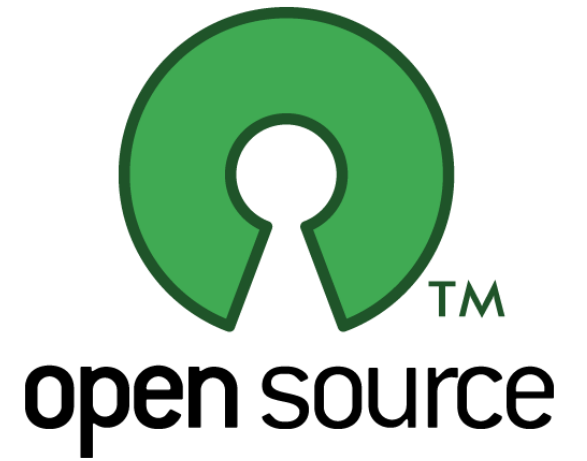


오픈소스와 라이선스

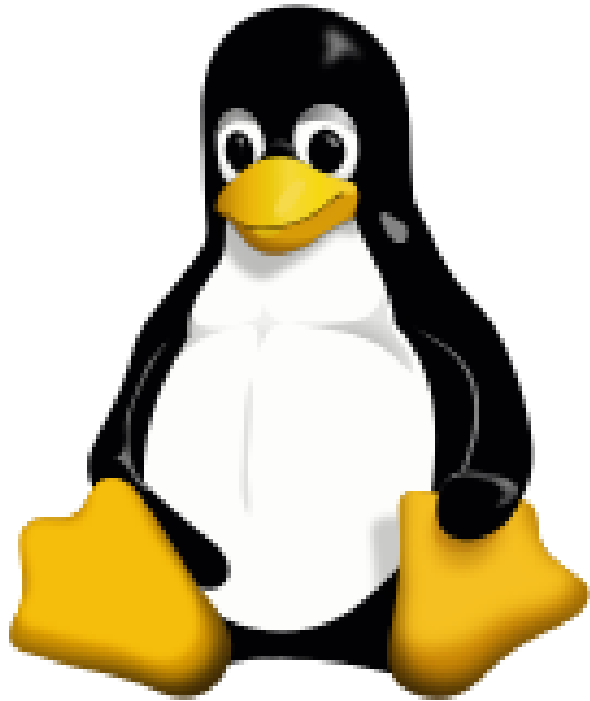


시스템소프트웨어 연구실
이건희

목차

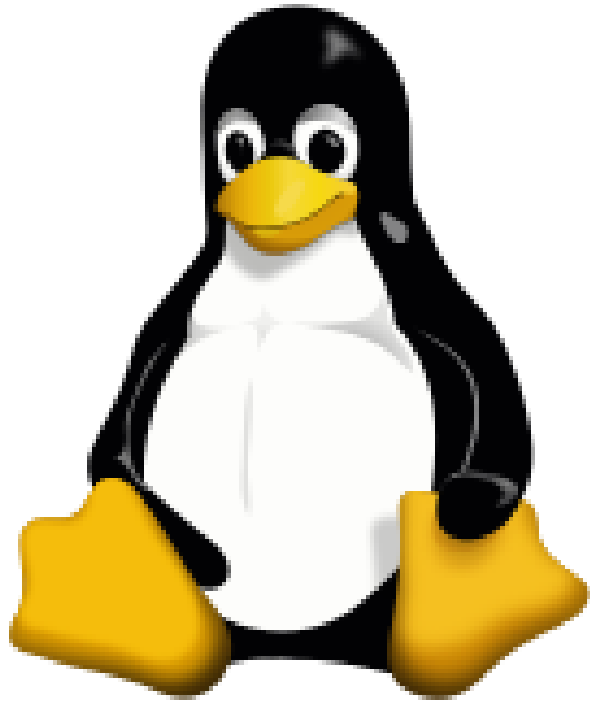
1. 오픈소스란?
2. 오픈소스를 활용할 때의 주의사항
3. 오픈소스 라이선스
4. 라이선스 적용하기

오픈소스란?



