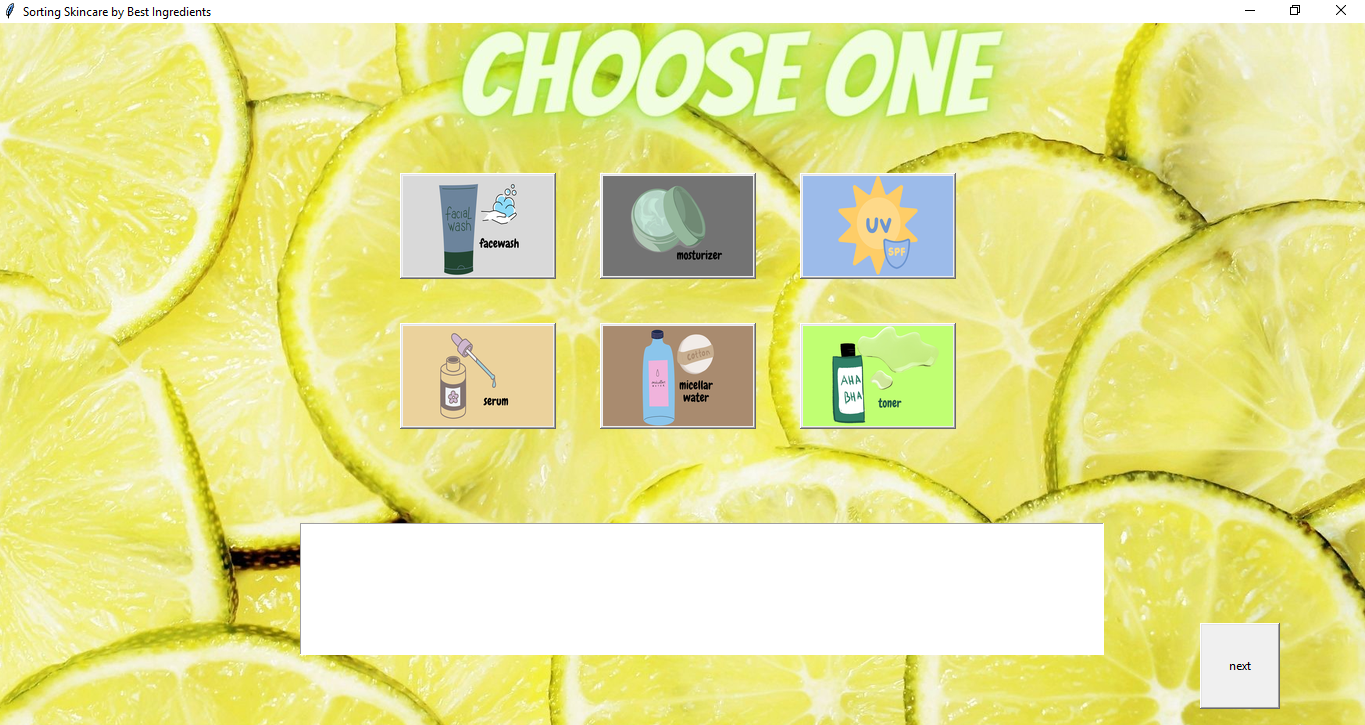
**2.2**



**Gambar 2.2** adalah tampilan sebelum direvisi, tidak ada gambar pada background dan juga tidak ada button back

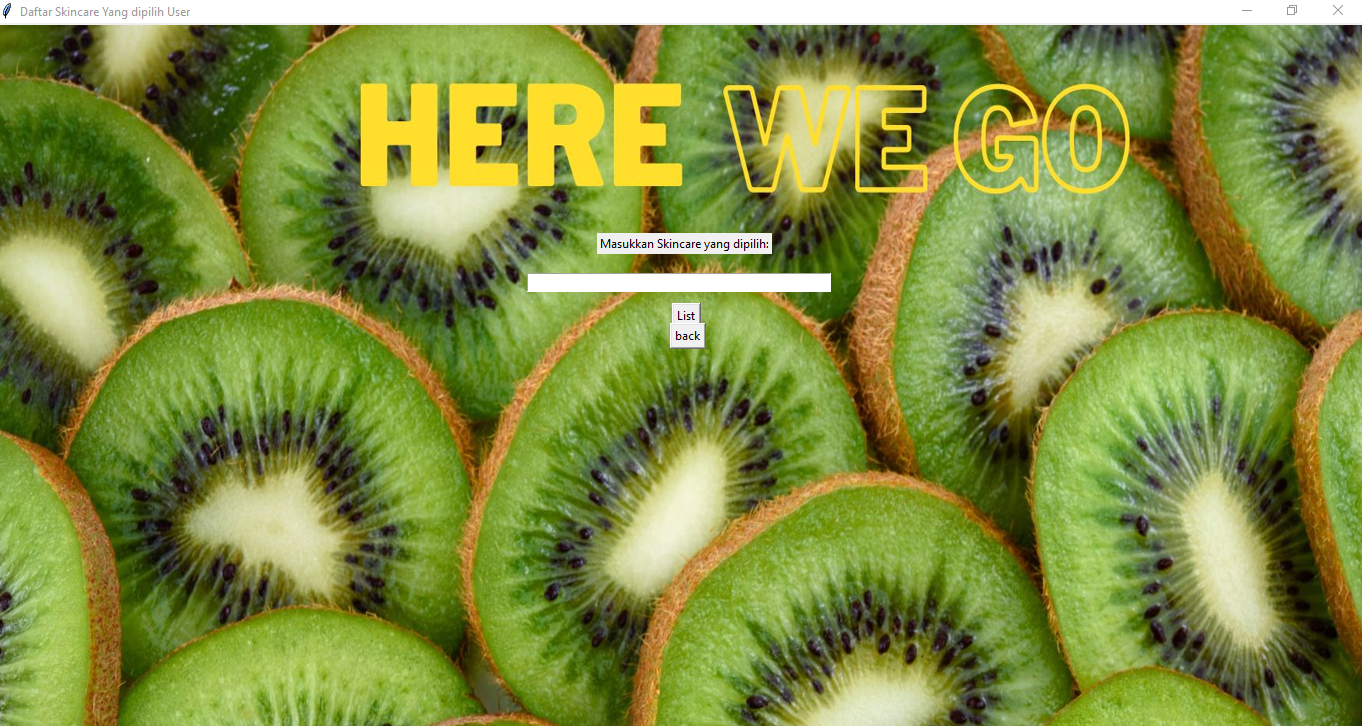
1. **Tampilan setelah revisi**

**3.1**



**Gambar 3.1** adalah tampilan yang sudah direvisi, sudah ditambahkan gambar untuk background dan juga sudah ditambahkan gambar pada masing-masing button

**3.2**

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**Gambar 3.3** adalah tampilan setelah direvisi, sudah ditambahkan gambar untuk background dan juga menambahkan button back

1. **Listing Code**

from tkinter import \*

from tkinter.ttk import Combobox

import tkinter as tk

from PIL import Image, ImageTk

from tkinter import messagebox

from tkinter.messagebox import showinfo

from tkinter import Tk, Label, Button, Entry, StringVar

class SkincareSorter():

    def \_\_init\_\_(self, root):

        self.root = root

        self.root.title("Sorting Skincare by Best Ingredients")

        self.root.geometry("400x300")

        image\_path = "E:/DataC\_250423/user/wishlist skincare/project skincare/sale (1).jpg"

        image\_path2 = "E:/DataC\_250423/user/wishlist skincare/project skincare/sale (2).jpg"

        image\_path3 = "E:/DataC\_250423/user/wishlist skincare/project skincare/sale (3).jpg"

        image\_path4 = "E:/DataC\_250423/user/wishlist skincare/project skincare/sale (4).jpg"

        image\_path5 = "E:/DataC\_250423/user/wishlist skincare/project skincare/sale (5).jpg"

        image\_path6 = "E:/DataC\_250423/user/wishlist skincare/project skincare/sale (6).jpg"

        image\_path7 = "E:/DataC\_250423/user/wishlist skincare/project skincare/sale (7).jpg"

