ANIMAL GO
Project

White Paper

Ver ENG 2.1

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Moon Labs

AI + Deep learning Reward Pet Community
ANIMAL GO

All about Pet

ANIMALGO MARKET

강아지 고양이 용품의 모든 곳
매일매일 무료배송 !

MARKET 상품 보러가기   AI 상품 추천!

보상받는sns   출석체크   마켓   찾아가는미용

AI 분석   AI상품추천   VIP   동물백과

파크(호텔)   파크(유치원)   파크(카페)   유저랭킹
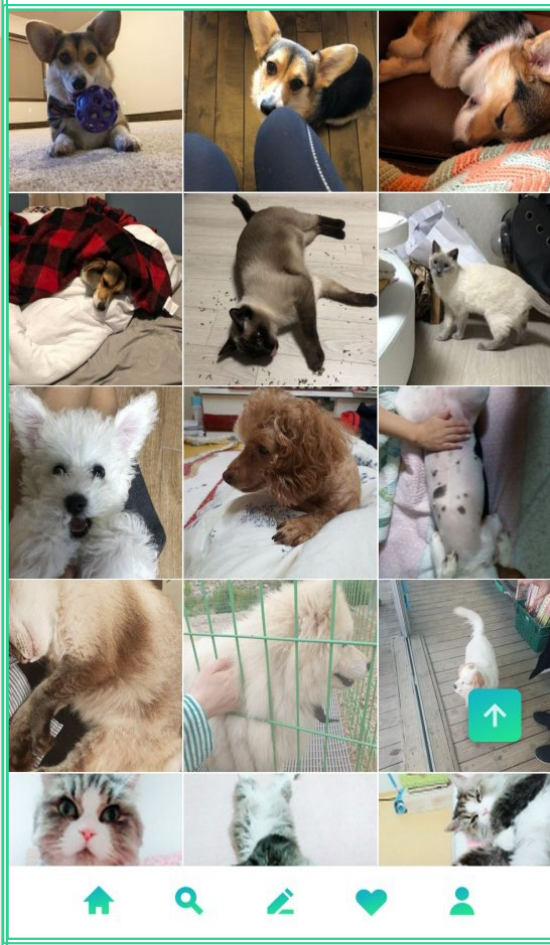
Reward Pet community

Caution
Warning

This white paper is designed to provide information to those whose project team is preparing and interested in an ongoing animation project, blockchain, or pet projects.

The project team does not encourage you to invest, and this white paper is not designed to encourage you to invest. The purpose of this white paper is to provide business models, platform usage, and technical details for the AnimalGo project. Nothing in this white paper is accurate or warranted because it is not for investment rights purposes. It is also noted that this white paper is based on the status at the time of its creation, and can be modified and changed from time to time, depending on market conditions and project team conditions. In addition, even as it is, this white paper does not give objective value.

Please keep in mind that you are only a subjective member of the project team. It's not a definitive statement on future plans, such as roadmaps, but it's the project team's goal, and it may not work as planned. Please note that the project team will not be responsible for the consequences if any actions are taken using this white paper. In other words, please read this white paper, noting that the project team has no legal or moral responsibility in connection with this white paper.

1. Introduction
ANIMAL GO

AnimalGo is a reward-type pet community application created by the AnimalGo team. With the mobile app, you can communicate and relate to pet lovers

Users will communicate through images and postings about their pets and receive various rewards depending on their community contributions. We have added technical factors such as looking at the bloodline of pets and predicting their health conditions by analyzing their defecation using deep learning technology.

You can buy pet products through the AnimalGo Market, and hotels, beauty salons and kindergartens through the AnimalGo Park. Even if your dog doesn't have to, you can play the game in the AnimalGo Toy. This is the No.1 pet community application that will interact with, empathize and share pet-related useful information.
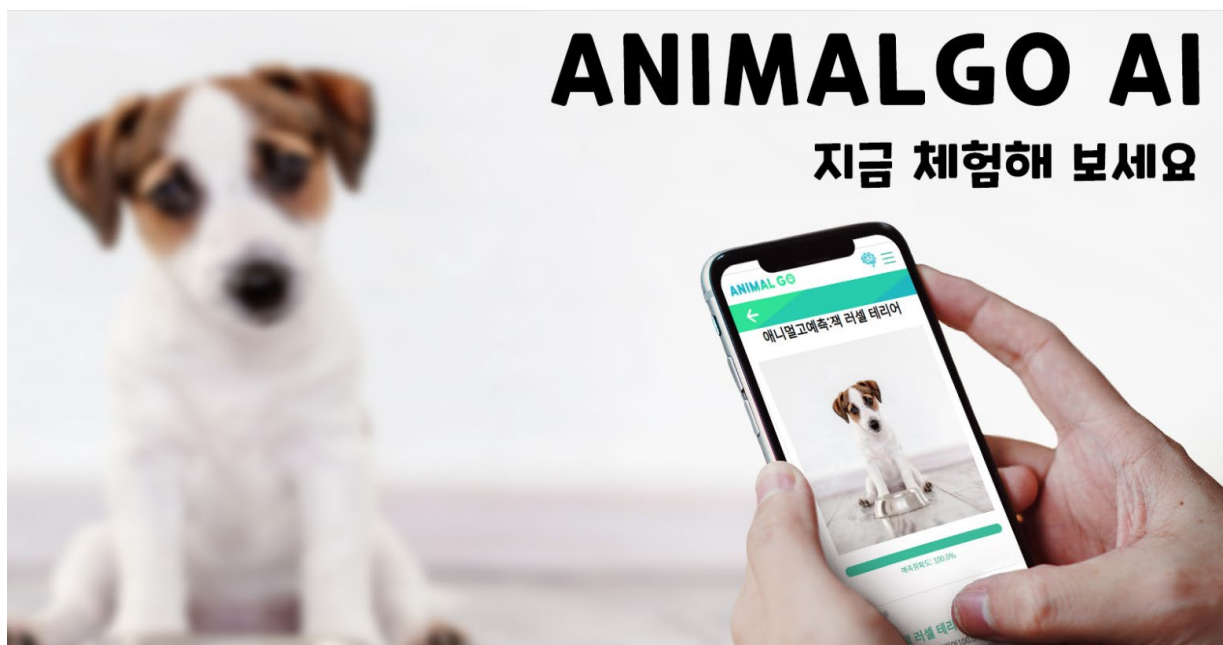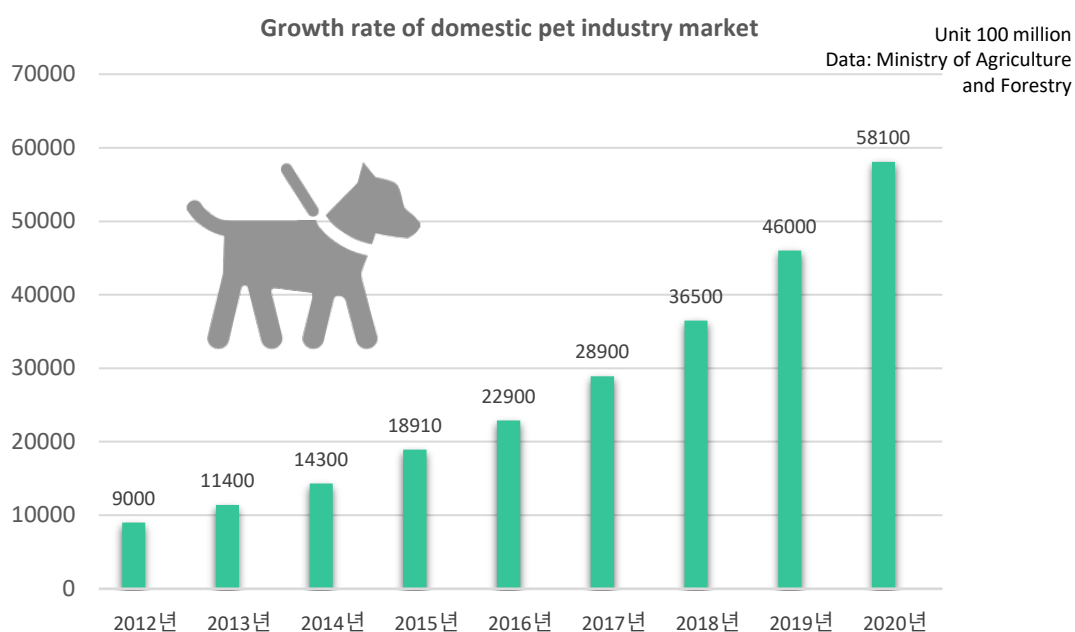
Background

Pet Industry Trend

Rising pets is becoming more and more popular because of improved income levels and an increase in households with one or two people.
We're sharing it. Some pets are treated as more than just companions, such as eating organic feed or eating products with red ginseng for their health.The size of industries related to pets is expected to surpass 3 trillion won in 2018 up from 0.9 trillion won in 2012.(KB Financial Group Management Research Institute's 2017 pet report)

The industry is also quick to respond in preparation for Pet+Economy. The related retail industry is open to the pet shop, which is a specialized shopping mall, and competitively releases premium feed and supplies. There are various, related industries that are derived from all areas that people enjoy such as pet kindergarten, pet taxi, pet household items, pet AI toys, pet hotel and cafe, CCTV, location tracking, and feed. This is done for the development of healthcare and the post-processing of pets for the treatment of chronic and degenerative diseases such as diabetes, high blood pressure and joint diseases caused by aging of pets. The market for burial mounds is also growing significantly, and as the market grows, IT technology is added to the pet industry, creating a new business that combines value-added and advanced content.