Linux

- 1991년 8월 26일 Linus Torvalds가 취미 삼아 만든 UNIX의 교육용 버전인 MINIX를 공개
- 이렇게 공개된 커널이 Linux의 시작
- 전 세계에서 수많은 개발자들이 개발에 관여하는 대표적인 오픈소스



Linux



CentOS



ubuntu



fedora



android



Chromium



Bootstrap



Tomcat

오픈소스(Open source)란?

- 공개(Open)된 소스(Source)
- 공개됐으므로 모두가 '무료'로 사용할 수 있을까?

답은 “NO!”

- 오픈 소스에도 **저작권**이 있다.
- 오픈 소스라 해서 **전부 무료**가 아니다.

오픈소스를 활용할 때의 주의사항

오픈소스를 활용할 때의 주의사항

- 저작권과 라이선스 주석을 유지해야 한다.
 - + 함수나 파일 단위의 오픈 소스도 출처를 명시해야 함

```
KeonHeeLee Update ServerManagerForNaver.py

1 contributor

206 lines (163 sloc) | 7.27 KB

1 '''
2 Copyright (c) IoT-Pet-Home-system team : Woo-jin Kim, Keon-hee Lee, Dae-seok Ko
3 LICENSE : GPL v3 LICENSE
4
5 - Description : https://github.com/kuj0210/IoT-Pet-Home-System
6 - If you want to contact us, please send mail "beta1360@naver.com"
7
8 * ServerManagerForNaver.py
9 - This module is used to process data from the Naver-talk-talk platform.
10 - This module uses to Server module for managing json data.
11   Specially, This module manage json data that use to send or recieve naver-talk-talk server.
12   ** Json data usually use HTTPS Protocol's body part.
13 '''
14 # -*- coding: utf-8 -*-
15
16 from ScreenshotThread import ScreenshotThread
17 from ServerUtility import ServerUtility
18 from ResponseMessage import Message
19
20 mServerUtility = ServerUtility()
21 responseMessage = Message()
```

```
'''
***** Original *****
* Copyright (c) IoT-Pet-Home-system team : Woo-jin Kim, Keon-hee Lee, Dae-seok Ko
* LICENSE : GPL v3 LICENSE
* Source code : https://github.com/kuj0210/IoT-Pet-Home-System/blob/master/main/ServerManagerForNaver.py
*****

* modified by KeonHeeLee
* If you want to contact me, please send mail to "beta1360@naver.com"
'''
```

오픈소스를 활용할 때의 주의사항

- 저작권, 개발자 및 컨트리뷰션 정보의 표시
- 소스 코드 내의 수정한 정보의 표시
- 라이선스 정보 제공 및 동일한 라이선스로 재배포

오픈소스 라이선스

오픈소스 라이선스

- 라이선스(License)?
 - 소프트웨어 사용에 대한 권리
 - 소프트웨어 저작권자가 사용을 허가하는 조건
- 저작권(copyright)?
 - 소프트웨어 저작권자가 저작물에 대해 가지는 배타적, 독점적 권리

오픈소스 라이선스

즉, 프로젝트의 사용조건은 개발자가 결정하며,
결과물에 대한 모든 권리는 개발자에게 있다.

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 - MIT License
 - BSD 2-Clause / BSD 3-Clause
 - Apache License 2.0
 - GPLv2 / GPLv3
 - LGPLv2
 - MPL

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- Copyleft가 아니다.

Copyleft & Permissive

	무료 이 용 가능	배포 허 용 가능	소스 코 드 취득 가 능	소스 코 드 수정 가 능	2차적 저작 물 재공개 의무	독점 SW 와 결합 가능
MIT License	O	O	O	O	X	O
BSD 2-Clause BSD 3-Clause	O	O	O	O	X	O
Apache License 2.0	O	O	O	O	X	O
GPLv2 GPLv3	O	O	O	O	O	X
LGPLv2	O	O	O	O	O	O
MPL	O	O	O	O	O	O

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MIT License	O	O	O	O	X	O
BSD 2-Clause BSD 3-Clause	O	O	O	O	X	O
Apache License 2.0	O	O	O	O	X	O
GPLv2 GPLv3	O	O	O	O	O	X
LGPLv2	O	O	O	O	O	O
MPL	O	O	O	O	O	O

