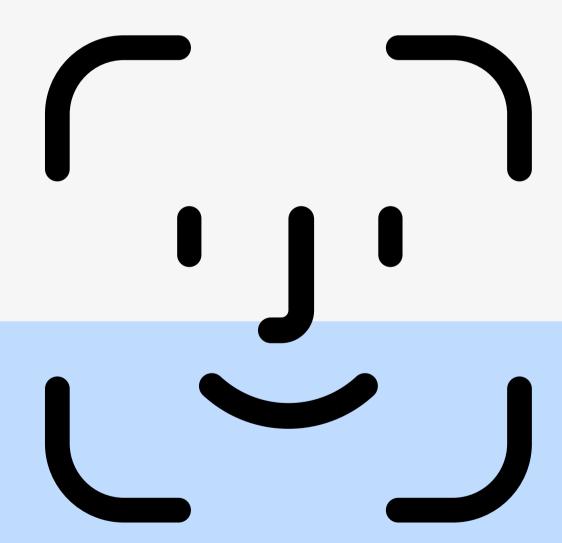
Paras helps to track your facial treatment, diagnose your facial skin problem, give advice for a healthy lifestyle, and recommend related beauty products.

# PARAS

YOUR FACIAL SKIN ADVICER



## The Team



Abid Ammar
Mahdy
Machine Learning
Developer



Abrar Dwi Fairuz
Nadhif
Machine Learning
Developer



Aditya Aulia Al-Azizi Machine Learning Developer



## The Team



Ega Prabu
Pamungkas
Cloud Engineer



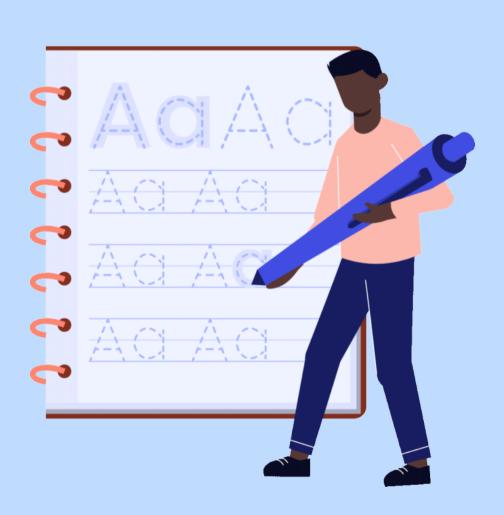
Kristianto Wijaya
Theofilus
Android Developer



Nicholas Yavin Android Developer



# Problem<br/>Statement



#### Money

Isn't always about skincare it is just a healthy lifestyle.

#### **Knowledge is Everything**

Lack of assistance in the healing process.

#### Flexible Continous Care

Teenager are the most productive age, they have limited time.

# Initial Solution



# Diagnose Your Problem Accurately

You can early diagnose your facial skin problem just with your photos.

# It's about The Progress not Destination

Our History feature helps you to track your facial treatment progress.

# Consult with Our Personal Assistance and Expert

We collaborate our AI with the Expert. Share your problem and we'll help.

