



TRASHSORT

SUSTAINABLE LIVING

C23-PC615



TRASHSORT TEAM

C 2 3 - P C 6 1 5



Handers The
Machine Learning
Engineer



Iffan Adhyatmawan Nusli
Machine Learning
Engineer



Ham Dandih
Machine Learning
Engineer



Syaiful Bahri Dirgantara
Cloud Software
Engineer



Muhammad Raihan
Cloud Software
Engineer



Rahmat Hidayat
Mobile
Developer



Cari

Berlangganan

PENGELOLAAN LINGKUNGAN

Tiga Permasalahan Mendasar Sampah yang Tidak Kunjung Selesai

Sampah terus menjadi masalah meski banyak inovasi dalam pengelolaannya. Sampah kantong plastik dan kemasan produk kebutuhan sehari-hari dianggap tak berharga sehingga tak terurus.

Audio Berita 6 menit

Oleh AGUSTINUS YOGA PRIMANTORO
7 April 2023 11:24 WIB · 4 menit baca

A. TEKS

2 akses artikel tersisa. Daftar untuk 5 akses gratis per bulan. [Daftar Sekarang](#)

detikfinance Home Ekonomi Bisnis Finansial Infrastruktur Properti Energi Industri Fintech

Masalah Sampah Bikin Jokowi Pusing, Puluhan Tahun Tak Ada Solusi

Herdi Alif Al Hikam - detikFinance
Senin, 13 Mar 2023 17:14 WIB

Presiden Jokowi di TPST Kesiman Kertalangu (Foto: Ni Made Lastri Karsiani Putri/detikBali)

West Jakarta City Government Urges Residents To Sort Organic And Inorganic Waste Before Being Transported By Officers

02 March 2023, 12:58 | Editorial Team

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Dampak Sampah yang Tidak Dikelola dengan Baik

BERITA | 10 Mei 2023 Bagikan Sekarang

Dampak Sampah yang Tidak Dikelola dengan Baik

Berbagai dampak yang saat ini bisa kita lihat dan bahkan rasakan akibat sampah yang tidak dikelola dengan baik



WHY SEGREGATE WASTE?

JAKARTA BANDUNG
50.8%
SURABAYA SEMARANG
YOGYAKARTA

KIC survey (2019)

as many as 50.8 % of respondents in five major Indonesian cities (Jakarta, Bandung, Semarang, Yogyakarta, and Surabaya) do not segregate waste. Of the 50.8% of households that do not segregate waste, 79% of them are confused in segregating waste. In fact, good waste segregation can make it easier for officers to sort out recyclable waste, so that waste can have economic value



BACKGROUND STUDY

Based on scientific papers with the title "Classification of Organic and Non-Organic Waste using Convolutional Neural Network". Realizing the manufacture of this tool in order to reduce the problem of waste in Indonesia, which in every year the waste problem will continue to grow.





WHAT ARE WE TRYING TO SOLVE ?

**"LACK OF PUBLIC AWARENESS
IN SORTING TRASH"**



"It's better to sort the trash from households, from the source, at the very least in two streams of segregation: organic and non-organic. It helps. I estimate that 50 percent of our waste problem is solved if we can sort our trash. The largest composition is indeed in the initial sorting"

Rofi Alhanif, the assistant deputy for waste management under the ministry of Maritime Affairs and Investment



West Jakarta City Government Urges Residents To Sort Organic And Inorganic Waste Before Being Transported By Officers



WHY TRASHSORT ?