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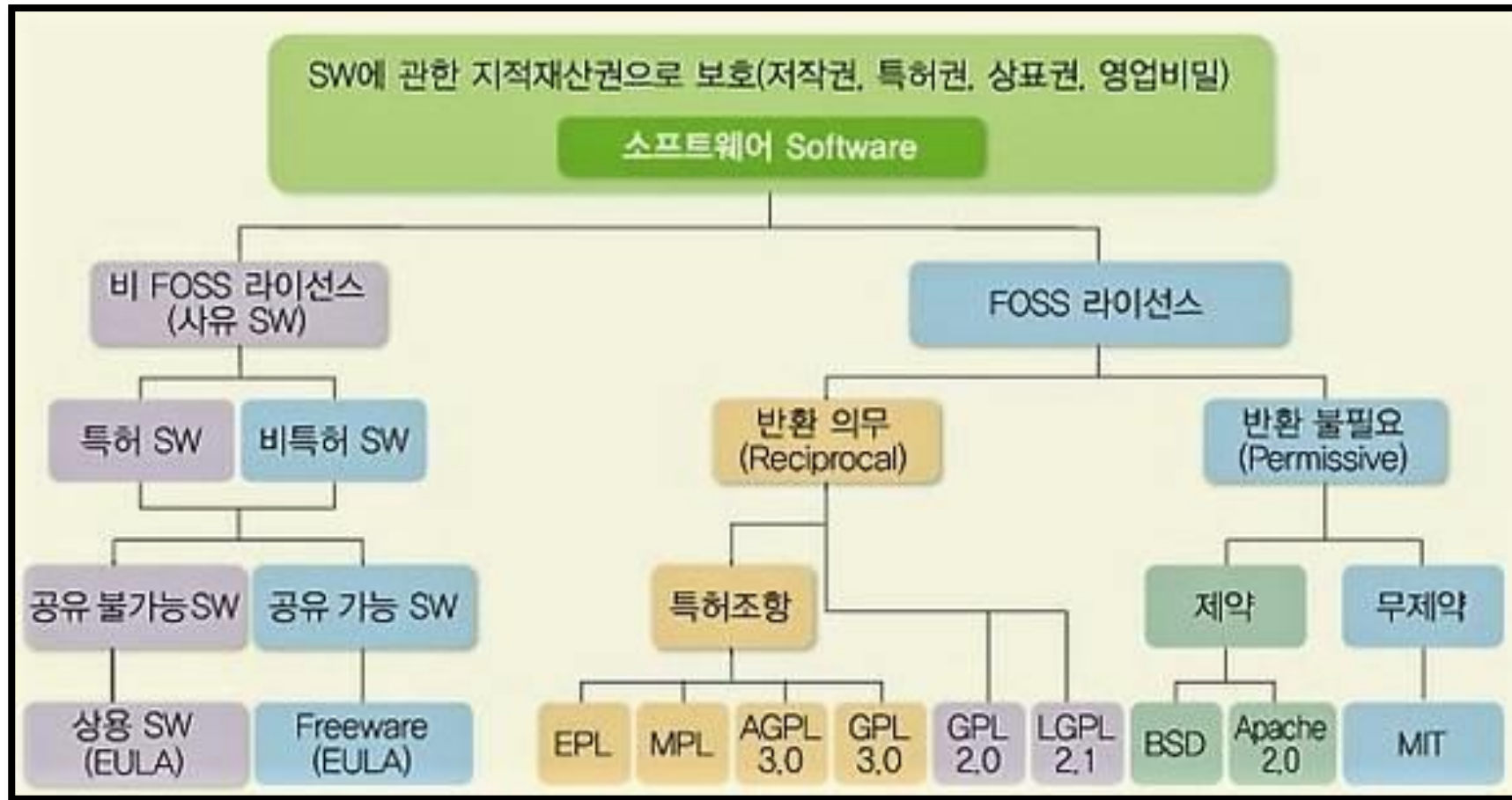
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- 본 라이선스에 의거하여 전체 작업을 누구에게나 공개해야 함