# Target Market

#### Millenials and Gen Z

Teenagers 15 - 35 years old who care a lot about their appearance

#### **General User**

Another user who wants to use our treatment app



# Competitors

Online Consultation

Buy Product

Health Tips and Information

General Health App

Hospital Booking







# Paras



#### Online Consultation

Buy Product

Health Tips and Information

Face Health App

Treatment History







## Android Implementation





User register with email address and fill the profile later



User can check the history after scan the face



User can scan the face using camera or gallery

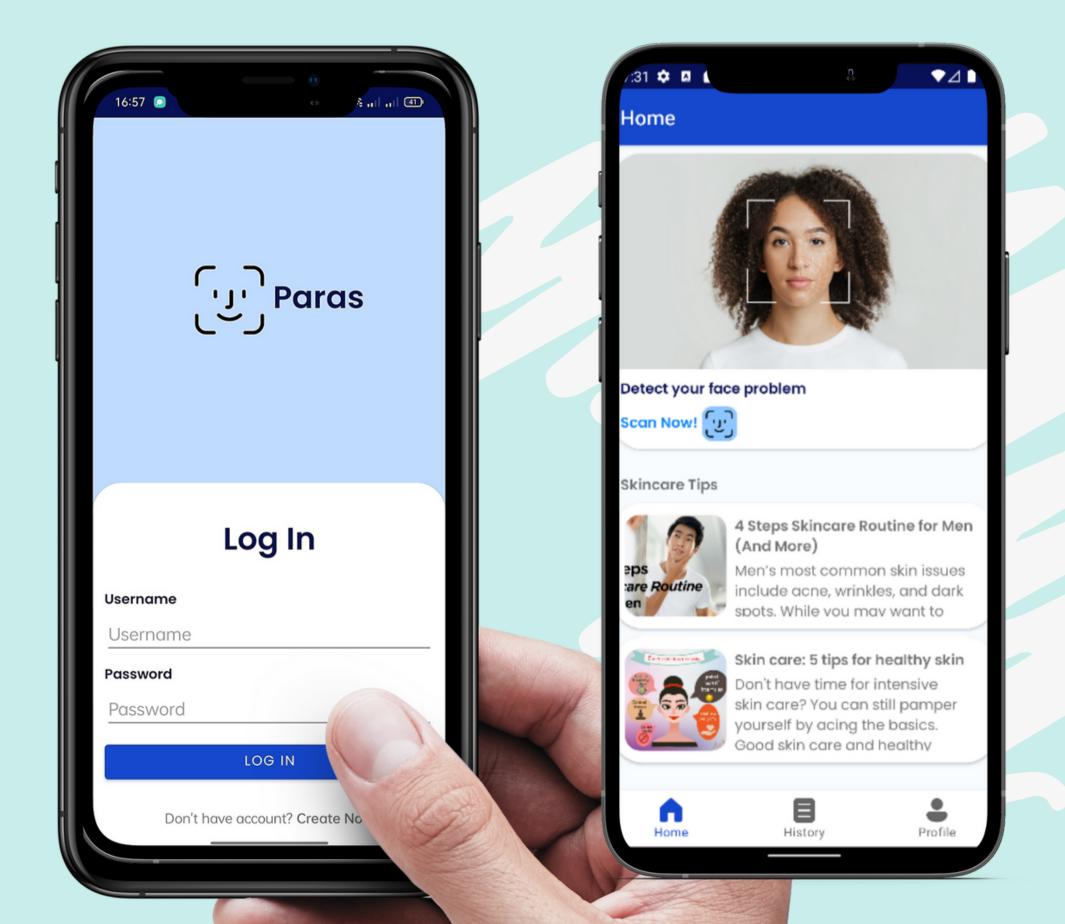


We provide some tips to keep your face healthy



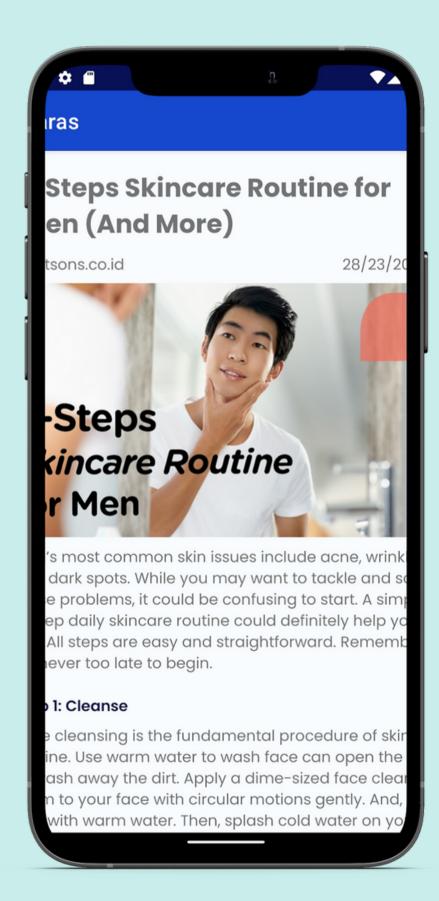
## RESULTS

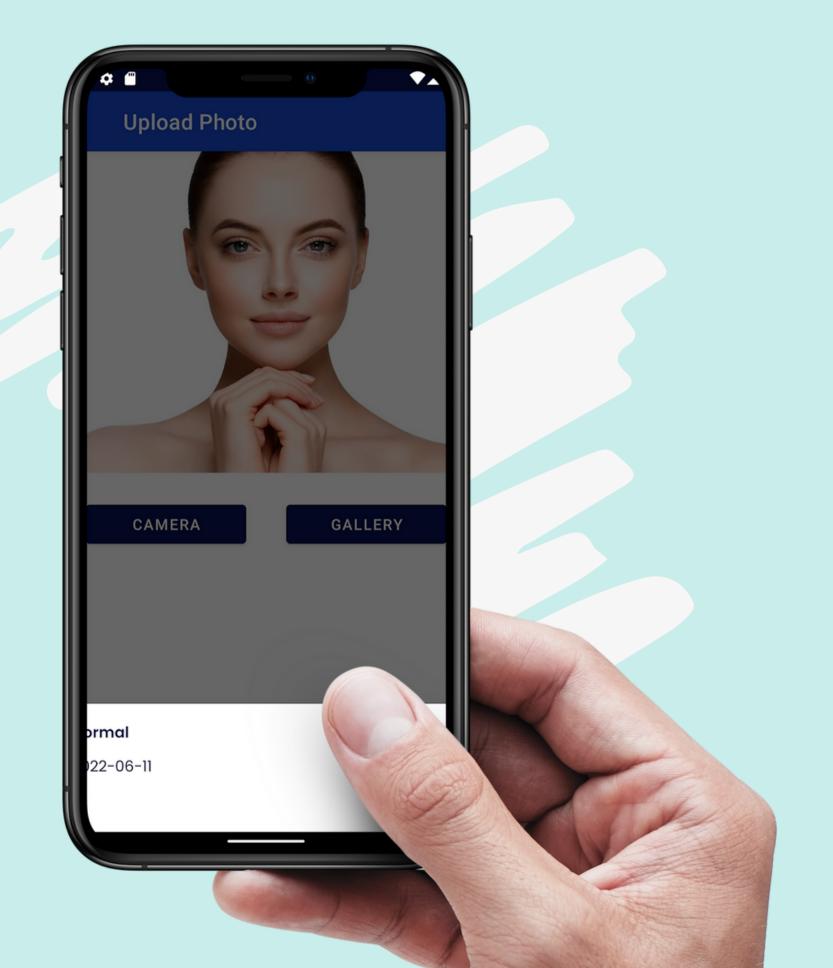






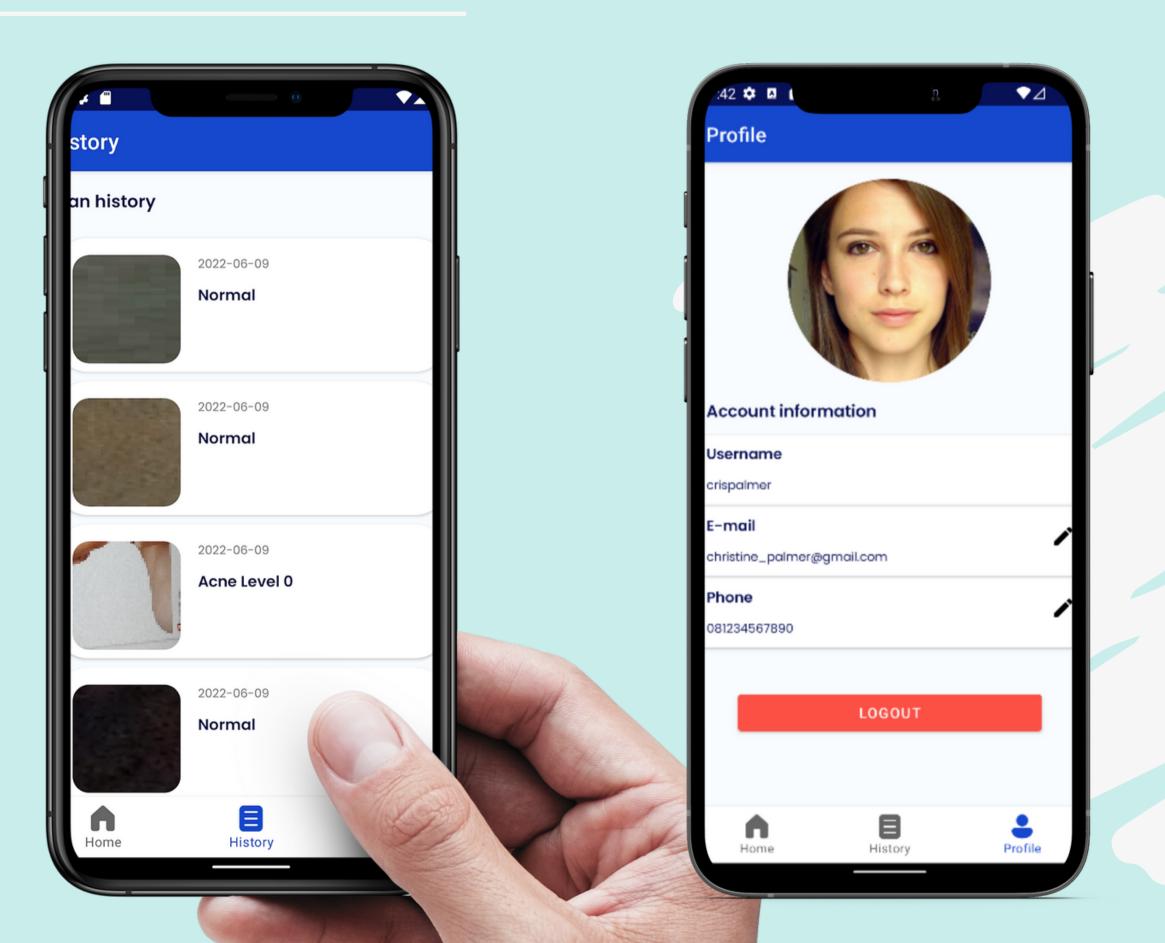
# RESULTS







# RESULTS



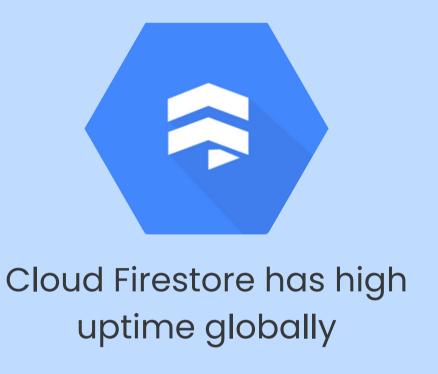




### CLOUD IMPLEMENTATION



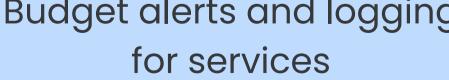






Cloud Storage for deploying model and images