Growth rate of domestic pet industry market

Unit 100 million
Data: Ministry of Agriculture and Forestry

Year	Value
2012년	9000
2013년	11400
2014년	14300
2015년	18910
2016년	22900
2017년	28900
2018년	36500
2019년	46000
2020년	58100

ANIMAL GO app

AnimalGo is a reward-type pet community application that allows you to communicate and exchange information among your partners. It creates a warm social network among people of similar interests so that they can communicate closely and share information freely. It also introduces location-based technology to support local community activities and help users meet naturally on trails or parks.

Users can access the community anytime, anywhere via mobile apps or PC browsers.
Users can upload their pet photos and create postings. The more people respond to posts, the more valuable they are. This valuable information will be reimbursed via the GO Point (GOP).
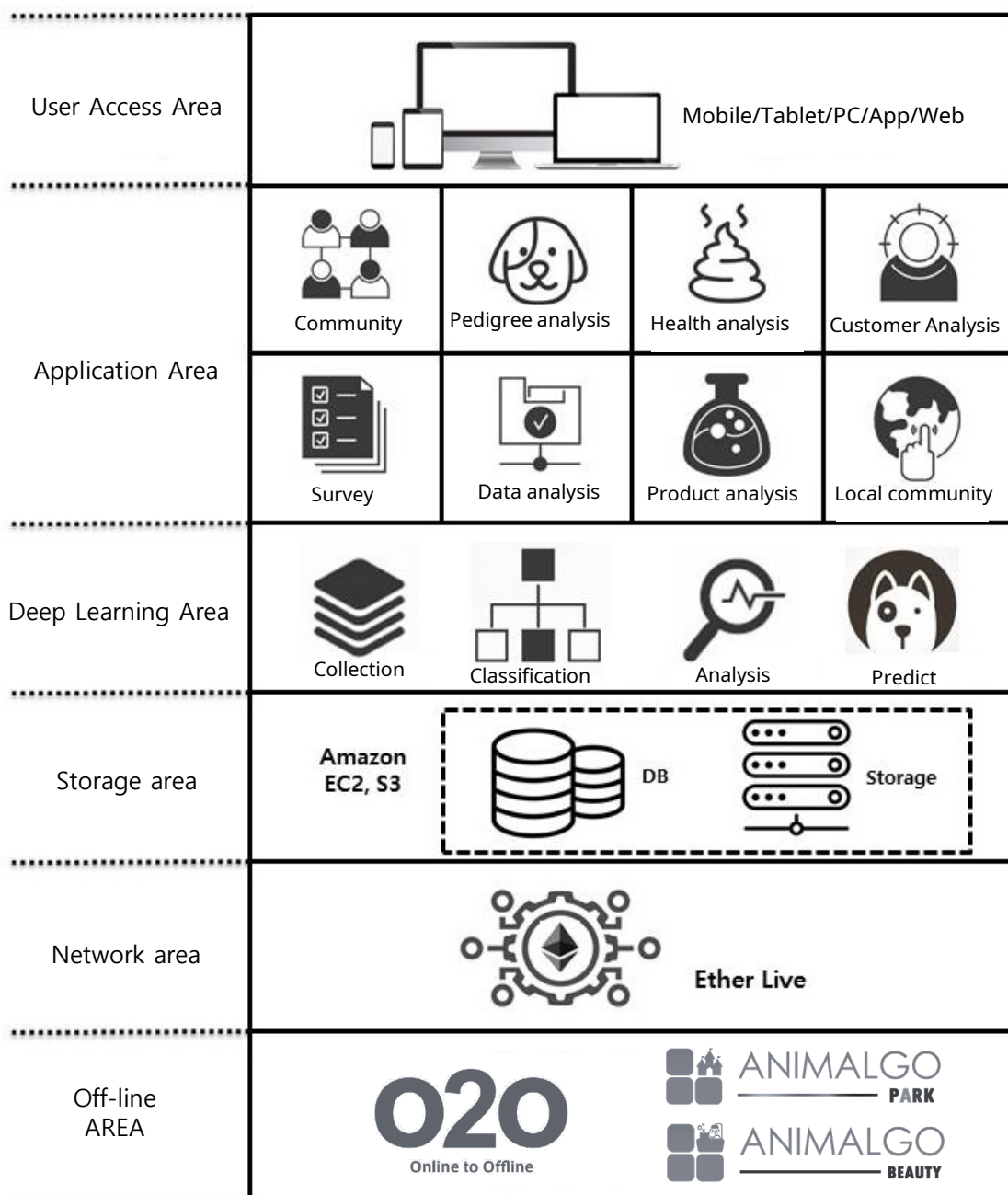
AnimalGo combines fun elements to encourage voluntary uploading and posting of photos. Using deep learning technology, it provides pedigree analysis and defecation analysis, recognizes images of dogs and cats, and provides pedigree information. In addition, the defecation analysis analyzes the bowel color, texture and distribution of the companion animal to analyze the overall health condition.

AnimalGo wants to expand its service gradually with the pet community as its primary axis. Pet insurance, pet sales, pet TV, pet animal hospital, pet food delivery, pet health products, pet wearables, pet funeral service, animal hospital information, pet care connection service, pet shopping mall and more will all be future option for growth. In these AnimalGo ecosystems, users can cash in on Go Point (GOP), a reward they have accumulated from their activities. Alternatively, GOPs can be exchanged for GoMoney crypto currency to be sold on the exchange.

AnimalGo is targeting the One Stop/All in One service application pet. We will start the service in Korea, but gradually expand it to a global service.

ANIMAL GO app

AnimalGo service consists of user areas that access apps and the web via mobile and PC, application areas where users freely use animations and services, health analysis using artificial intelligence technology, deep learning areas that perform pedigree analysis, storage areas that store posts and images uploaded by users, and blockchain network areas.

User Access Area		Mobile/Tablet/PC/App/Web
Application Area	Community	Pedigree analysis	Health analysis	Customer Analysis
	Survey	Data analysis	Product analysis	Local community
Deep Learning Area	Collection	Classification	Analysis	Predict
Storage area	Amazon EC2, S3	DB	Storage
Network area		Ether Live
Off-line AREA	O2O Online to Offline	ANIMALGO PARK / ANIMALGO BEAUTY

ANIMAL GO app

4.1User Access Area

Users can use the Anywhere service anytime through their mobile app or PC browser.
Reactive web enables seamless use on tablet PCs, as well as Android or iOS devices.
Users can upload and post their pet photos via mobile. Pet photos are uploaded at a small
capacity of tens of kilobytes to reduce upload time and wireless charges.

4.2 Application Area

Users can enjoy a variety of additional services provided by animal services. In addition to the
community function of writing posts and uploading photos, these additional services also allow
users to enjoy real-time services such as pedigree analysis and feces analysis. Add services
such as shopping to enjoy a rich, animal ecosystem. These services are continually added to
make them more animated and valuable.
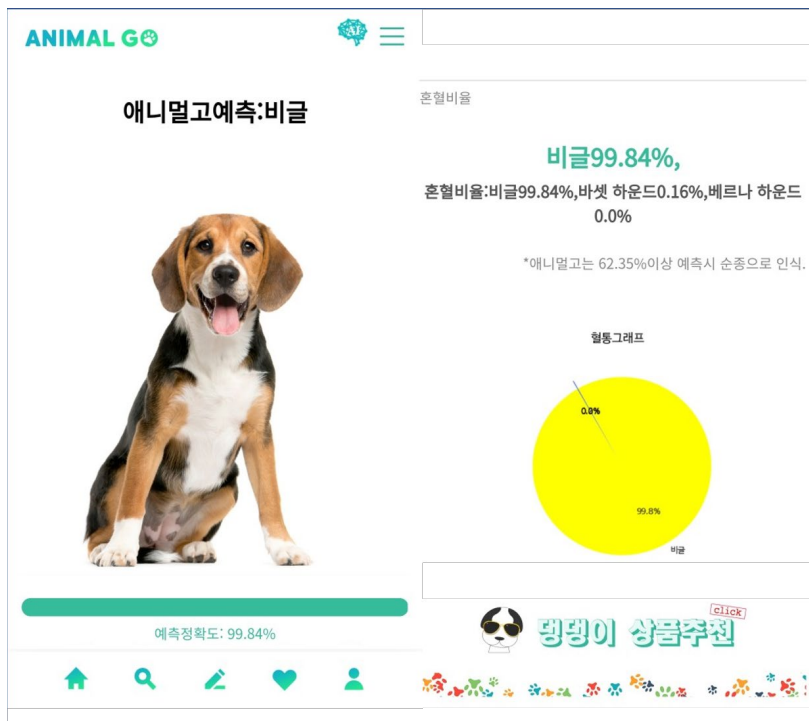
[Application pet recognition result screen]