        # Membaca gambar menggunakan PIL

        image = Image.open(image\_path)

        image2 = Image.open(image\_path2)

        image3 = Image.open(image\_path3)

        image4 = Image.open(image\_path4)

        image5 = Image.open(image\_path5)

        image6 = Image.open(image\_path6)

        image7 = Image.open(image\_path7)

        # Mengubah ukuran gambar sesuai kebutuhan

        image = image.resize((1500, 750), Image.ANTIALIAS)

        image2 = image2.resize((150, 100), Image.ANTIALIAS)

        image3 = image3.resize((150, 100), Image.ANTIALIAS)

        image4 = image4.resize((150, 100), Image.ANTIALIAS)

        image5 = image5.resize((150, 100), Image.ANTIALIAS)

        image6 = image6.resize((150, 100), Image.ANTIALIAS)

        image7 = image7.resize((150, 100), Image.ANTIALIAS)

        # Membuat objek ImageTk dari gambar

        image\_tk = ImageTk.PhotoImage(image)

        image\_tk2 = ImageTk.PhotoImage(image2)

        image\_tk3 = ImageTk.PhotoImage(image3)

        image\_tk4 = ImageTk.PhotoImage(image4)

        image\_tk5 = ImageTk.PhotoImage(image5)

        image\_tk6 = ImageTk.PhotoImage(image6)

        image\_tk7 = ImageTk.PhotoImage(image7)

        # Membuat label untuk menampilkan gambar

        image\_label = Label(root, image=image\_tk)

        image\_label.pack()

        image\_label2 = Label(root, image=image\_tk2)

        image\_label2.pack()

        image\_label3 = Label(root, image=image\_tk3)

        image\_label3.pack()

        image\_label4 = Label(root, image=image\_tk4)

        image\_label4.pack()

        image\_label5 = Label(root, image=image\_tk5)

        image\_label5.pack()

        image\_label6 = Label(root, image=image\_tk6)

        image\_label6.pack()

        image\_label7 = Label(root, image=image\_tk7)

        image\_label7.pack()

        # Menampilkan gambar

        image\_label.image = image\_tk

        image\_label2.image = image\_tk2

        image\_label3.image = image\_tk3

        image\_label4.image = image\_tk4

        image\_label5.image = image\_tk5

        image\_label6.image = image\_tk6

        image\_label7.image = image\_tk7

        self.sort\_button\_ss = Button(root, width=150, height=100, text="", command=self.sorted\_ss\_normal)

        self.sort\_button\_ss.config(image=image\_tk2, compound="top")

        self.sort\_button\_ss.place(x=800, y=150)

        self.sort\_button\_toner = Button(root, width=150, height=100, text="", command=self.sorted\_toner\_normal)

        self.sort\_button\_toner.config(image=image\_tk3, compound="top")

        self.sort\_button\_toner.place(x=800, y=300)

        self.sort\_button\_micellar = Button(root, width=150, height=100, text="", command=self.sorted\_micellar\_normal)

        self.sort\_button\_micellar.config(image=image\_tk4, compound="top")

        self.sort\_button\_micellar.place(x=600, y=300)

        self.sort\_button\_fwash = Button(root, width=150, height=100, text="", command=self.sorted\_Fwash\_normal)

        self.sort\_button\_fwash.config(image=image\_tk5, compound="top")

        self.sort\_button\_fwash.place(x=400, y=150)

        self.sort\_button\_moist = Button(root, width=150, height=100, text="", command=self.sorted\_moist\_normal)

        self.sort\_button\_moist.config(image=image\_tk6, compound="top")

        self.sort\_button\_moist.place(x=600, y=150)

        self.sort\_button\_serum = Button(root, width=150, height=100, text="", command=self.sorted\_serum\_normal)

        self.sort\_button\_serum.config(image=image\_tk7, compound="top")

        self.sort\_button\_serum.place(x=400, y=300)

        self.sort\_button\_submit = Button(root, width=10, height=5, text="next", command=self.open\_user)

        self.sort\_button\_submit.place(x=1200, y=600)