# Machine Learning Implementation



# Facial Skin Diseases Classification



Detect the face position from the user image



CelebFaces Attribute



Detect whether there is facial skin disease on user face

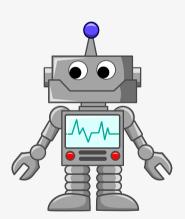
#### **Dataset**

kaggle/Acne grading classificationdataset





# Machine Learning Implementation



#### **Face Detection**



#### Model

Transfer learning with MobileNetv3 small with 2 outputs

# Facial Skin Diseases Classification



#### Model

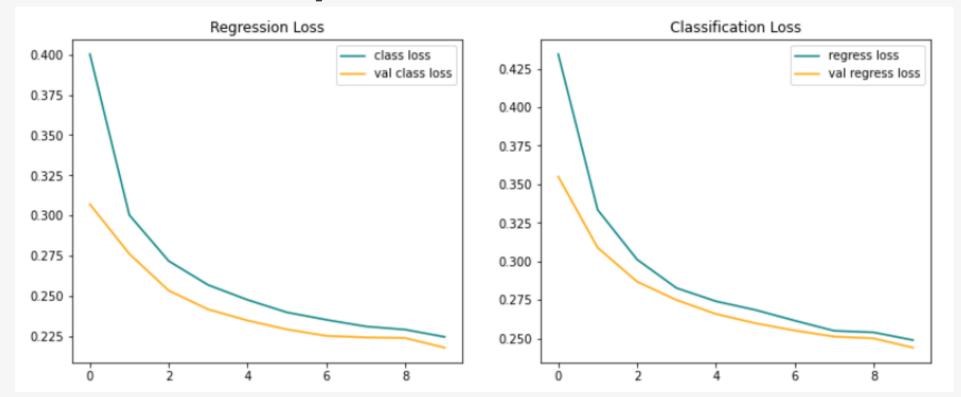
Transfer learning with MobileNetV2 with 2 input and 1 output