EASY TO USE AND CAN BE USED ANYTIME

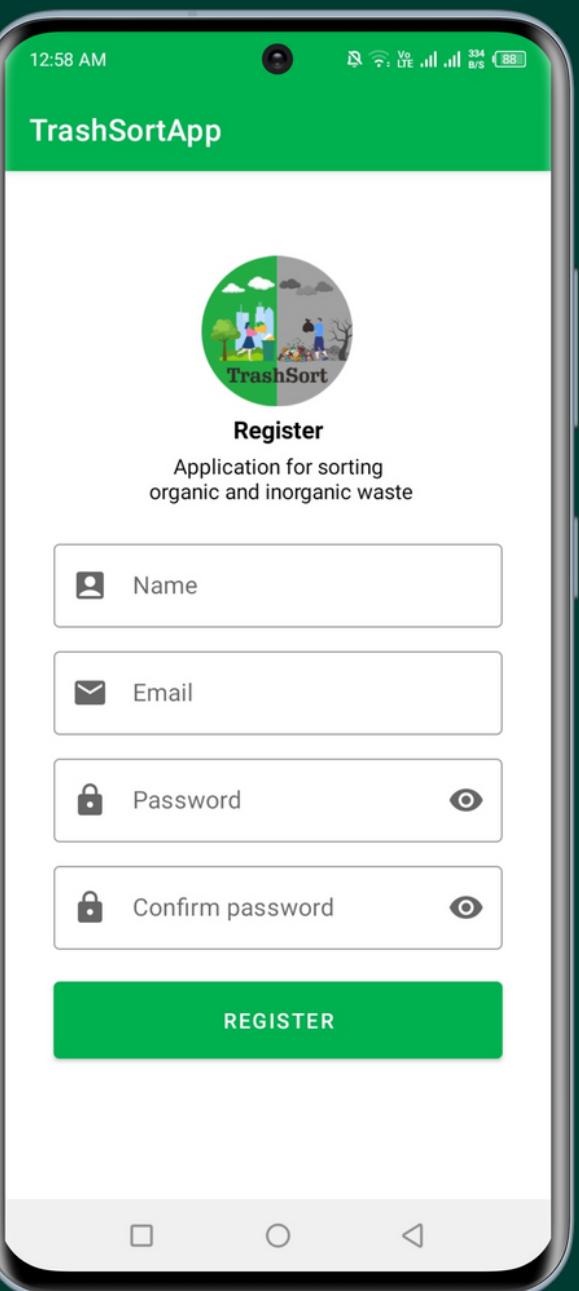
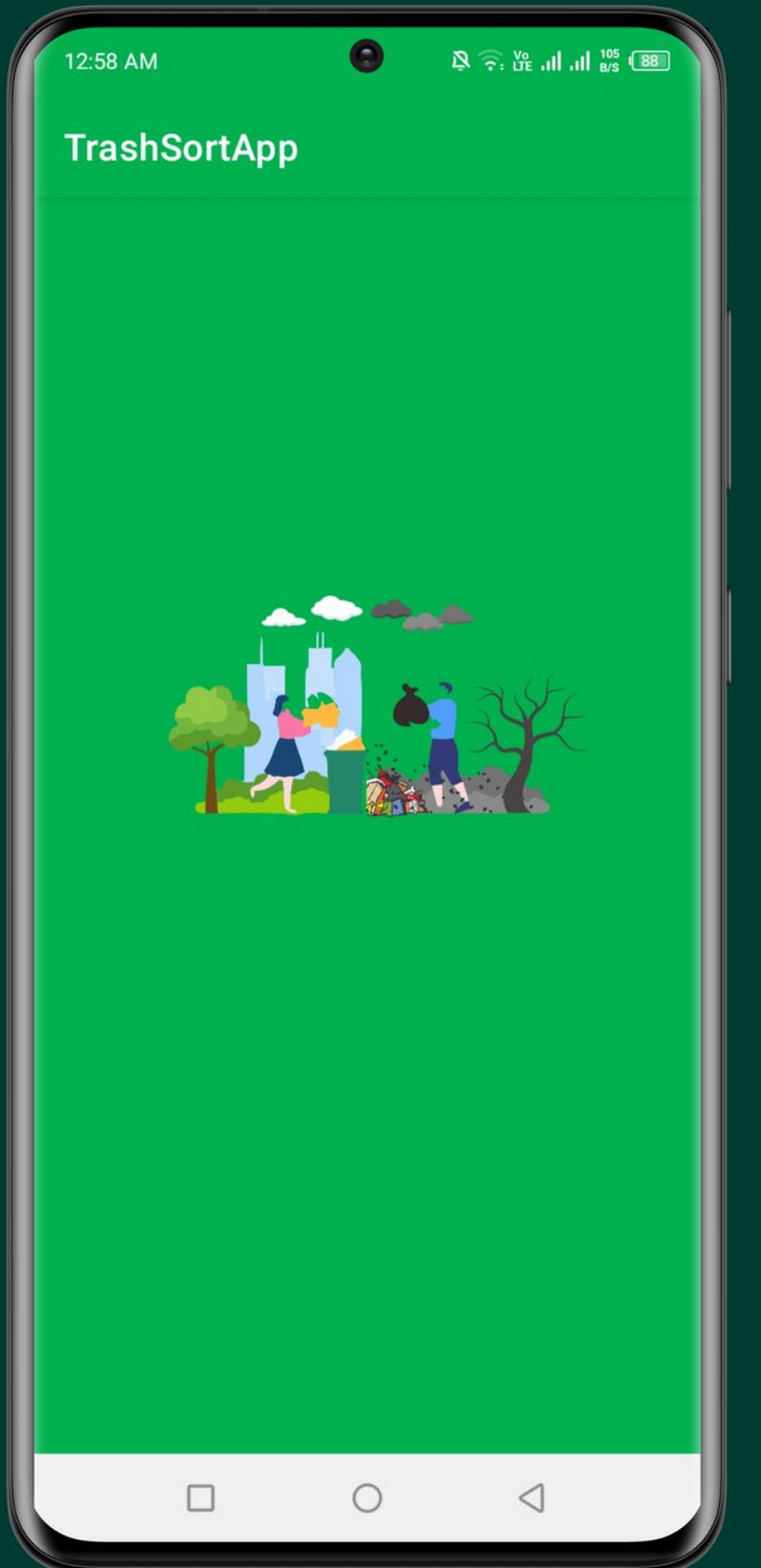
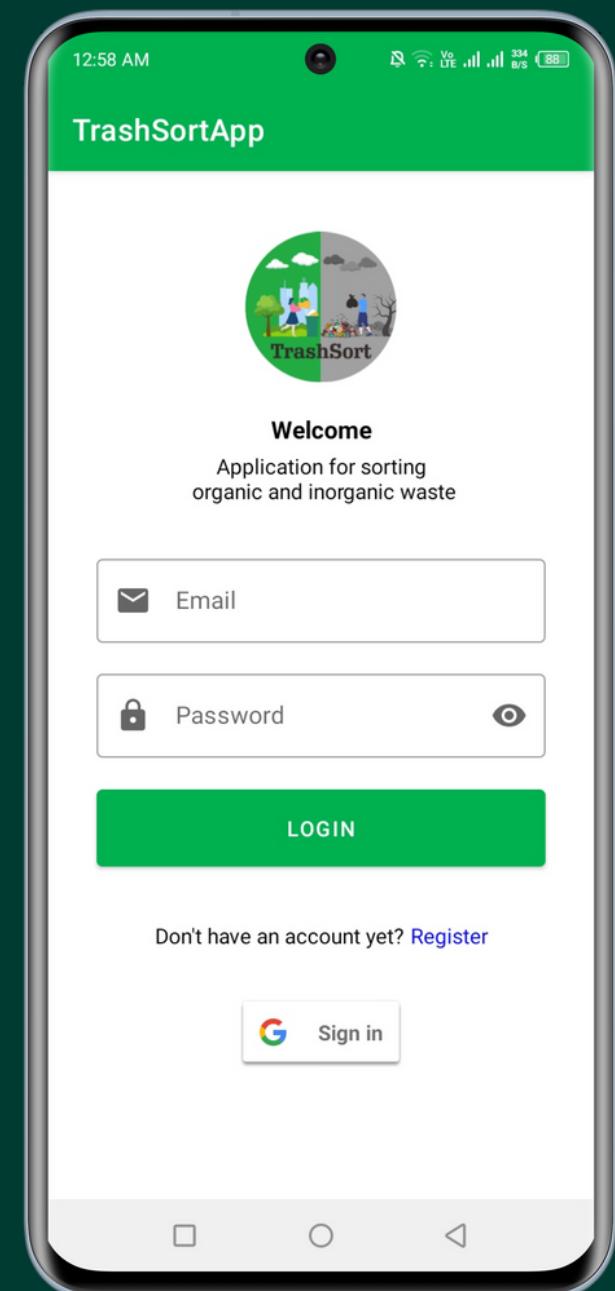