4.2 Application Area

4.2.1 Community Function

It's a signature feature of AnimalGo. Users upload photos of their pet and write postings through mobile apps and PC browsers. The more 'like' comments you receive, the more valuable content you receive. Reading posts will perform a curation function that is recommended as a good content through voting. The more you get, the more valuable the community becomes. Both the users who post the content and the voters who perform the curations will receive GOP rewards for their contributions to the community. Posts uploaded by the user are stored in the DB, the hash is extracted, and stored in the blockchain. Because such postings are not subject to revision or deletion, they can be a means of proving 'originality' if someone uses them indiscriminately. And, if they are illegally copied and posted, they will be held responsible for the postings through 'declaration' among users.
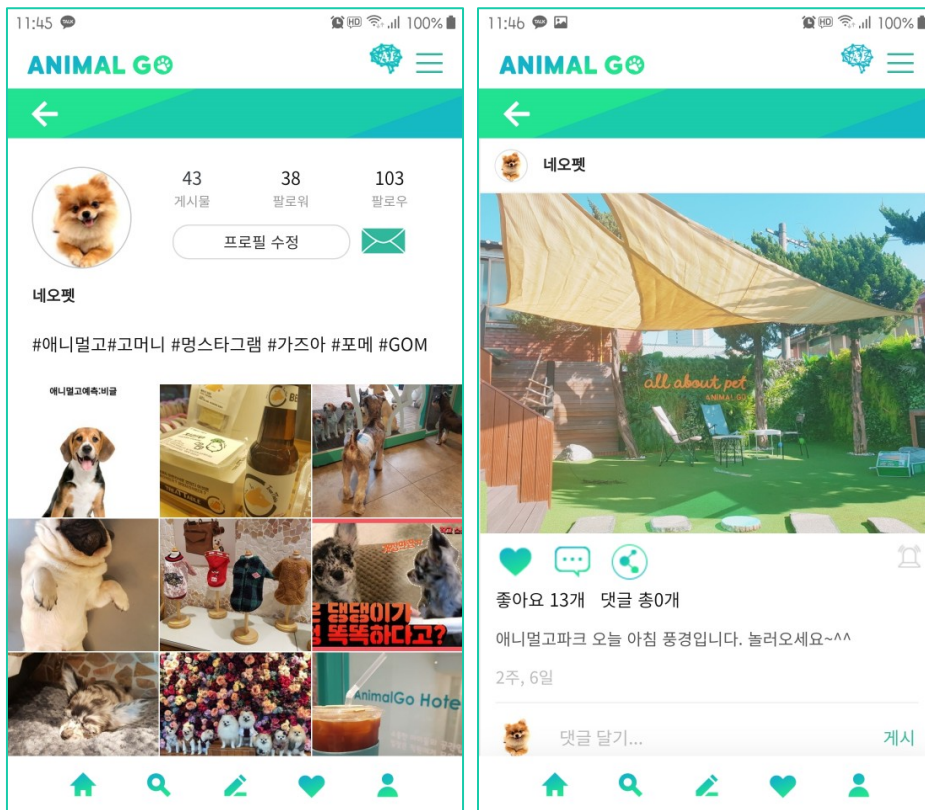

[Application Community Screen]

ANIMAL GO app

4.2 Application Area

4.2.2 Pet Pedigree Analysis Function

Pet images posted by users can be analyzed for pedigree using deep learning technology. Not only do you recognize the bloodline of dogs, cats, and so on, but you can also predict the rate of deep learning technology becomes more sophisticated and accurate as learning data grows. The bloodline analysis naturally leads the user to upload images of their companion animals. Other pet-related applications receive passive entry of the kind of companion animal when subscribing from the user, while the AnimalGo App uploads voluntarily through the fun element. These accumulated photographic images become learning data for deep learning and allow us to take a good circle that further enhances the accuracy of our analysis.

Photograph → Recognition → Result
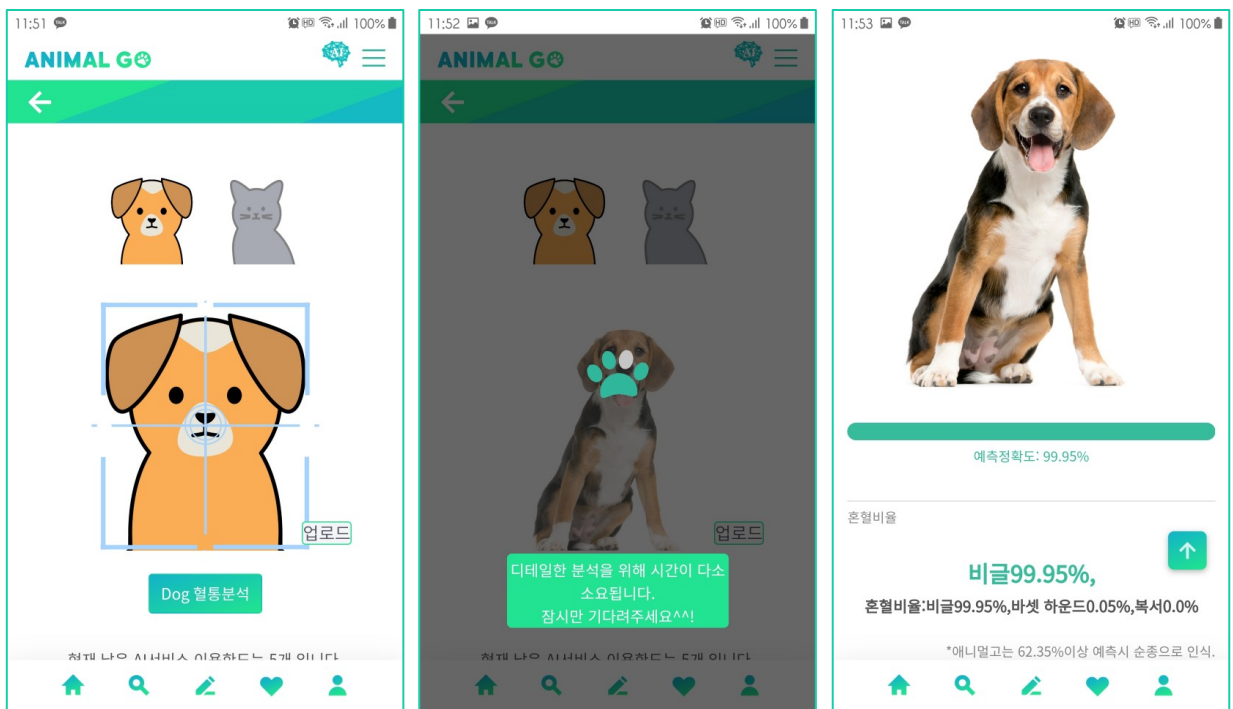
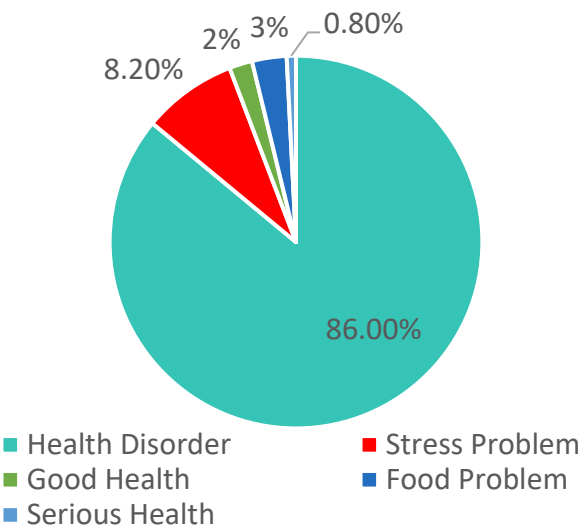[Pet Practical Analysis Results screen]

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ANIMAL GO app

4.2 Application Area

4.2.2 Pet Health Analysis

Analyze health status tracking the defecation of your pet. Whether the texture is hard, thin, dark or bright, it provides information on their health and users can change their feed properly. Or you can take preemptive action, such as looking for an veterinarian. If pet pedigree analysis is only a once-in-a-lifetime element, pet health analysis is a service that depends on the results of your health analysis, you can either recommend suitable feed or introduce a reputable animal hospital.

Defecation analysis graph

2% 3% 0.80%

8.20%

86.00%

- Health Disorder
- Stress Problem
- Good Health
- Food Problem
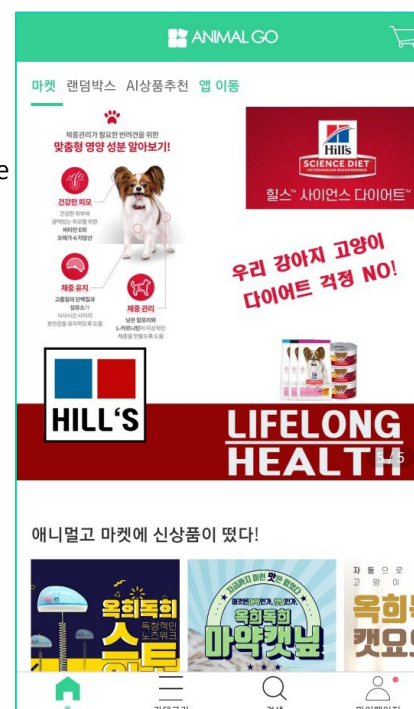- Serious Health

[Pet Health Analysis Screen]

ANIMAL GO

4.2 Application Area

4.2.4 AI Product recommendation

Based on the data accumulated from the bloodline,

Recommend AI-tailored products to users.

비글은 당뇨에 약합니다. 사람이 먹는 음식을 주지마시
고 균형있는 사료를 추천합니다.

추천상품

우리 강아지에게 딱!

R 패키지

B패키지(스트레스 OUT 패키지)

4.2.5 AnimalGo Market

Animal Go Market sells everything about pet.

Funeral services, beauty, business pleasure, insurance

 (Samsung Fire & Marine Insurance),

There are all about for food, toys, dolls, houses,

snacks, and health products..

ANIMAL GO

마켓 랜덤박스 AI상품추천 앱 이동

제중관리가 필요한 반려견을 위한
맞춤형 영양 성분 알아보기!