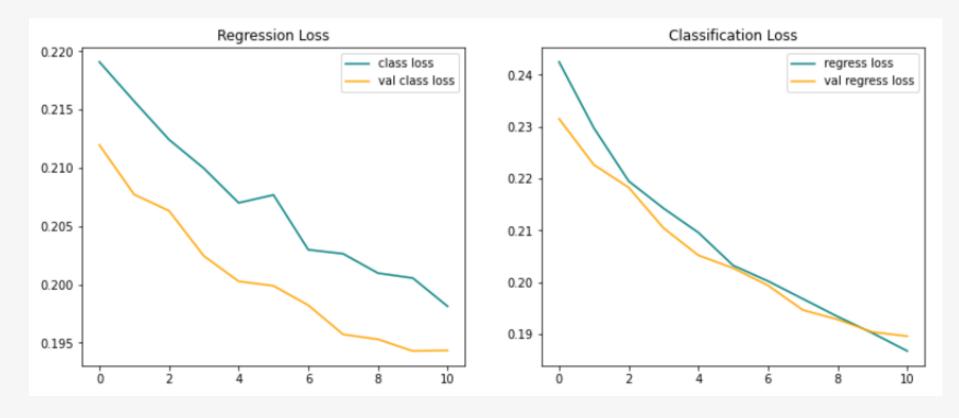


#### Baseline Face Detection Model

### Freeze Layer



#### Fine-Tune

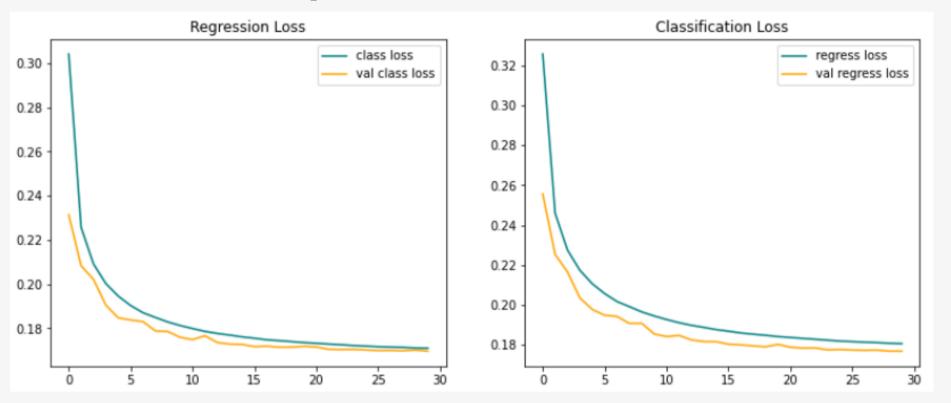




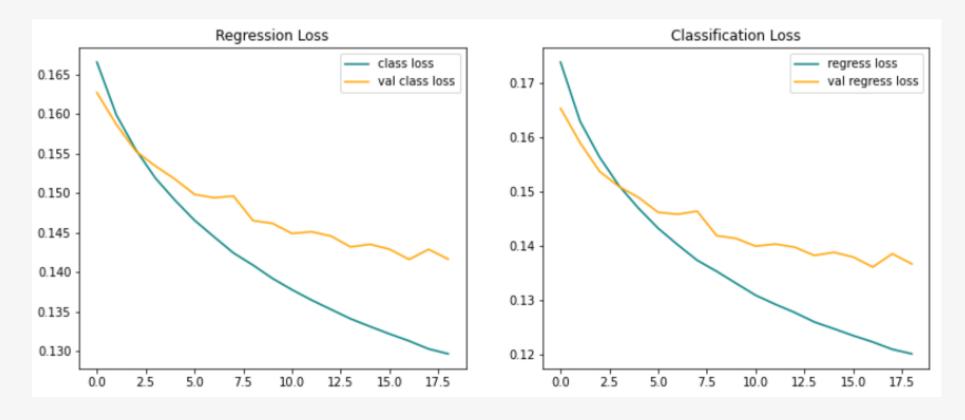
## Improvement

Improving Face
Detection Model

### Freeze Layer



#### Fine-Tune

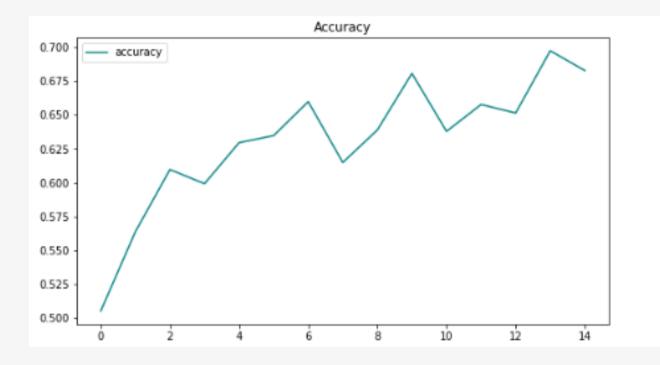