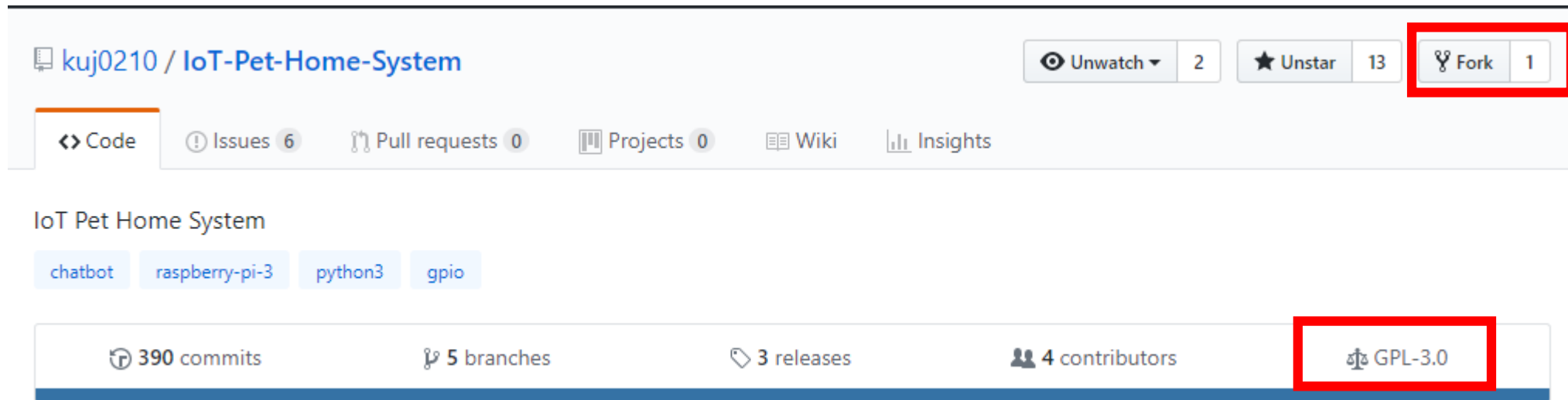


출처 : NIPA 공개, SW역량프라자가 발간한 공개SW 라이선스 가이드

라이선스 적용하기

Step 0.

- 다른 오픈소스 프로젝트를 fork해서 시작했다면
원본 프로젝트의 라이선스를 그대로 따르는 것이 좋음



Step 1.

- 자신의 프로젝트에 포함된 오픈소스 SW가 있는지 확인
그리고 각 SW의 라이선스를 확인



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KoNLPy

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한국어 자연어처리를 할 수 있는 파이썬 패키지입니다.

KoNLPy is a Python package for natural language processing of the Korean language.

- English documentation: <http://konlpy.org/en/latest>
- 한국어 문서: <http://konlpy.org/ko/latest>

Links

- KoNLPy was rewrapped using Py4J by Steven Han: <https://github.com/nazgul33/konlpy>

1. Flask framework

BSD 3-clause license

2. KoNLPy

GPL v3 license

Step 2.

- Copyleft 라이선스를 포함하는 SW가 있는지 확인 후,
만약 포함한다면 동일한 라이선스로 자신의 프로젝트 배포
- 만약 없다면, 프로젝트 목적에 맞추어서 라이선스 선택



KoNLPy

gitter join chat build failing docs passing coverage 56% status beta licence GPL

한국어 자연어처리를 할 수 있는 파이썬 패키지입니다.

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Links

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GPL v3 license를 사용 -> Copyleft license

- 본 라이선스에 의거하여 전체 작업을 누구에게나 공개해야 함
- 또한 해당 라이선스와 동일한 라이선스로 배포해야 함

Step 3.

- 해당 라이선스에 맞게 문서화 진행
 1. LICENSE
 2. README
 3. 그 외의 명시

<> Code

Issues 6

Pull requests 0

Projects 0

Wiki

Insights

IoT Pet Home System

chatbot

raspberry-pi-3

python3

gpio

390 commits

5 branches

3 releases

4 contributors

GPL-3.0

Branch: master

















New pull request

Create new file

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 KeonHeeLee	Create __init__.py	Latest commit ebc5dc8 4 days ago
 .API_Doc	Update pi_push_alarm.json	11 days ago
 .README	Update How_to_use_SSL_Certificates_and_apply_HTTPS_KR.md	9 days ago
 main	Create __init__.py	4 days ago
 test	Update client_travis.py	13 days ago
 version	Delete v1.1.zip	29 days ago
 .gitattributes	Initial commit	3 months ago
 .travis.yml	Update .travis.yml	13 days ago
 CODE_OF_CONDUCT.md	Create CODE_OF_CONDUCT.md	29 days ago
 ISSUE_TEMPLATE.md	Create ISSUE_TEMPLATE.md	28 days ago
 LICENSE	Merge branch 'master' into add-license-1	20 days ago
 PULL_REQUEST_TEMPLATE.md	Create PULL_REQUEST_TEMPLATE.md	28 days ago
 README.md	Update README.md	12 days ago
 README_KR.md	Update README_KR.md	9 days ago
 _config.yml	Set theme jekyll-theme-slate	25 days ago
 requirements.txt	Create requirements.txt	13 days ago