건강한 피모

체중 유지

체중 관리

Hill's
SCIENCE DIET

힐스™ 사이언스 다이어트™

우리 강아지 고양이
다이어트 걱정 NO!

HILL'S

LIFELONG
HEALTH

애니멀고 마켓에 신상품이 떴다!

옥희독희
스

옥희독희
마약캣닢
★★★★

옥희독
캣요요

홈   카테고리   검색   마이페이지

4.2 Application area

AnimalGo Game

ANIMAL GO app

4.3 Deep Learning Area

AnimalGo App uses deep learning artificial intelligence technology to provide fun and benefits to its partners. When users upload pet photos, they recognize the pedigree of the pet and analyze the pet's bowel movements to analyze its health. The more pictures you upload, the smarter the app becomes.

4.4 AnimalGo Deep Learning Technology Overview

AnimalGo pet recognition utilizes deep learning convolution neural network technology(CNN) . Because deep learning is based on a variety of data, building big data must be a priority. To that end, AnimalGo's team built a big data center. As of Jun 2019, AnimalGo has collected 174 dogs, 40 cats, 50 fish, and more than 2 million images for human facial recognition. For reliable and accurate analysis, sustained images must be accumulated. AnimalGo adds a fun element to naturally upload images. These images are used as big data to learn about AnimalGo so that it can be analyzed quickly. This circle structure encourages users to upload images more voluntarily. In addition, images uploaded using blockchain technology are permanently and constantly stored, which can be used to prove ownership of the uploaded user.
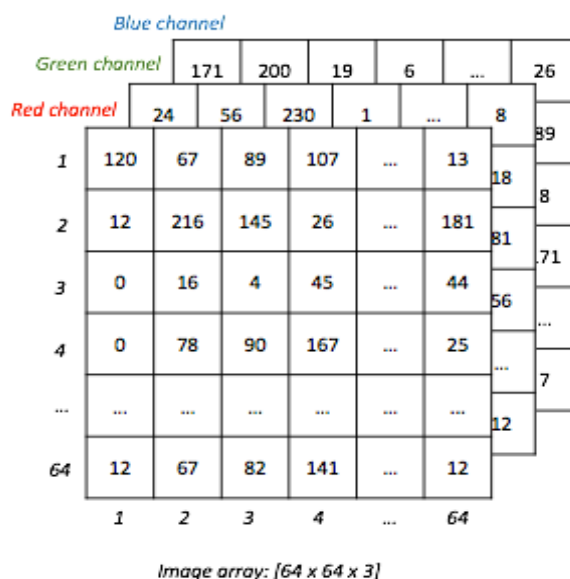
[Results of pet pedigree recognition]

4.5 Pet Pedigree Recognition Process

The pet pedigree recording process is as follows:

1) The Python numpy matrix displays images in numbers.

2) The matrix is a three-dimensional pixel RGB (red, green, blue) size 64X64, 224X224, 256X256.

3) Enter several sizes to remove the pet's nose, ears, hair, size, teeth, and tongue and analyze them separately.

4) Anonymous and neural networks that have learned pedigree from existing big data

comprehensively judge pet's ears, nose, eyes, face shape, size, color, tongue, etc. to predict pet's pedigree.

Neural networks form multiple combinations of convolution neural networks(CNN), each looking at the ears, nose, teeth, nose, and so on, and measuring the pet's father's connection to mother and similarity, and finalizing the pedigree recognition results.


[Pet bloodline recognition process using CNN technology]

4.6 Pet Pedigree Recognition Technology

For pet bloodline recognition technology, VGG networks for Large-Scale Image Recognition (K. Simonyan, A. Zisserman) were used for the first time by Oxford researchers. However, as technology continues to develop, various performance neural networks such as RESNET, Mobilenet, Xception, and Inception have started to emerge, and the team is using these neural network technologies by customizing them.

Refer to Technical Code in the white paper(P.27) for details.
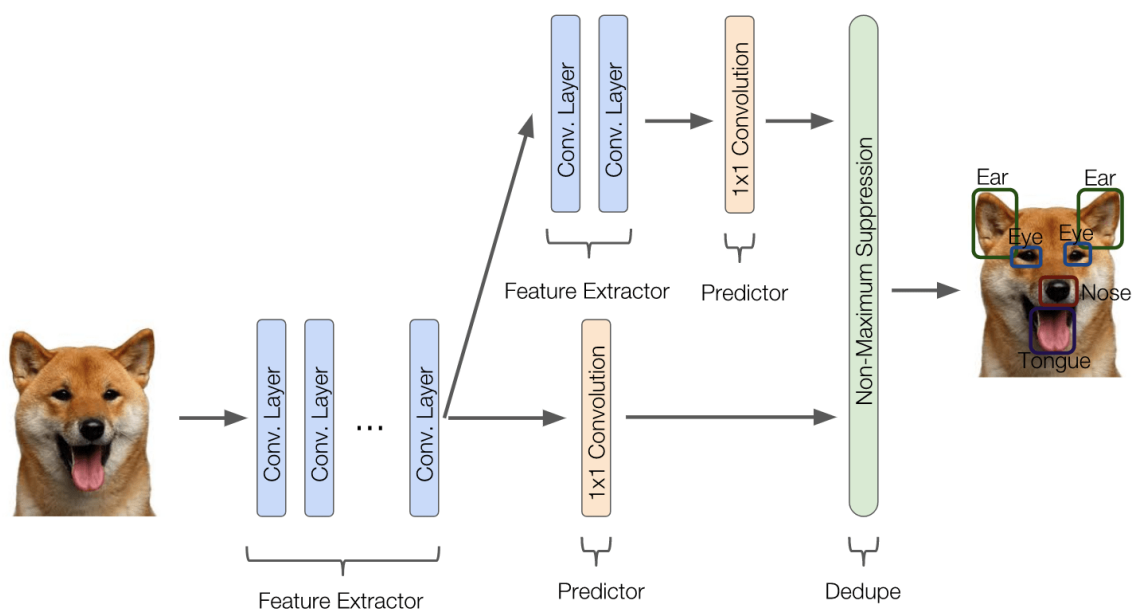
[Pet bloodline recognition technology by Custom networks]

4.5 Blockchain and Storage Area

For photos and comments uploaded by users, the address is stored in the DB and the storage area. The hash values obtained through the hash algorithm are permanently stored in the blockchain. This will serve as a witness to the originality of the post. Photos and articles stored are used as deep learning data for analyzing customer behavior, pet pedigree, and health analysis information. Blockchain, DB, and storage are securely stored using Amazon AWS's S3, and AWS securely stores customer data with security and redundancy and ensures full-time availability 24/7/365. DB will count 'OK' in the user's post at midnight to perform the appropriate compensation according to the point policy. Compensation is provided for the activities of users such as membership, birthday, recommendation, meeting opening, voting, and survey. Points obtained through the activity can be spent for services such as shopping malls, healthcare, pet hotels, and pet dogs, or converted to a GOM2(Gomoney token) through the exchange site.
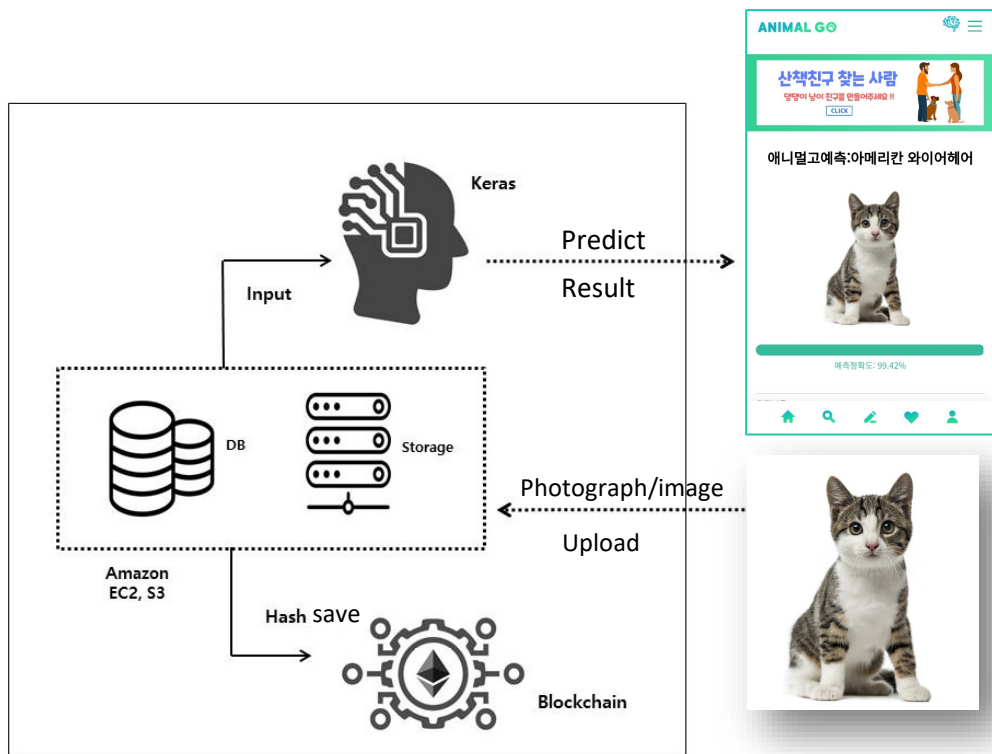
[Blockchain and Storage Area]

5.1. AnimalGo Service Operations

Community Operations

The AnimalGo Community referred to Steamit, but established and operated its own reward system. Steamit presented a successful model as a compensatory community, but users complained of a variety of inconveniences in their use.