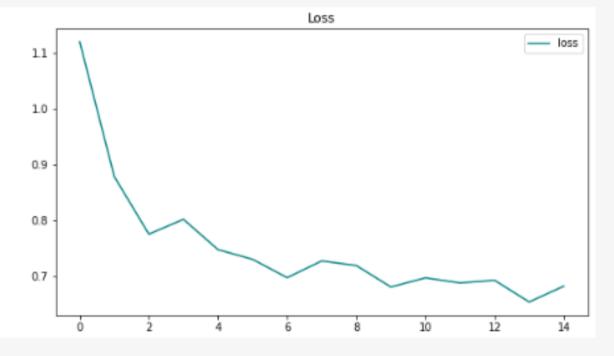




Facial Skin Diseases Classification Model

### Freeze Layer



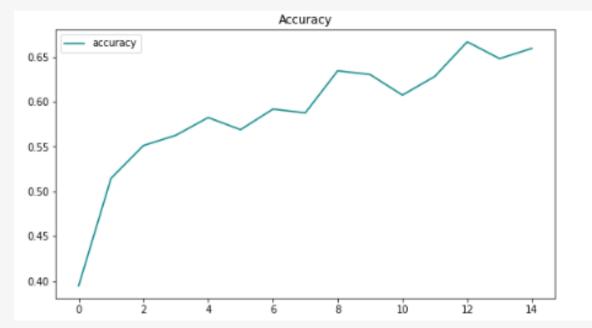


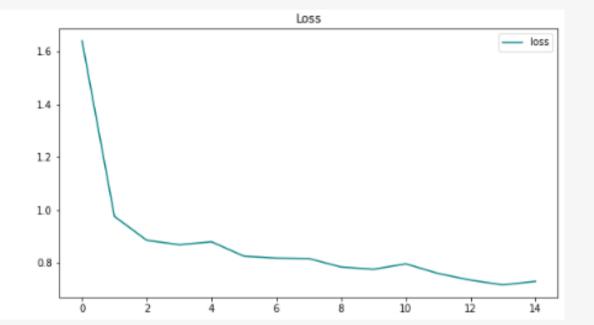


## Improvement

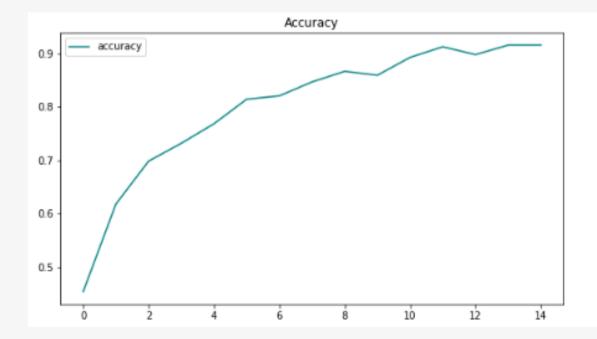
Improving Facial
Skin Diseases
Classification Model