IDENTIFY THE CATEGORY OF WASTE EASILY UTILISING MACHINE LEARNING



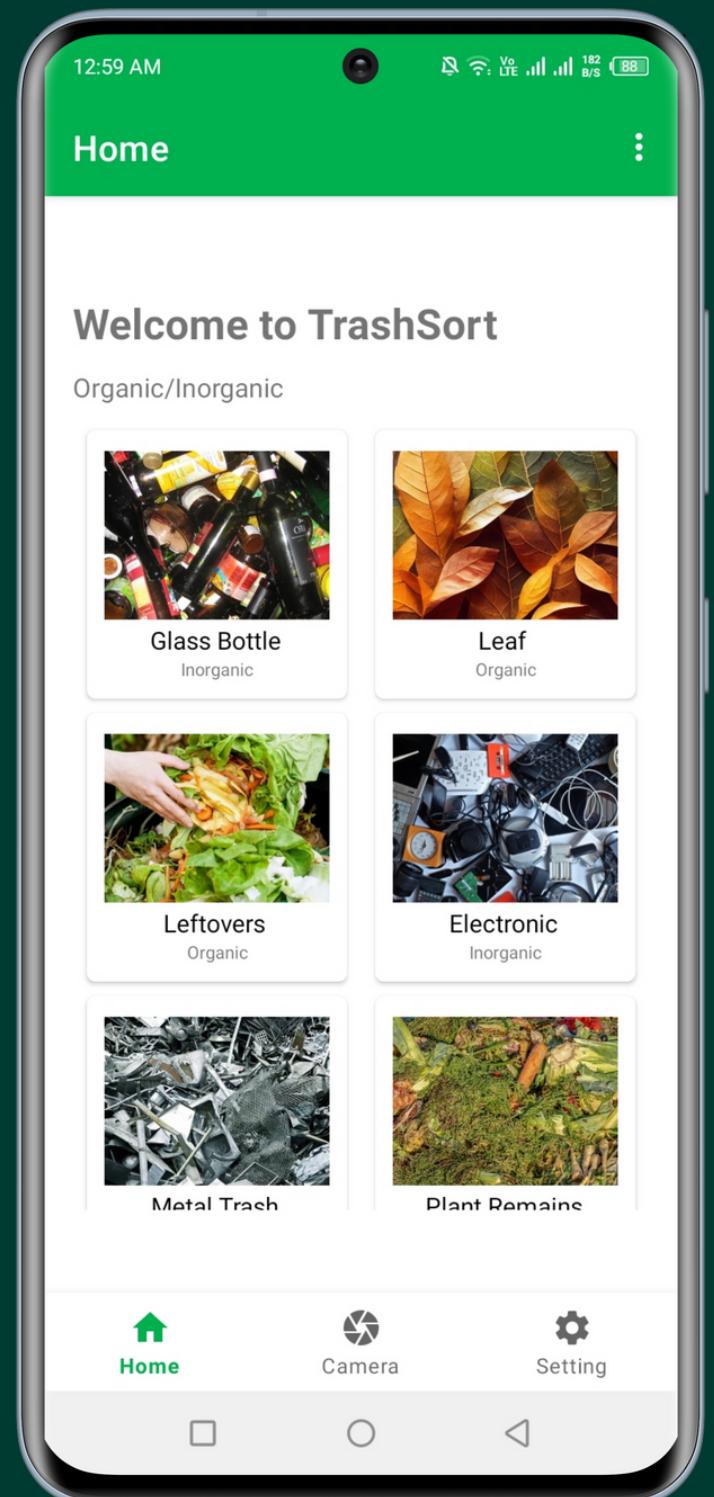
PROVIDE TIPS AND INFORMATION ABOUT RECYCLING IN INDONESIA