As a case in point, membership is very difficult in itself and you have to wait a few weeks for approval after signing up. Because your login ID is blockchain address, it's easy to see a failure if you didn't save it when logging out. Making it so difficult may have helped prevent the indiscriminate e-mailing of IDs, but it has caused great inconvenience. It is also frustrating to have to wait 13 weeks to complete the swap of steam power for steam. AnimalGo supports easy sign-in through SNS login, and personal information collection is only entered in certain services such as shopping.

By default, the user logs in to the application every day to gain points.

When you log on to Instagram, Facebook, and Twitter, you can add up the "like" value that you acquired during the day before and provide points created. This is intended to encourage and activate the community. The user AnimalGo application allows for upload of photos and completing the post anytime, anywhere. Participants in the community will conduct a curation process to evaluate the quality of the content through a 'yes' vote, and both the publisher who created the content and the voter who participated in the curation will be rewarded by pre-determined regulations as they have contributed to the development of the community. If content was stolen from other people' s ~~works~~ or if you post content that undermines the well-being ~~of~~ society, the complainant who 'reported' will also be rewarded. Users can open meetings and organize clubs or community gatherings. It also provides points for activities that enrich the community.

If points are accumulated, they will gain an advantage. The number of content you can publish per day increases and you get additional bonuses based on the point top rank interval. Voting rights for posts are also increased. Points can be increased by switching them after purchase.

5.2 Participate in surveys, product tests and events provided by enterprises

Users will voluntarily participate in surveys or events hosted by the company and will earn compensation from the company. It can be a marketing survey, product planning survey, product beta test, event of spent operation creation, and volunteer meeting.

5.3 Marketing Materials Available

Users will obtain points through the company or AnimalGo if they provide data for the marketing they need. The data provided is limited to commercially available marketing data, not personal sensitive information, and may be bioinformatics, healthcare information, shopping lists, etc.

5.4 Using Points

Users can use the points (GOP) gained through the activity in AnimalGo ecosystem. AnimalGo ecosystems span the entire life cycle of companion animals.

It covers the birth and sale of pets, the life of the owners, welfare, and after-sales service. Specifically, pet sales, pet health care, animal hospital, caregiver, walking friend, pet food, health care item, pet wearables, funeral service, pet insurance, shopping mall, etc. are all covered. This can be found in the white paper AnimalGo Ecosystem chapter. The points gained from the activity are animal and can be used in combination with the points and cash in the ecosystem. The details of GOP use can be inquired in weeks, months, three months, and six months, and the points can be sent to the human body.

5.5 Points to Token Exchange

You can convert points (GOP) to take money on the exchange rate of the day on the Exchange Bank site. Tokens are gradually listed for trading on the commercial coin exchange, and GOP-to-GOM2 exchange history is managed as history.
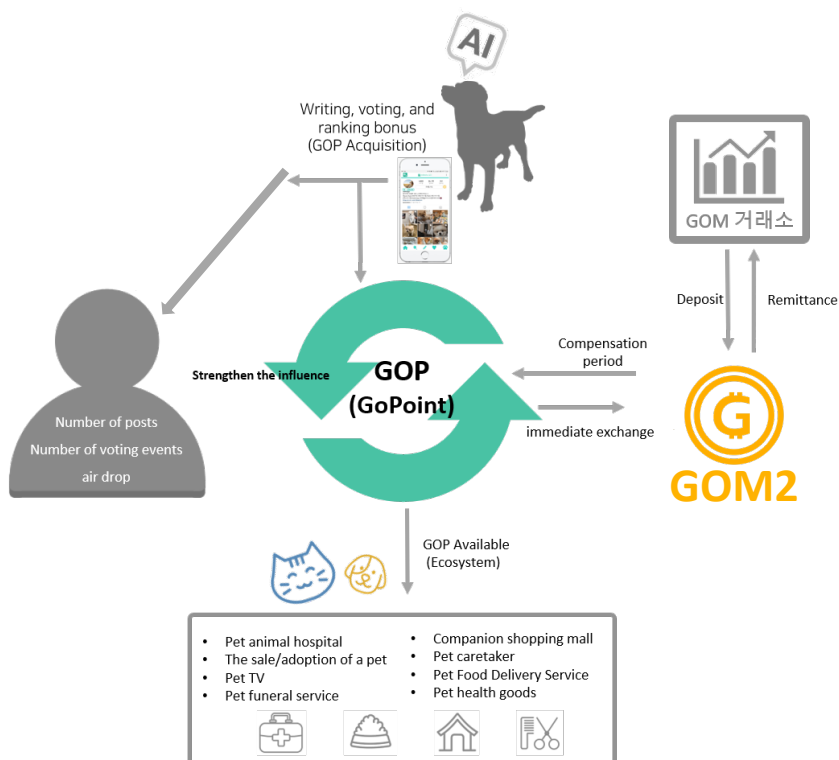
6.GOP & GOM2 Policy

6.1 Overview

The three values that are common in the AnimalGo ecosystem consist of GoPoint (GOP), GOM2 (GoMoneyToken2) operated by the blockchain, an indicator of contribution within the platform..

GOP(GoPoint): GOP is convertible to GOM2 and can be acquired through community activities (writing, good/thinking, etc.) and represents an animal and platform contribution. GOP is used as an influence indicator for the community, and GOP acquired or purchased can be used as a means of payment in the Deepmall on the AnimalGo platform. If the GOP holder wants to tokenize, he or she can switch to GOM after a reward period.

GOM2(GoMoney2): The bear is a means to purchase the GOP (Go point) required for community activities and can exchange the GOPs acquired through the activity for cryptocurrency. Cryptocurrency can be traded between individuals through the market exchange.

[Overview of GOP, GOM and GEX policies]

[Samsung Blockchain Wallet]

6.GOP & GOM2
Policy

6.2 Acquisition and use of GOP

6.2.1. Acquisition of GOP

Participants in an AnimalGo platform can obtain GoPoints (GOP) in two ways:

First, it is acquired through active participation on an AnimalGo platform. Participants acquire GOP in a variety of ways, such as providing their own information within the app, creating valuable content themselves, or contributing to the community's midnight action through voting.

1) Content creation: Users can create content (letters or images) and obtain GOP as a result of curation activities from other users.

Content created by the user is evaluated according to the voting of other users on the platform and rewards are given according to the number of votes received.

2) Vote (yes/no): Users like/dislike content posted. Your vote contributes to the screening of valuable posts through curation within the community. Users who participate in ~~the~~ voting will be compensated accordingly. Second, through exchange between GOM2 and GOP. If you purchase GoMoneyTokens (GOM2) through the exchange, you can obtain a GOP. The exchange rate between GOM2 and GOP is affected by the GOM2 exchange rate on the same day.

6.2.2 Use of GOP

In AnimalGo, GOPs are available in a number of ways:

1) Voting Power: When platform participants are voting, the voting power they exercise is proportional to their GOP holdings.

The voting power generated by the GOP helps to curate quality content in the community.

2) Purchase of goods: Participants can supply items from the pet shopping mall through GOP.

We will continue to add affiliate services to diversify our point usage.

3) GOM2 Exchange: GOP can be exchanged for GOM2 at the request of the participants who own it, and is liquidated after a fixed period of seven days after the request. The reason for this fixed period is to maintain constant exchange rates through the stable retention of GOPs and to protect point holders from sudden fluctuations in the market.

If held, it is considered to contribute to the platform as a community activity.

4) Airdrop: Depending on the amount of GOP reserves, GOP can be obtained in proportion to the airdrop.

6.GOP & GOM2
### Policy

6.8 Why use blockchain?

1. Coin compensation, motivation - AnimalGo rewards users in pet SNS activities and games. It's motivated by the ability to cash in. It's benchmarked Crytokittyes, Cowclicker which is compensated SNS stream that paralyzed Etherium.

2. Blockchain, Game Interaction - There are countless characters in the AnimalGo game. Each time a new block was created, items, backgrounds, and characters were created according to the value of Nonce, enabling the character to be unique and existential. User-to-user trading is also possible, but it's like the exchange block is being traded.

3. Blockchain, Deep Learning Interworking - AnimalGo has AI technology services such as pet awareness. Image data is required for deep learning. Image like this can be a problem with copyright. Therefore, the customer's SNS and deep learning use images are saved in blockchain and then ownership is proved. in exchange for a reward Used for deep learning
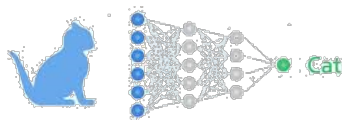

4. Composition of Ecosystem by Coin Use – By using GOM2 Token, consumers who use GOM2Token products or services within the ecosystem can receive discount benefits when purchasing GOM2Token and use it as a marketing and customer attraction for merchants.