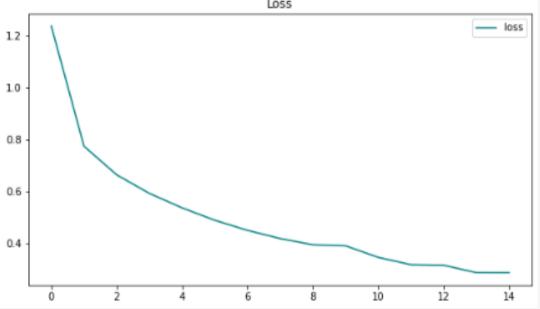
### Edge Detection





## Image + Edge Detection

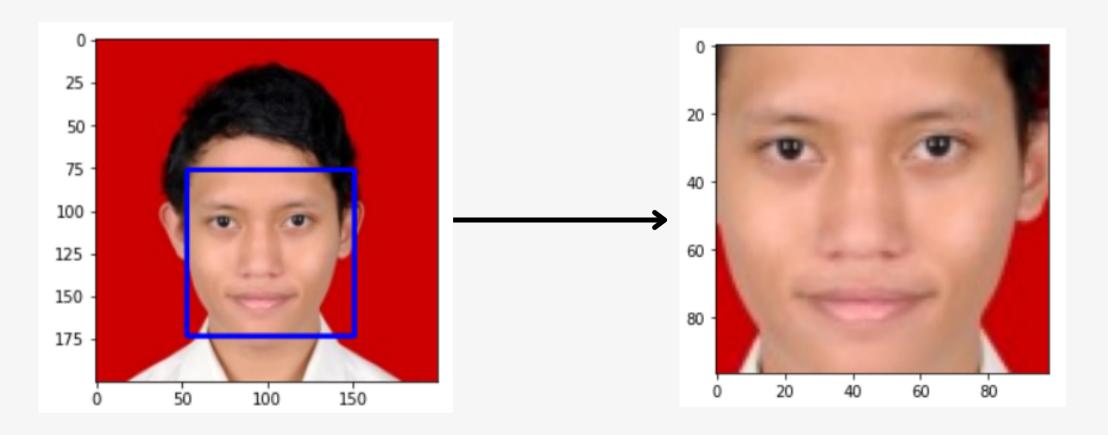








#### Face Detection

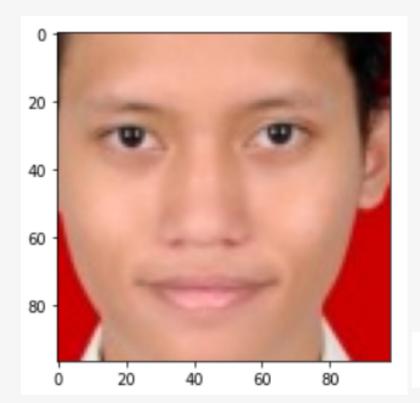


[array([[0.99891734]], dtype=float32),
array([[0.26713032, 0.38098302, 0.75979733, 0.8683231 ]], dtype=float32)]