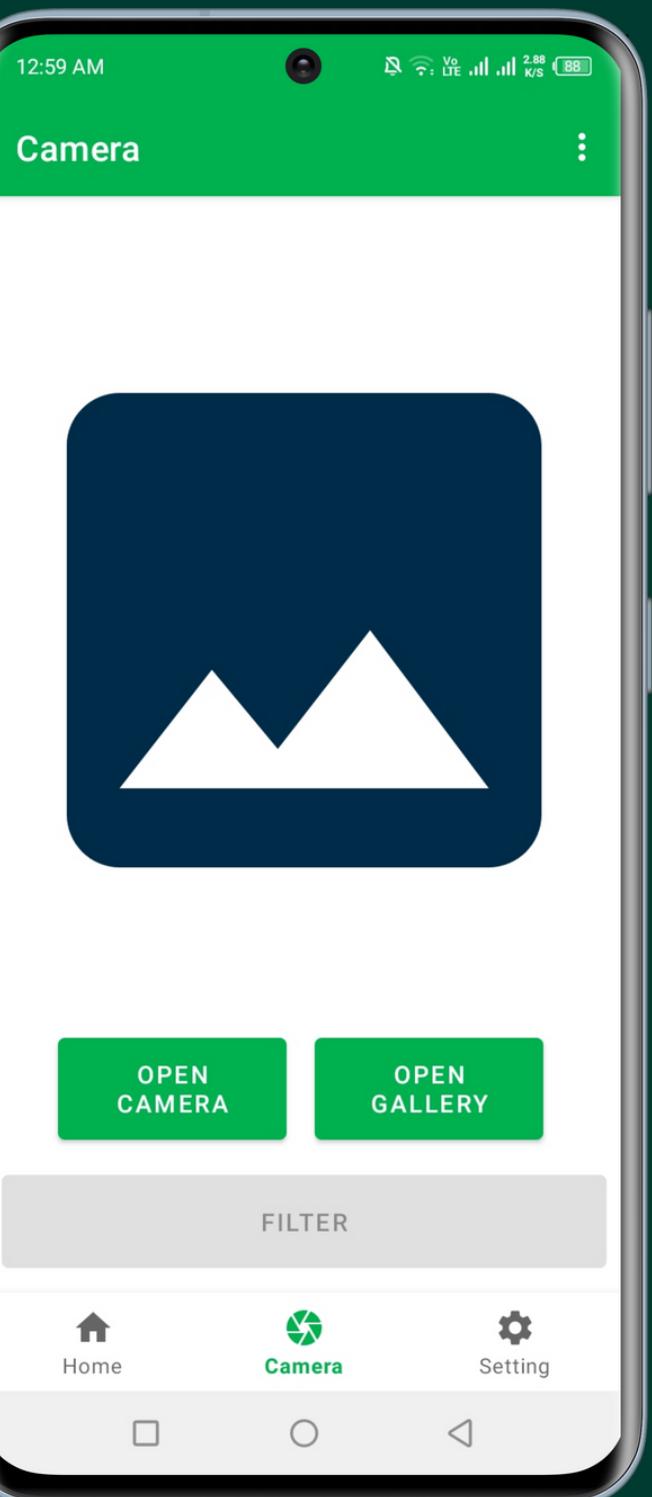




HOME

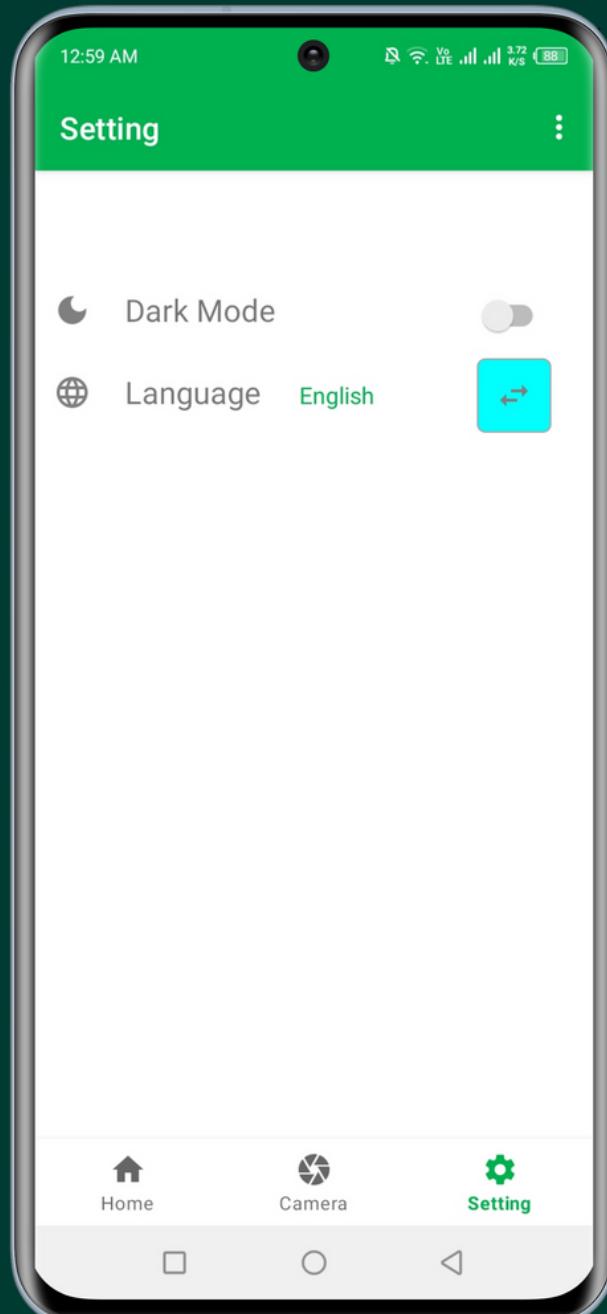