6.GOP & GOM2
Policy
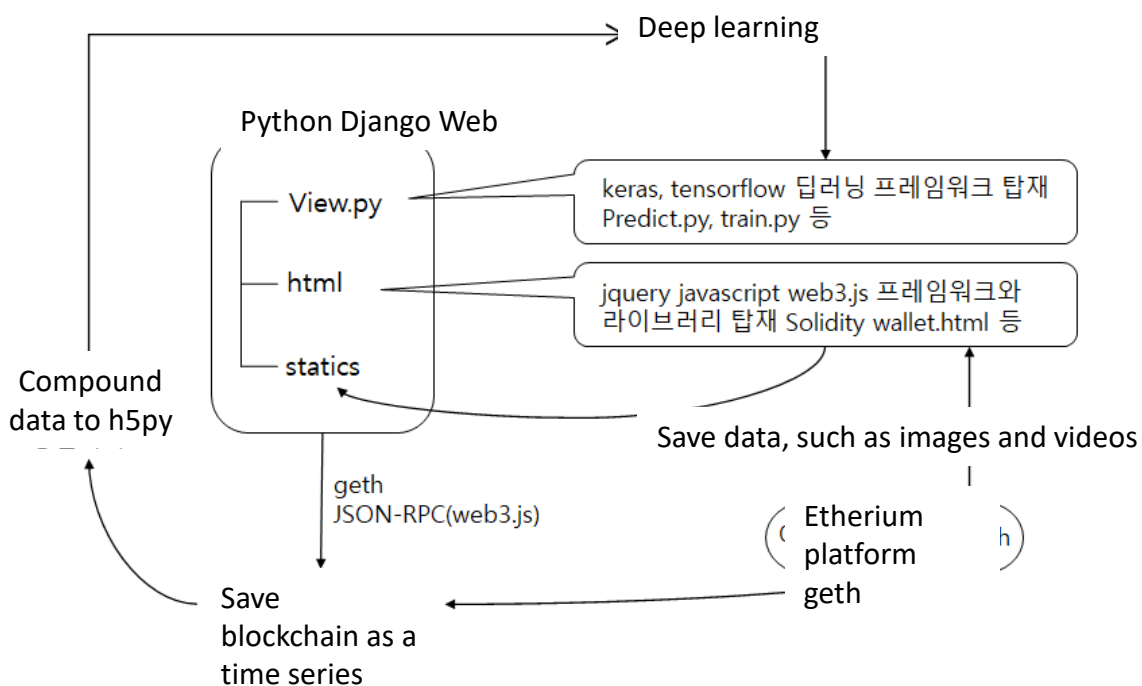
6.4 Samsung Blockchain Wallet
Registration for use of GOM2 Token in Samsung Blockchain Wallet from Samsung Electronics Galaxy 10. Samsung Electronics' latest mobile phone users can use GOM2 safely and conveniently
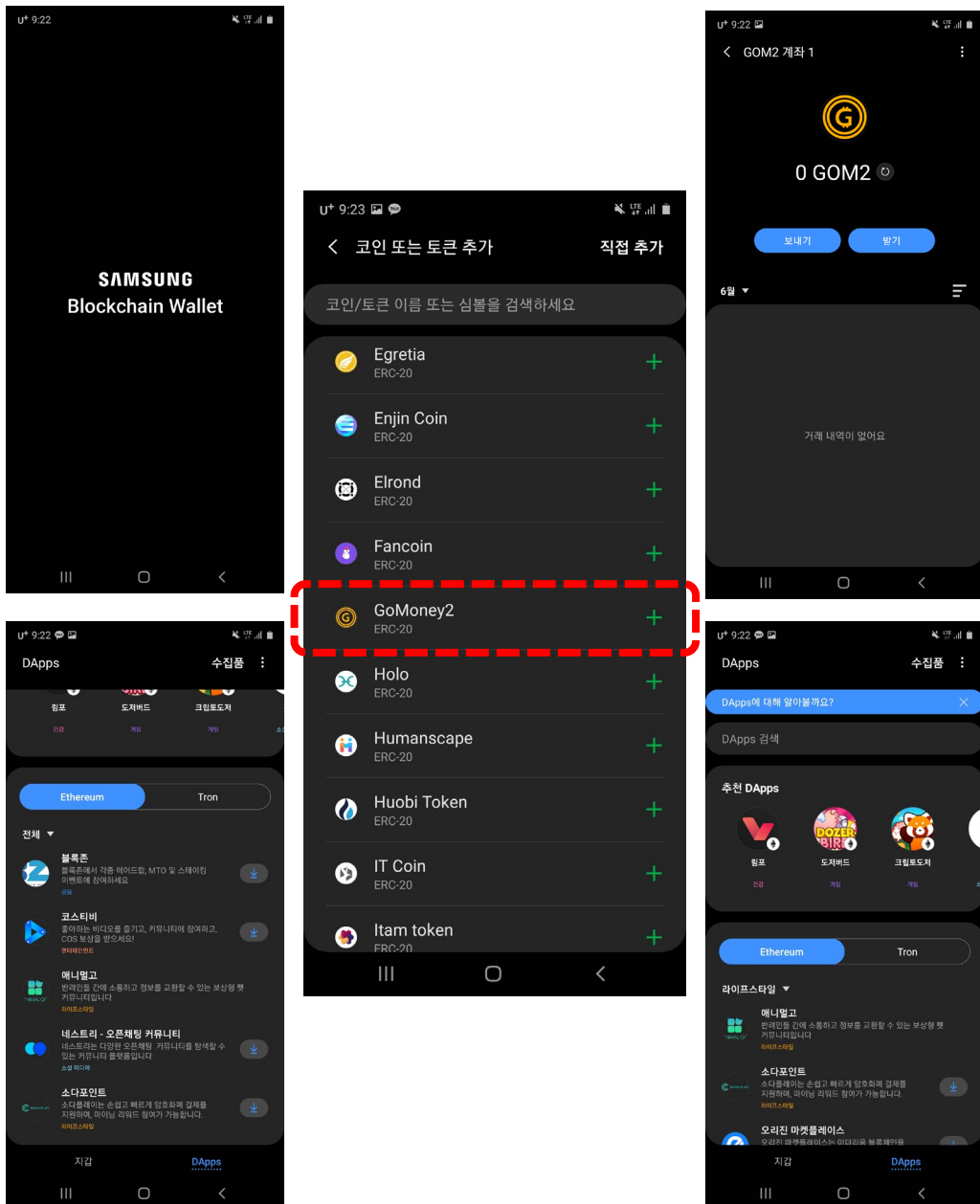
Technology

Technical Code

AnimalGo App used Keras and Tensorflow deep learning framework for pet bloodline analysis and defecation analysis. Images uploaded by the user are stacked on the server and permanently stored in a blockchain network based on ERC-20 by extracting hash values. This clearly identifies ownership of the user's uploaded image. Images accumulated on the server are again used as learning data for deep learning to improve accuracy.

Deep learning

Python Django Web

- View.py
- html
- statics

keras, tensorflow 딥러닝 프레임워크 탑재
Predict.py, train.py 등

jquery javascript web3.js 프레임워크와
라이브러리 탑재 Solidity wallet.html 등

Compound
data to h5py

Save data, such as images and videos

geth
JSON-RPC(web3.js)

Etherium
platform
geth

Save
blockchain as a
time series

There are four service targets using artificial intelligence deep learning technology:

①pet recognition ② defecation analysis ③ tooth analysis ④ voice analysis

① pet recognition ② defecation analysis ③ Tooth analysis uses Keras, an open source library. Among them, we used the VGG16 neural network as a basis and did optimization after Customization.
As of Jun 2019, As of June 19, 174 dogs and 40 cats have been categorized.

7.기술코드
Technology

④Voice analysis uses Python's Scipy library and analyzes the library's voice wav file.

What is Scipy? It's an efficient collection of numerical algorithms used in areas such as signal processing, integration and optimization, and statistics.

For voice analysis, the fftpack module is used in the scipy library, and this module is used for frequency analysis and we will briefly explain it.

In Python, Fourier transforms can be done using module fftpack, and Fourier transforms (FT) are the frequency components that make up the function (or signal) for time.

Voice analysis currently analyzes frequencies with stress, good, alert, scared, and demand to produce results out of five.

Defecation analysis, voice analysis, and tooth analysis, which are classified as pet healthcare, are relatively less sophisticated than pet recognition technology, as they are relatively difficult to obtain learning data for deep learning. We continue to improve our learning data and code.

Deep Learning's machine learning (as a result of that) is expected to reach a significant level, depending on how sophisticated learning data is and how abundant learning data is (big data). This is a battle with learning data.

Below is the code for learning images and modeling about pet recognition.

The file uses two(load_deepton.py and train_animalgo.py) to create a learning model.

①**load_deepton.py** (because code composition is the same, only the 1st codes for the

1st and 2nd categories are disclosed)

```
from sklearn.cross_validation import train_test_split
import pymysql.cursors
import numpy as np
from PIL import Image
import os, glob
import os.path
def image_1cha():
animal_dir="./1Cha"
categories = ["dog","cat","human", "fish" ]
nb_classes=len(categories)
```

```
image_w=224
image_h=224
x=[]
t=[]
for i,idx in enumerate(categories):
        label=[0 for k in range(nb_classes)]
        label[i]=1
        image_dir=animal_dir+"/"+idx
for dirname,subdirs,file in os.walk(image_dir):
        files=glob.glob(image_dir+"/*.jpg")
for j,f in enumerate(files):
try:

        img=Image.open(f)
        img=img.convert("RGB")
        img=img.resize((image_w, image_h))
        data=np.asarray(img)
        x.append(data)
        t.append(label)
        img.close()
        print("good")
        print(j)
except:
        print("can not")
        x=np.array(x)
        t=np.array(t)
x_train, x_test, t_train, t_test = train_test_split(x,t,test_size=0.2, random_state=33)
return x_train, x_test, t_train, t_test
```

