Python과 Keras

얼굴인식 모델 작성

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얼굴인식 모델 프로그램

Layer (type)	Output Shape	Param #
conv2d_1 (Conv2D)	(None, 64, 64, 32)	896
max_pooling2d_1 (MaxPooling2)	(None, 32, 32, 32)	0
conv2d_2 (Conv2D)	(None, 32, 32, 32)	9248
max_pooling2d_2 (MaxPooling2)	(None, 16, 16, 32)	0
dropout_1 (Dropout)	(None, 16, 16, 32)	0
conv2d_3 (Conv2D)	(None, 16, 16, 64)	18496
max_pooling2d_3 (MaxPooling2)	(None, 8, 8, 64)	0
dropout_2 (Dropout)	(None, 8, 8, 64)	0
flatten_1 (Flatten)	(None, 4096)	0
dense_1 (Dense)	(None, 512)	2097664
dense_2 (Dense)	(None, 128)	65664
dense_3 (Dense)	(None, 2)	258

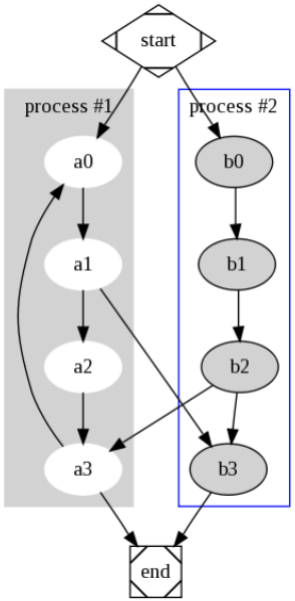
정답은 파일명에

Graphviz

- http://www.graphviz.org/

What is Graphviz?

Graphviz is open source graph visualization software. Graph visualization is a way of representing structural information as diagrams of abstract graphs and networks. It has important applications in networking, bioinformatics, software engineering, database and web design, machine learning, and in visual interfaces for other technical domains.



Graphviz

- 라이브러리 설치

```
(venv)> pip install tensorflow
(venv)> pip install keras
(venv)> pip install graphviz
(venv)> pip install pydotplus
```

Graphviz

- img_model_generator.py

```
def load_images(image_directory):…

def labeling_images(image_file_list):…

def delete_dir(dir_path, is_delete_top_dir=True):…
```

```
def main():
    print("=========================================
    print("Keras를 이용한 모델 학습 ")
    print("지정한 이미지 파일을 학습하는 모델 생성")
    print("=========================================
```

Graphviz

- 모델 학습