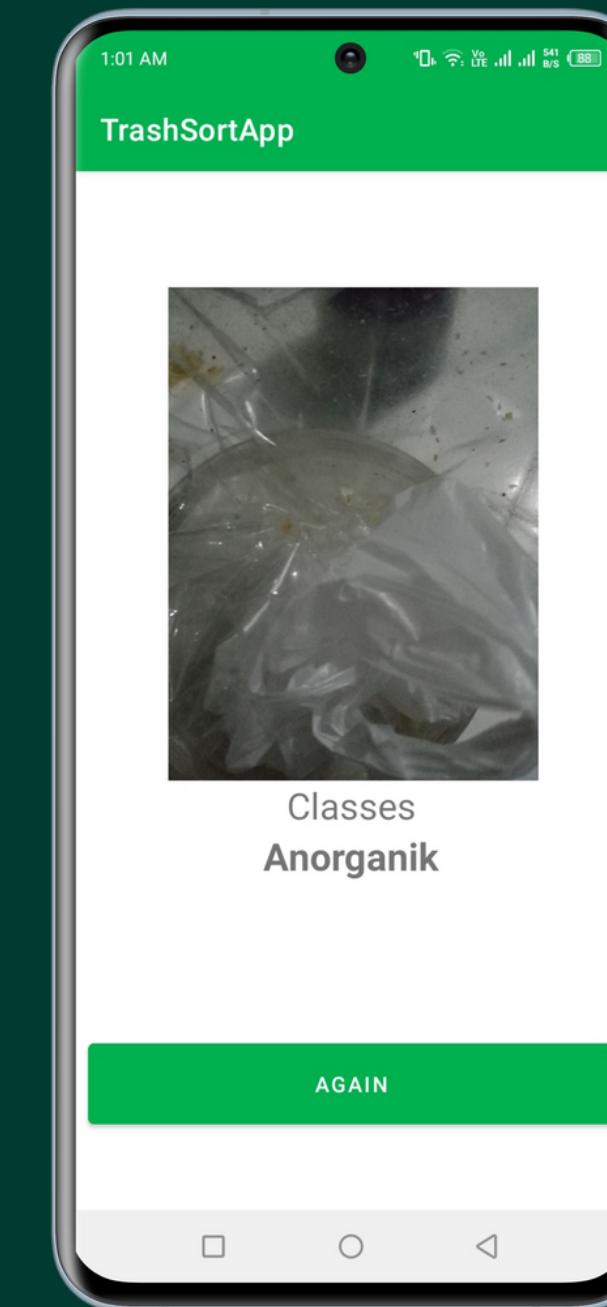
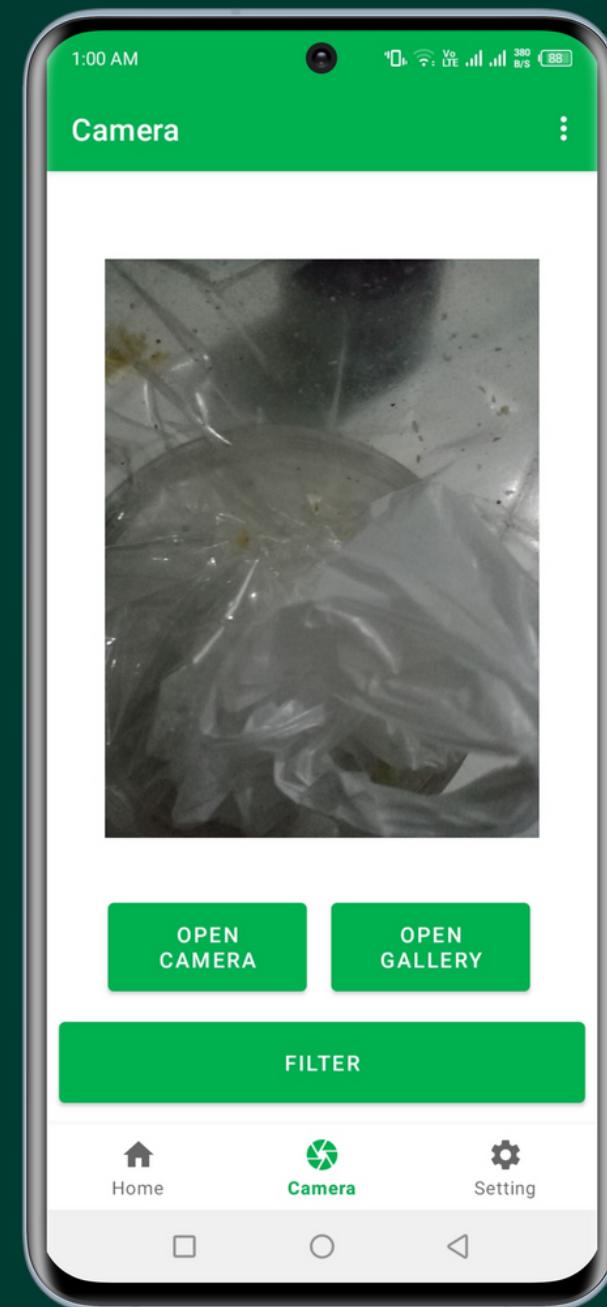