7.기술코드
Technology

②train_aniamalgo.py (Code for creating a learned neural network model)

```python
import numpy as np
import tensorflow as tf
import load_miracle as lm
from keras.layers import *
import matplotlib.pyplot as plt
from keras.optimizers import SGD
from keras.models import Sequential
from keras.callbacks import ModelCheckpoint, EarlyStopping


categories = ["dog","cat","human", "fish" ]
nb_classes=len(categories)
with tf.device('/gpu:0'):
x_train, x_test, t_train, t_test=lm.image_1cha()
x_train = x_train.astype("float32")
x_test = x_test.astype("float32")
x_train /= 255
x_test /= 255


print(x_train.shape)
print(x_test.shape)
```

7.기술코드
Technology

```
#1
model=Sequential()
model.add(ZeroPadding2D((1,1),input_shape=x_train.shape[1:]))
model.add(Conv2D(64,(3,3),activation='relu'))
model.add(ZeroPadding2D((1,1)))
model.add(Conv2D(64,(3,3),activation='relu'))
model.add(MaxPooling2D((2,2),strides=(2,2)))
model.add(ZeroPadding2D((1,1)))
#2
model.add(Conv2D(128,(3,3),activation='relu'))
model.add(ZeroPadding2D((1,1)))
model.add(Conv2D(128,(3,3),activation='relu'))
model.add(MaxPooling2D((2,2),strides=(2,2)))
model.add(ZeroPadding2D((1,1)))
model.add(Conv2D(256,(3,3),activation='relu'))
#3
model.add(ZeroPadding2D((1,1)))
model.add(Conv2D(256,(3,3),activation='relu'))
model.add(ZeroPadding2D((1,1)))
model.add(Conv2D(256,(3,3),activation='relu'))
model.add(MaxPooling2D((2,2),strides=(2,2)))
model.add(ZeroPadding2D((1,1)))
#4
model.add(Conv2D(512,(3,3),activation='relu'))
model.add(ZeroPadding2D((1,1)))
model.add(Conv2D(512,(3,3),activation='relu'))
model.add(ZeroPadding2D((1,1)))
model.add(Conv2D(512,(3,3),activation='relu'))
model.add(MaxPooling2D((2,2),strides=(2,2)))
#5
model.add(ZeroPadding2D((1,1)))
model.add(Conv2D(512,(3,3),activation='relu'))
model.add(ZeroPadding2D((1,1)))
model.add(Conv2D(512,(3,3),activation='relu'))
model.add(ZeroPadding2D((1,1)))
model.add(Conv2D(512,(3,3),activation='relu'))
model.add(MaxPooling2D((2,2),strides=(2,2)))
```
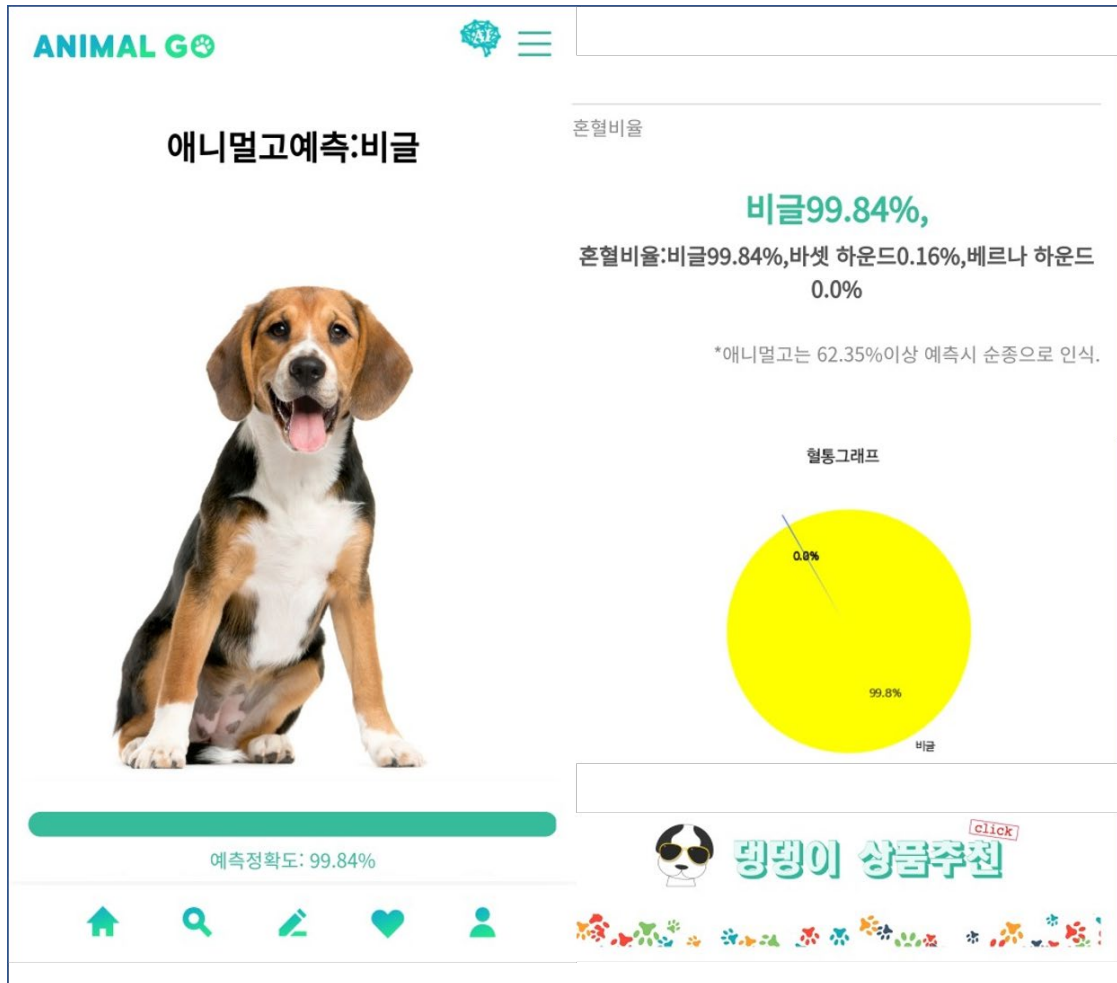
```python
model.add(Flatten())
model.add(Dense(4096,activation='relu'))
model.add(Dropout(0.5))
model.add(Dense(4096,activation='relu'))
model.add(Dropout(0.5))
model.add(Dense(nb_classes))
model.add(Activation('softmax'))
model.summary()
sgd = SGD(lr=0.001, decay = 1e-7, momentum=0.9,
nesterov=True)
model.compile(loss='categorical_crossentropy',optimizer=sgd,
metrics=['accuracy'])
early_stopping = EarlyStopping(monitor="val_loss",
min_delta=0, patience=10, verbose=0, mode="auto")
history = model.fit(x_train, t_train, batch_size=32, epochs=100,
verbose=1, validation_split=0.2, callbacks=[early_stopping])
score=model.evaluate(x_test,t_test, verbose=1)
print('loss=',score[0])
print('accuracy=',score[1])
animalgo10_params = "./model_1Cha.h5py" #storage  route
model.save_weights(animalgo10_params) #storage
plt.plot(history.history['loss'])
plt.plot(history.history['acc'])
plt.title('1Cha')
plt.ylabel('Acc')
plt.xlabel('Epochs')
plt.legend(['loss', 'acc'], loc='upper left')
plt.show()
```

Technology

Recognition Result

ANIMAL G☺

애니멀고예측:비글

혼혈비율

비글99.84%,

혼혈비율:비글99.84%,바셋 하운드0.16%,베르나 하운드 0.0%

*애니멀고는 62.35%이상 예측시 순종으로 인식.

혈통그래프

0.0%

99.8%

비글

예측정확도: 99.84%

댕댕이 상품추천 click

Technology

Recognition Result

Allocation

The total number of issues was 10 billion, but as GOM2 was hard-forked, the number of issues decreased to 1 billion.
(November 2019)

20% sale

10% project team

5% advisor

**5% marketing**

50% for ecosystem configuration

10% storage (reserve)

1.Archive (reserve) is for emergency use only.

2.The token distribution plan included in the white paper can be changed depending on the progress of the project roadmap, changes in the situation related to technology development, and other changes in circumstances that may affect the issuance and distribution of tokens. Animalgo can notify the reasons for the change through the website and e-mail the participants.

3.GOM2 that belongs to the project team after being used in the remaining sales volume or in the animal and ecosystem may be distributed through the exchange or sold to a third party depending on the incineration or the team's financial situation.

- ■ Sale
- ■ Project team
- ■ Advisor
- ■ Marketing
- ■ For ecosystem composition
- ■ Storage(reserve)
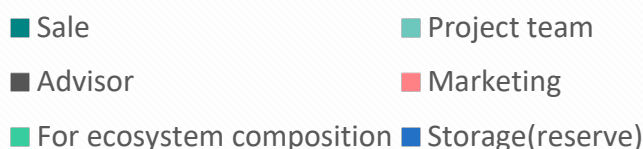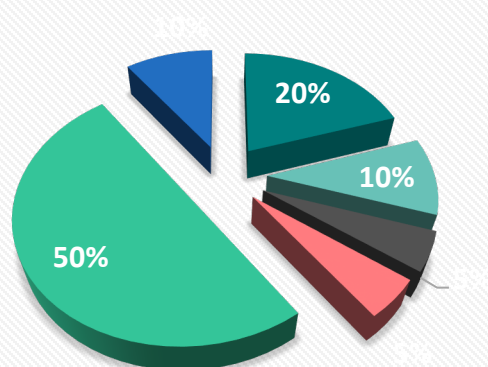
Allocation

The plan to use 20% of the money for sale is as follows.