        # self.result\_text = Text(root, width=100, height=10)

        # self.result\_text.place(x=150, y=500)

        self.result\_text = Text(root, width=100, height=8)

        self.result\_text.place(x=300, y=500)

    def selection\_sort\_skincare(self, skincare\_list):

        for i in range(len(skincare\_list)):

            max\_index = i

            for j in range(i + 1, len(skincare\_list)): #mencari indeks dengan daftar kandungan\_terbaik yag terpanjang

                if len(skincare\_list[j]['kandungan\_terbaik']) > len(skincare\_list[max\_index]['kandungan\_terbaik']): #memeriksa

                    max\_index = j

            skincare\_list[i], skincare\_list[max\_index] = skincare\_list[max\_index], skincare\_list[i]

    def display\_sorted\_skincare(self, skincare\_data):

        sorted\_skincare = ""  #menyimpan produk skincare yang telah

        for skincare in skincare\_data:

            sorted\_skincare += skincare['nama'] + ' - ' + ', '.join(skincare['kandungan\_terbaik']) + '\n'

        self.result\_text.delete(1.0, END)

        self.result\_text.insert(END, sorted\_skincare)

    def sorted\_ss\_normal(self):

        sunscreen\_normal\_data = [

            {'nama': 'Whitelab UV Shield Tank Sunscreen Gel SPF 50++', 'kandungan\_terbaik': ['Niacinamide', 'Hyaluronic Acid']},

            {'nama': 'Erha21 Perfect Shield for Normal & Dry SPF #)', 'kandungan\_terbaik': [' Vit E', 'NIacinamide', 'Aloe Vera']},

            {'nama': 'Wardah UV Shield Essential Sunscreen Gel SPF 30', 'kandungan\_terbaik': ['Aloe Vera']},

        ]

        self.selection\_sort\_skincare(sunscreen\_normal\_data)

        self.display\_sorted\_skincare(sunscreen\_normal\_data)

    def sorted\_micellar\_normal(self):

        micellar\_normal\_data = [

            {'nama': 'Corine de Farme Purity Micellar Water', 'kandungan\_terbaik': ['Citric Acid']},

            {'nama': 'Wardah Cleansing Micellar Water', 'kandungan\_terbaik': [' Allantoin', 'Glycerin']},

            {'nama': 'Nivea Micellar Skin Breathe Biru', 'kandungan\_terbaik': ['Citric Acid', 'Glycerin', 'Sodium Chloride']},

        ]

        self.selection\_sort\_skincare(micellar\_normal\_data)

        self.display\_sorted\_skincare(micellar\_normal\_data)

    def sorted\_toner\_normal(self):

        toner\_normal\_data = [

            {'nama': 'Pyunnkang Yul Essence Toner', 'kandungan\_terbaik': ['Carbomer']},

            {'nama': 'COSRX AHA BHA Clarifying Treatment Toner ', 'kandungan\_terbaik': [' Allantoin', 'Glycerin', 'Carbomer']},

            {'nama': 'The Body Shop Vitamin E Hydrating Toner', 'kandungan\_terbaik': ['Glycerin']},

        ]

        self.selection\_sort\_skincare(toner\_normal\_data)

        self.display\_sorted\_skincare(toner\_normal\_data)

    def sorted\_Fwash\_normal(self):

        fwash\_normal\_data = [

            {'nama': 'Cethapil Gentle Skin Cleanser', 'kandungan\_terbaik': ['Niacinamide', 'Pro-Vita B5', 'Glycerin']},

            {'nama': 'Neutrogena Hydro Boost Hydrating Cleansing Gel ', 'kandungan\_terbaik': ['Glycerin', 'Hyaluronic Acid']},