CAMERA





CAMERA CLASSIFICATION



SETTING



Mobile Developer

Github PC615



**Implementation of
Authentication and
Authorization using Firebase**



tensorflow implementation



Cloud Computing

Github PC615



**Authentication and
Authorization using Firebase**



**Provide Cloud Storage as
Backend to upload image as well
as Vertex AI to classify the Image**

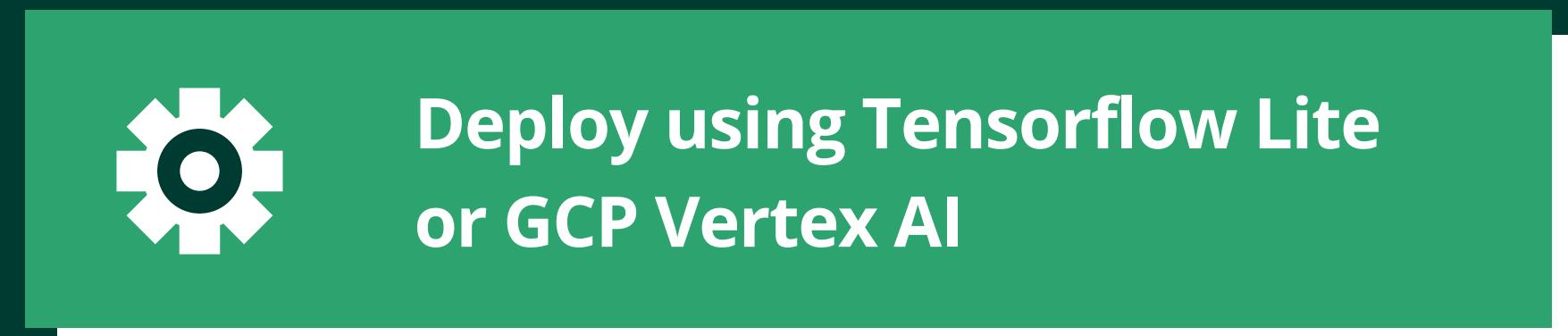
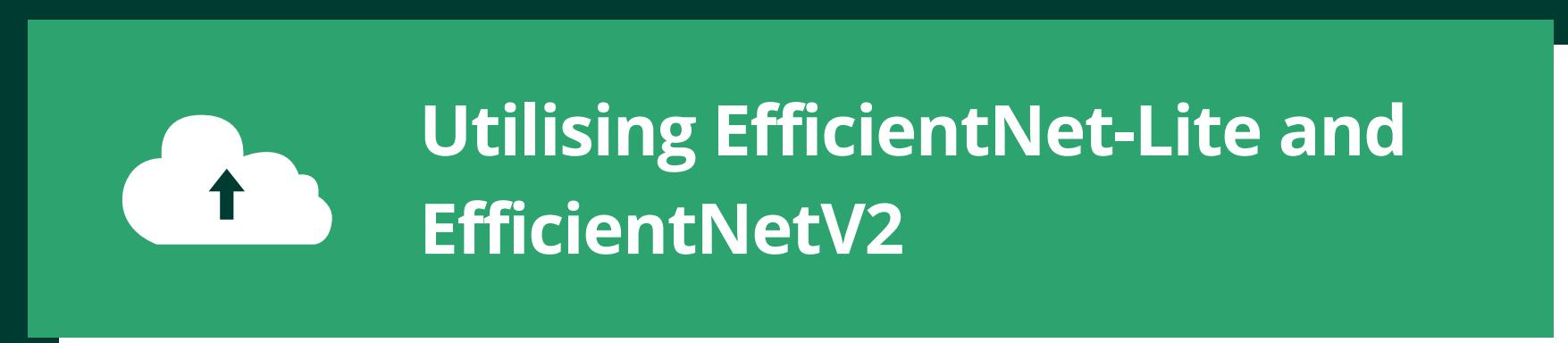
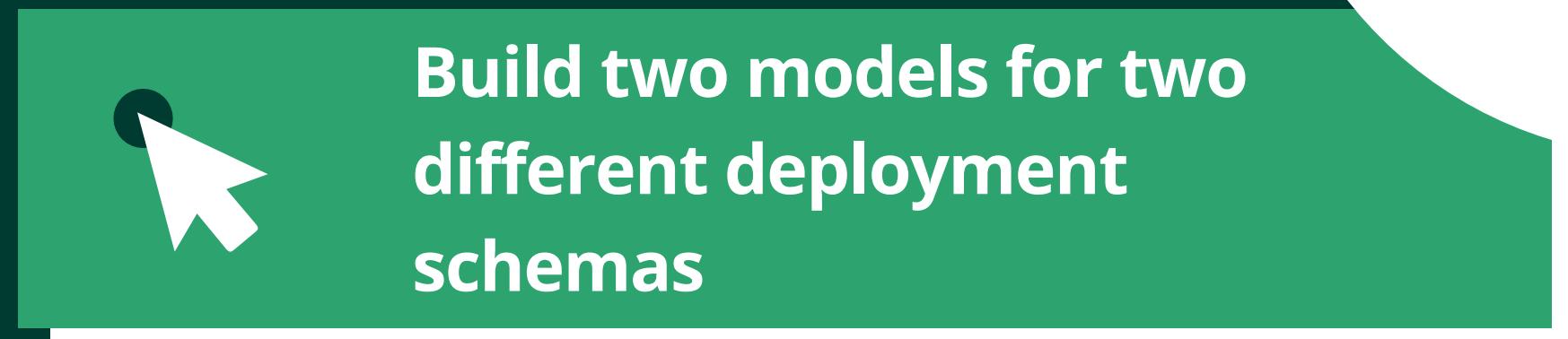