Application R&D costs – We will use the costs of upgrading business models, security and office operations such as adding research and development staff to the team, developing application functions, collecting user data for deep learning, and developing refining, delivery, and corporate services. It will also be used to recruit more people for local development and testing, develop localized applications, and expand servers for global expansion. The AnimalGo Team will implement the MVP in April to serve it as a mobile app.

Server management, operational costs – We will spend money on the project team's server operation and management operations staffing, building and operating service personnel and customer centers to meet customers needs.

Build Alliance Services – We will use expenses, such as establishing an Alliance Services Partnership for the Ecosystem. Affiliate services will be a whole pet business, including pet hospitals, health care, walking friends, food, shopping, supplies, hotels, cafes, shopping, caregivers, funerals, wearables and TVs.

Legal, Accounting Costs – will be used to receive legal advice and accounting advice to suit the legislation and practice of each country.

The plan for using 5% of the Gomoney marketing fee is as follows.

Marketing costs – As the pet industry is growing exponentially and competition is expected to grow, we will do marketing activities such as advertising and promotional activities to help applications take the lead in the market quickly, and we will be working on and off-line to ensure this.

※ Allocation and use plans may vary depending on the project team and the situation of the Gomoney project.

Marketing Plan

In order to activate the pet community, users must constantly be introduced and 'Like' posts must be generated. In order to bring in users, AnimalGo's team wants to promote high-efficiency marketing at low cost in the mid- to long-term.

Incentive (GOP) is provided when logging in to SNS

When Facebook, Instagram and Twitter users log in as of the previous day, they provide an incentive, GOP, based on the 'Like' number of posts, to motivate them to log on daily. This will encourage you to upload pictures or vote on other people's posts.

Promote the online community

Low-cost online communities and social marketing are used efficiently more than expensive public networks and advertising media. Online pet related communities, such as cafes, Facebook, Instagram, and sites, continue to promote animations and hold app launch events. Events can be performed for airdrop events, upload user pet product presentation events, and so on depending on event.

Influence marketing

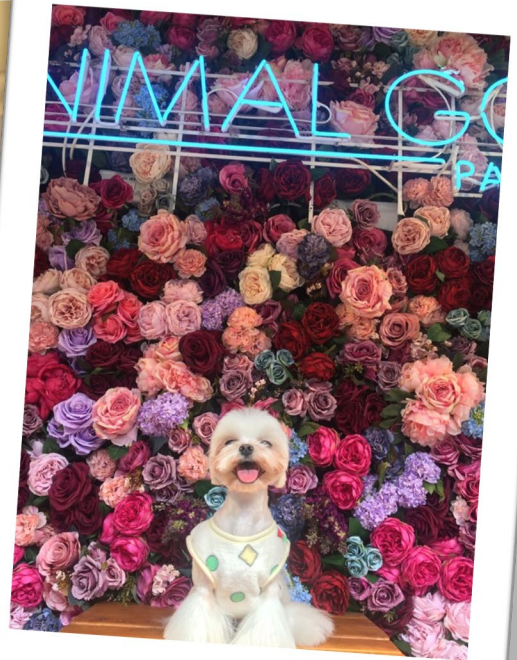Promote AnimalGo through the Power YouTuber and Power Blogger and host the event.

An industry-academic regiment

We promote AnimalGo in connection with the industry such as pet beauty, fitness, shopping, etc., pet related institutes, universities, pet research institutes, and institutions. To create an app ecosystem, we partner with industries and academia to continuously invite influential people as advisors to strengthen cooperation.

Participation in an exhibition

Promote apps and host membership events for pet industry-related famous exhibitions, fairs, and conferences.

9. 마케팅 계획
Marketing

10. Ecosystem
Ecosystem

Pet Healthcare

Pet insurance

Pet Hotel./

AnimalGo Game

ANIMAL GO Ecosystem

Pet Hotel./

Walking friend

Pet Wearable

Pet funeral Service

Pet food delivery service

Pet health products

▶ AnimalGo Hotel - Pet caregivers, also known as pet sitters service

▶ Walk friend – Based on GPS information, GOP reward for uploading walking posts with neighborhood animations

▶ AnimalGo game – a point-based, ecosystem-ready service for gaming

▶ Pet health care – Service that checks the health of the pet and associates it with the surrounding animal hospitals.

▶ Pet funeral service – Service that connects outstanding businesses

▶ Pet food delivery – Pet food, snacks, and other companion animal products shopping and delivery services (DeepMall and other pet malls)

▶ Pet wearable – Calculate the amount of exercise during a walk using a pet necklace (IoT) and compensate with the GOP.

▶ Pet health supplies – Recommended services for health products required after health check of pets such as defecation analysis, etc.

▶ Pet insurance – Connecting to pet related insurance planners

※All services in an AnimalGo ecosystem can be paid and deducted with Gopoint (GOP).

10. Ecosystem
Ecosystem

10.1AnimalGo Market – Pet Shopping Mall

With GOP, app users can pay for GOP at AnimalGo Market, a pet shopping mall.

※All services in an AnimalGo ecosystem can be paid and deducted with Gopoint (GOP).
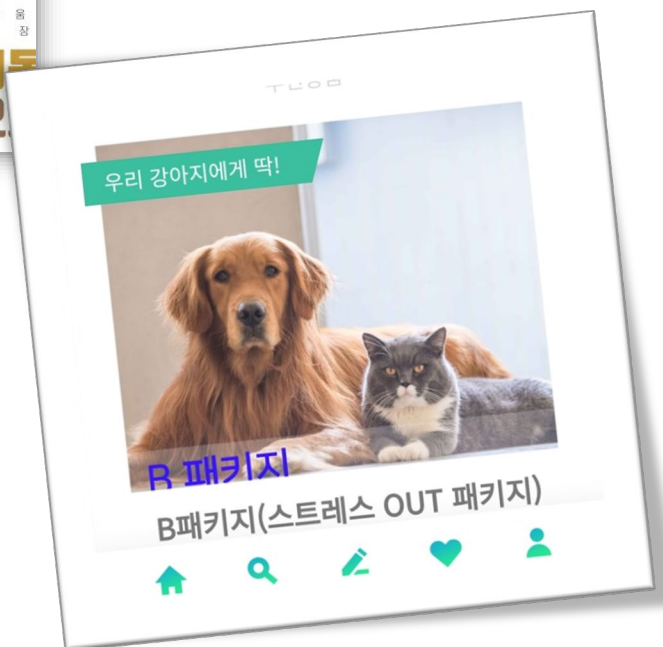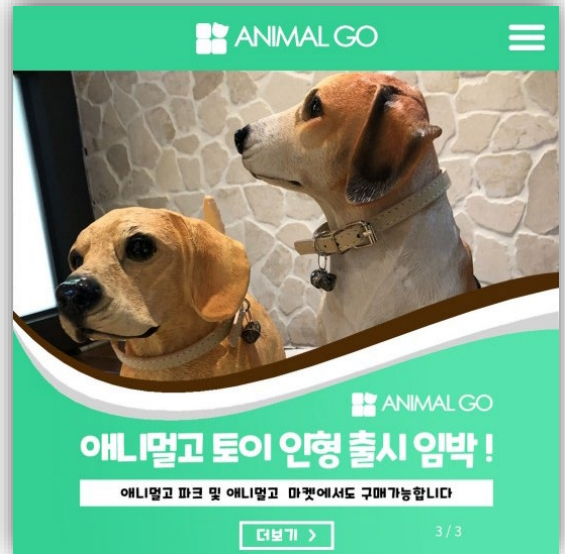
11.로드맵
Milestone

Milestone

2017 The first half of year

Launch Project

The second half 2017

Establishing a Project Master Plan
Issuing AnimalGo Business Plan

2018 The first half of year

Collect pet image data
Collection of Health Analysis Data
Deep Learning, AI Technology Development

The second half 2018

Building blockchain server DB

2019 The first half of year

Developing AnimalGo Mobile App MVP Service
Animalgo SNS Overview
AnimalGo app MVP service launch,
corporate establishment
Bitsonic IEO on the Korea Exchange ,
Stabilizing Services
creating YouTube channels

The second half 2019

Launching AnimalGo formal service
an additional listing on the domestic/foreign exchange
Marketing activities, subscriber retention, shopping malls, animal hospitals,
Extending Animal and Ecosystem, including Pet Career

2020 The first half of year

AnalyticalGo App Global Marketing
AI-based technology implementation added
Expanded global ecosystem,

12.재정
Finance

Since beta launch in June 2019, the Animalgo project has established an ecosystem of 100,000 users as of November 2019, maintaining a 35 KRW market price for nearly six months, more than 3 times the IEO price of 1 KRW.

As a result, IEO funds and project supplies have created a successful sales base. Offline services such as Animal Go Park, Animal Go Beauty are on the rise, and online sales such as Animal Go Games and Animal Go Market are also on the rise.

The project is a success story where not only the token price but also the sales.

13.출처

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- https://keras.io/

- https://www.tensorflow.org/

- www.tractica.com

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14.협력
Partners

Hill's
Transforming Lives™

UPbit

ROYAL CANIN

coinone

라이프앤도그
LIFE and DOGUE

BITSONIC

MARRAINE
BEAUTY

CoinBene

CW
청담우리동물병원

Live Longer, Live Stronger
100% HOLISTIC
BON FAMILLE
www.bon-famille.com

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water resistant, durable, easy to clean, perfect for most destructive beasts out there!
Beast Den™
BY URBAN BEAST

NT BLOCK
Blockchain solution

법무법인 민후

MELONI
COCO

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