- GitHub에서 LICENSE 파일을 인식해서 해당 카테고리 생성


Branch: master IoT-Pet-Home-System / LICENSE
Find file Copy path


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✓ Distribution		ℹ Disclose source
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 KeonHeeLee Merge branch 'master' into add-license-1 6cdd3d7 20 days ago

1 contributor

675 lines (553 sloc) 34.3 KB
Raw Blame History

```

1          GNU GENERAL PUBLIC LICENSE
2              Version 3, 29 June 2007
3
4  Copyright (C) 2007 Free Software Foundation, Inc. <http://fsf.org/>
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7
8              Preamble
9
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```

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Language: [English](#) [한글](#)



Pet House System

licence [GPL v3](#) python [>=3](#) release [v1.0.2](#) build [passing](#)

Pet House System is a tool that enables you to manage pets through Messenger.

Index

- [Introduction](#)
- [Features](#)
- [Requirement](#)
- [Settings & Installation](#)
 - [Settings](#)
 - [Installation](#)
- [Pet House Structure](#)
- [Motor operation structure](#)
- [Client & Server Structure](#)
 - [Full server structure](#)
 - [Client & Main server structure](#)
 - [Main server & Pi-server structure](#)
- [How to use](#)
- [How to connect motor wires](#)
 - [Food Motor](#)
 - [Water Motor](#)
 - [Door Motor](#)
- [Notes](#)
- [LICENSE](#)

- README 파일에도 라이선스 명시
- 라이선스 전문이 길 경우 boilerplate로 명시

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125 lines (98 sloc) | 4.63 KB

Raw

Blame

History



```
1  '''
2  Copyright (c) IoT-Pet-Home-system team : Woo-jin Kim, Keon-hee Lee, Dae-seok Ko
3  LICENSE : GPL v3 LICENSE
4
5  - Description : https://github.com/kuj0210/IoT-Pet-Home-System
6  - If you want to contact us, please send mail "beta1360@naver.com"
7
8  * ServerUtility.py
9    - This module support server overall.
10   - It use to send request, manage database module and is set some wrapper.
11  '''
12
13  import json
14  import requests
15  from RegistUser import RegistUser
16
17  class ServerUtility:
18      def __init__(self):
19          self.mRegistUser = RegistUser()
20          self.NAVER_TALK_URL = "https://gw.talk.naver.com/chatbot/v1/event"
21
22
23      # openDB & closeDB & getDatabase
24      # : The related database module's wrapper.
25
26      def openDB(self):
27          self.mRegistUser.openDatabase()
28
29      def closeDB(self):
30          self.mRegistUser.closeDatabase()
31
32      def getDatabase(self):
33          return self.mRegistUser
34
35      def postPiOperation(self, platform, user_key, operation):
36          '''
37          1. Arguement
38             - platform : messenger application platform (Kakao-Talk & Naver-Talk-Talk)
39             - user_key : Usage to find URL, PiKey (access to database).
40             - operation : request to device for controlling commands.
41
42          2. Output : response from device (Operation status : use, fail, using)
43
44          3. Description
45             This function access to database to get where device is connected, what is PiKey.
```

- 소스 코드 주석 혹은 NOTICE.txt 파일에도 명시해둘 것
- 해당 경우는 소스코드 주석에 명시

참고자료

1. 네이버 오픈소스 가이드

- <https://naver.github.io/OpenSourceGuide/book/>

2. OLIS 오픈소스 SW- 라이선스 가이드

- <https://olis.or.kr/license/introduction.do>

3. 프로젝트 예제 – 공모전 때 사용한 프로젝트

- <https://github.com/kuj0210/IoT-Pet-Home-System>