Deployed to App Engine



Machine Learning

Github PC615





Dataset

used is public dataset called
Waste Classification data from
kaggle.





TARGET MARKET



AGE : +7 YEARS OLD

PROFESSIONAL : ALL PROFESSION

ROLES : ALL ROLES



WHY MARKET NEEDS OUR SOLUTION ?



1



THE DATASET IS
COLLECTED FROM
KAGGLE PLATFORM

2



HELP THE
GOVERNMENT TO
TAKE ACTION IN
SORTING WASTE

3



INCREASE PUBLIC
AWARENESS TO
SORT WASTE.



TrashSort



COMMERCIAL VALUE

Data and Analytics

TrashSort can collect valuable data and analytics on users' waste management habits. Aggregated and anonymized data can be used to generate insights, trends, and reports, which can be valuable for businesses, municipalities, or organizations interested in waste management.

User Base and Engagement

The size and engagement of the user base can significantly impact the commercial value of the app. A large and active user base can attract advertisers, partnerships, and potential investors.

Government Partnerships

The app's capabilities and data can be of interest to local governments or municipalities aiming to improve waste management practices. Public-private partnerships or licensing agreements can be established to provide the app's services to a broader audience or specific regions.



LONG-TERM BENEFITS

Environmental Impact

By encouraging proper waste sorting and disposal, the app contributes to reducing environmental pollution and promotes recycling and responsible waste management practices. This leads to a long-term positive impact on the environment, conserving resources, reducing landfill waste, and minimizing the release of harmful substances into the ecosystem.

Behavioral Change

The app has the potential to create lasting behavioral change by educating and raising awareness about the importance of waste sorting. Over time, users develop a habit of correctly categorizing their waste, which extends beyond the app itself. This behavioral change can have a cumulative effect on waste management practices and sustainability.

Reduce Contamination

Proper waste sorting reduces contamination of recyclable materials. When recyclables are sorted correctly, they can be processed more efficiently at recycling facilities. By minimizing contamination, the app improves the quality of recyclable materials, making them more valuable and increasing the likelihood of successful recycling.