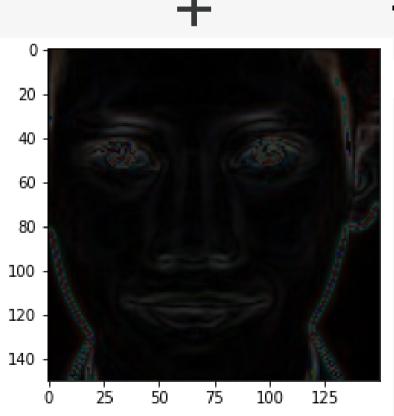




#### Facial Skin Diseases Classification Model



label = ['acne level 0', 'acne level 1', 'acne level 2', 'normal']



#### normal

array([[0.2985379 , 0.00136719, 0.00565832, 0.6944366 ]], dtype=float32)



# Our Next Plan



# Product Recomendation

Pick the best product based on other user reviews and budget

#### Personal Assistance

Help early advice for your related facial skin problems.

# **Expert Consultation**

This feature helps users to consult with an expert virtually.

# More Facial Problem Detection

We'll add another detection





What we wil accomplish each month until the end of the year

Product Recommendation

July

Expert Consultation

October

Personal Assistance

August

More Facial Problem Detection

December

### Documentations



#### **PARAS Github:**

https://github.com/feratyusa/paras-capstone-bangkit-2022

#### How to Use PARAS

#### to scan your face

- 1. Login or Register first.
- 2.Click "Scan Now" button to start scanning your face.
- 3. Either choose to upload an image of your face from gallery or take a photo of your face.
- 4. Make sure your whole face is visible
- 5. Click upload and wait for the result.
- 6.On the History page, you can see recent or past scan and see the progress of your face everytime you scan.

## Local Plan Deployment

Timeline	Activities	Budget
July	Testing prototypes to partner and user candidate	\$200
August	Improving product from feedback testing prototypes	\$800
September	Release beta version to public	\$400
Oktober	Evaluate the product and find investor	\$600
November	Product release and penetrate to market by advertising	\$2,000
Desember	Next development by feedback and research a new features	\$1,000



# **Budgeting 1**

Category	Proportions (max)	Budget (max) in USD
Team Salary	30%	\$1.500 / Rp 23.000.000
Research / Operational  1. Buying/renting things,  2. Prototyping,  3. Infrastructure & Testing  4. Learning/capacity building,  5. Survey/FGD/data collections  6. Transportation expenses  7. Additional salary for external experts, observer, respondents  8. Productions preparations, tooling  9. Legalities, patent/copyright registration, product certification	100% 15% 5% 5% 10% 5% 5% 30% 20%	\$5.000 / Rp 70.000.000 \$750 / Rp 10.500.000 \$250 / Rp 3.500.000 \$250 / Rp 3.500.000 \$500 / Rp 7.000.000 \$250 / Rp 3.500.000 \$250 / Rp 3.500.000 \$1500 / Rp 21.000.000 \$1500 / Rp 14.000.000



# **Budgeting 2**

Category	Proportions (max)	Budget (max) in USD
All aspects covered in Budgeting - 1	50%	\$5.000
Additional Budget for Team Salary	15%	\$1.500
Additional Budget for Research/Ops	15%	\$1.500
Marketing and Sales	20%	\$2.000
Market research and competitive analysis	15%	\$1.500
Future Development / R&D	20%	\$2.000
Other Expenses (taxes, reserves)	10%	\$1.000



### SUSTAINABILTY

#### Target Market 1

What are their profiles and visual personas?

#### Target Market 2

Visualize the people who will turn to you for solutions.

Who are the customers you want to cater to?