            {'nama': 'Olay Foaming Face Wash For Sensitive Skin', 'kandungan\_terbaik': ['Glycerin', 'Niacinamide', 'Lauric Acid', 'Aloe Vera']},

        ]

        self.selection\_sort\_skincare(fwash\_normal\_data)

        self.display\_sorted\_skincare(fwash\_normal\_data)

    def sorted\_serum\_normal(self):

        serum\_normal\_data = [

            {'nama': 'Somebymi Snail Truecica Miracle Repair', 'kandungan\_terbaik': ['Niacinamide', 'Allantoin']},

            {'nama': 'Nacific Phyto Niacin ', 'kandungan\_terbaik': ['Niacinamide', 'Hyaluronic Acid', 'Lemon Extrak']},

            {'nama': 'Elsheskin Smoothing Serum for acne skin', 'kandungan\_terbaik': ['Glycerin', 'Centella Asiatica', 'Salysilic Acid', 'Alkcohol']},

        ]

        self.selection\_sort\_skincare(serum\_normal\_data)

        self.display\_sorted\_skincare(serum\_normal\_data)

    def sorted\_moist\_normal(self):

        moist\_normal\_data = [

            {'nama': 'SKINTIFIC 5x Ceramide Barrier Repair Moisturizer Gel',

             'kandungan\_terbaik': ['Ceramide', 'Hyaluronic Acid', 'Centella Asiatica']},

            {'nama': 'Joylab Moisture Bomb Pudding Gel Creme ', 'kandungan\_terbaik': ['Glycerin', 'Niacinamide']},

            {'nama': 'NPure Day Cream Centella', 'kandungan\_terbaik': ['Centella Asiatica', 'Salycilic Acid']},

        ]

        self.selection\_sort\_skincare(moist\_normal\_data)

        self.display\_sorted\_skincare(moist\_normal\_data)

    def open\_user(self):

        self.root.destroy()

        new\_root = Tk()

        new\_root.title("Next Window")

        new\_root.geometry("500x500")

        next\_gui = choosen(new\_root)

        new\_root.mainloop()

class choosen:

    daftar\_mhs = []

    def \_\_init\_\_(self, master):

        self.master = master

        master.title("Daftar Skincare Yang dipilih User")

        master.geometry("350x250")

        master['background'] = 'yellow'

        # Menambahkan gambar

        img\_path = "E:/DataC\_250423/user/wishlist skincare/project skincare/sale.jpg"

        image = Image.open(img\_path)

        image = image.resize((1500, 1000))  # Mengubah ukuran gambar sesuai kebutuhan

        photo = ImageTk.PhotoImage(image)

        self.image\_label = Label(master, image=photo)

        self.image\_label.image = photo  # Menyimpan referensi gambar agar tidak dihapus oleh garbage collector

        self.image\_label.place(x=0, y=0)  # Menempatkan gambar di posisi (0, 0)

        self.label = Label(master, text="Masukkan Skincare yang dipilih:")

        self.label.place(x=600, y=210)  # Menempatkan label di posisi (20, 150)

        self.nama = StringVar()

        self.field\_nama = Entry(master, textvariable=self.nama, width=50)

        self.field\_nama.place(x=530, y=250)  # Menempatkan input field di posisi (20, 180)

        self.button = Button(master, text="List", command=self.daftar)

        self.button.place(x=675, y=280)

        self.button2 = Button(master, text="back", command=self.go\_back)

        self.button2.place(x=673, y=300)

        # self.button2 = Button(master, text="back", command=self.go\_back)

        # self.button2.place(x=675, y=290) # Menempatkan tombol di posisi (20, 210)

    def daftar(self):

        mhs = self.nama.get()

        choosen.daftar\_mhs.append(mhs)

        showinfo(message="{} berhasil ditambahkan kedalam troly!\n\nDaftar Skincare menjadi:\n{}".format(mhs, choosen.daftar\_mhs))

        self.nama.set("")

    def go\_back(self):

        self.master.destroy()

root = Tk()

skincare\_sorter = SkincareSorter(root)

root.mainloop()