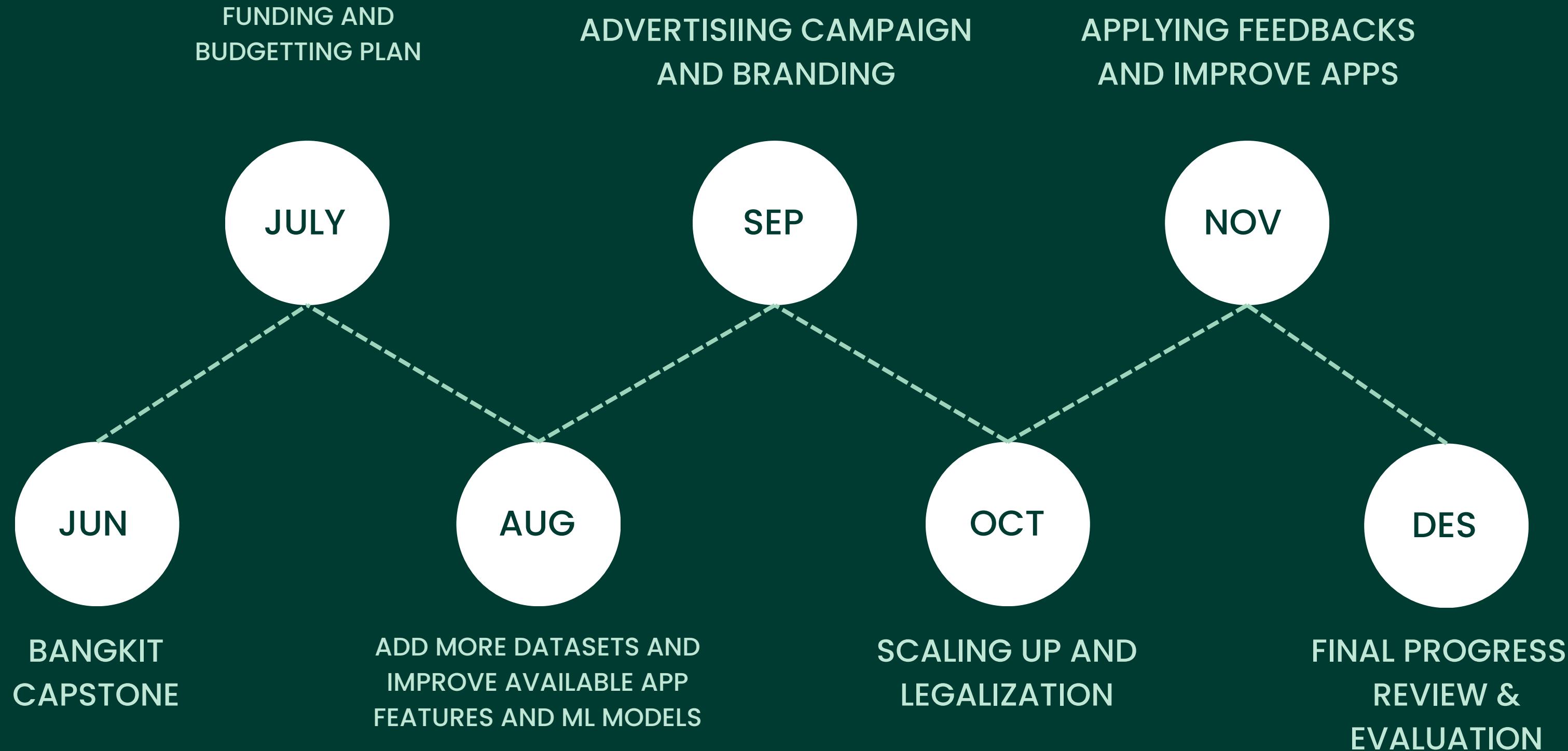
POSSIBLE PILOT ON THE NEXT 6 MONTHS



BUDGETING	TIMELINE	ROLES
RP. 700.000	JULY	
RP. 21.700.000	AUGUST	
RP. 7.700.000	SEPTEMBER	PROJECT MANAGER IT DEVELOPER UI UX DESIGNER MARKETING
RP. 14.000.000	OCTOBER	
RP. 700.000	NOVEMBER	
RP. 7.700.000	DESEMBER	



PROJECT MILESTONE FOR 2023





USD 5K BUDGETTING

CATEGORY	PROPORTION	BUDGET (USD/RUPIAH)
TEAM SALARY	30%	USD 1500 / RP. 22.000.000
OPEARTIONAL		
CLOUD	30%	USD 1500 / RP. 22.000.000
PLAYSTORE PUBLISH	1%	USD 50 / RP. 700.000
MARKETING AND BRANDING	10%	USD 500 / RP. 7.000.000
INTERNET	1%	USD 50 / RP. 700.000
TRANSPORTATION EXPENSES	1%	USD 50 / RP. 700.000
PROTOTYPING	7%	USD 350 / RP. 5.000.000
OTHER EXPENSES (DATASET COLLECTING, SURVEY , ETC)	10%	USD 500 / RP. 7.000.000
LEGALITIES, COPYRIGHTS AND PRODUCT CERTIFICATION	10%	USD 500 / RP. 7.000.000
TOTAL		USD 5000 / RP. 70.000.000



USD 10K BUDGETTING

CATEGORY	PROPORTION	BUDGET (USD/RUPIAH)
ALL ASPECTS COVERED IN 5K USD BUDGETING	50%	USD 5000 / RP. 70.000.000
ADDITIONAL BUDGET FOR TEAM SALARY	15%	USD 1500 / RP. 22.000.000
ADDITIONAL BUDGET FOR RESEARCH/OPS	20%	USD 2000 / RP. 29.000.000
MARKETING AND SALES	20%	USD 2000 / RP. 29.000.000
MARKET RESEARCH AND COMPETITIVE ANALYSIS	10%	USD 1000 / RP. 14.000.000
FUTURE DEVELOPMENT / R&D	20%	USD 2000 / RP. 29.000.000
OTHER EXPENSES (TAXES, RESERVES)	10%	USD 1000 / RP. 14.000.000



SUSTAINABILITY

Source of Income

- Collaboration with government
- In-App Advertising
- Partnerships with Waste Management Organizations

Efficiency Priority

- Accurate sorting model & adding more waste categories
- Reducing unnecessary cost in R&D
- Using bare-minimum operations (smaller instances)

THANK YOU

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