TI MCU, DSP 및 Xilinx FPGA 프로그래밍 전문가 과정

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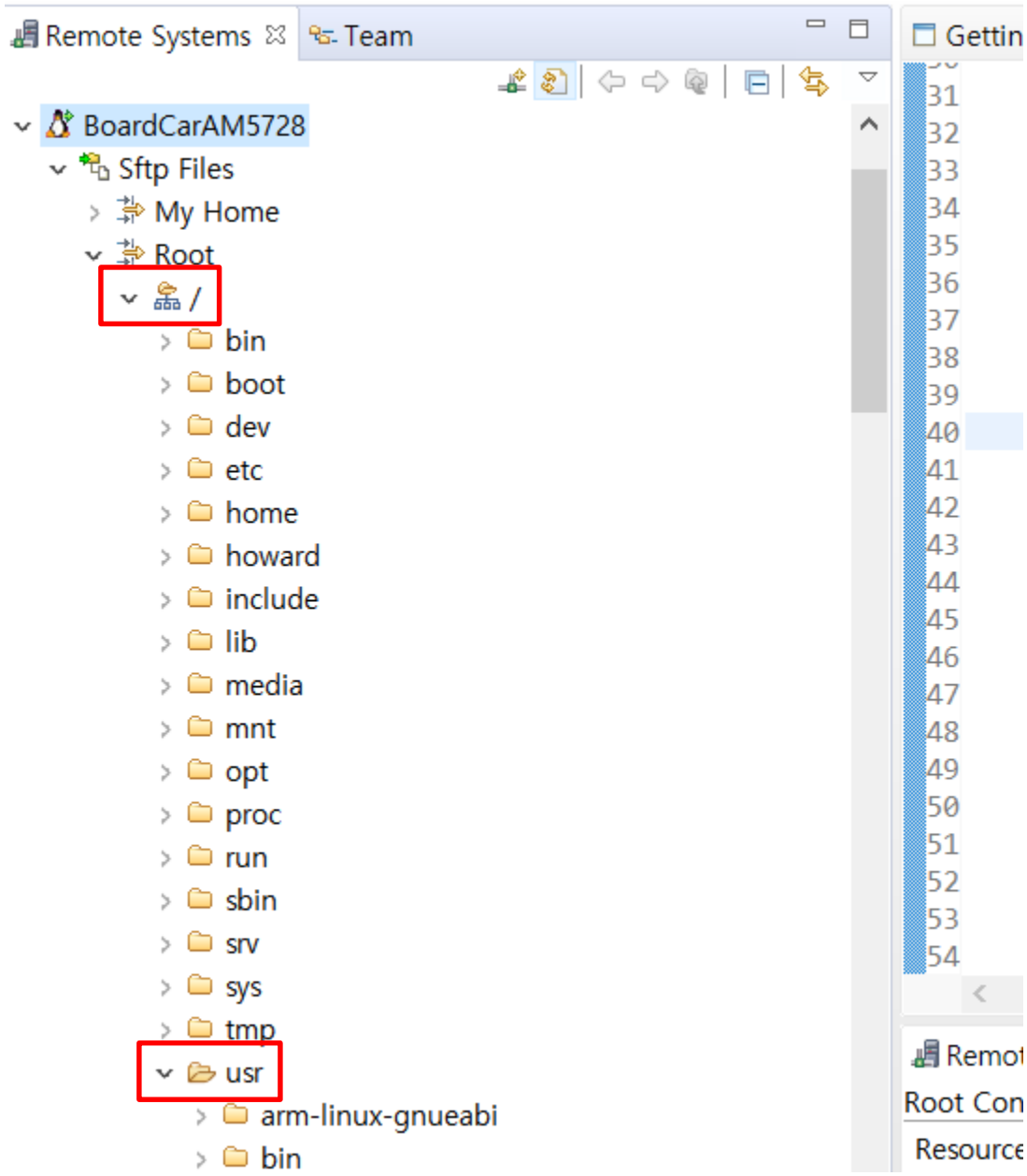
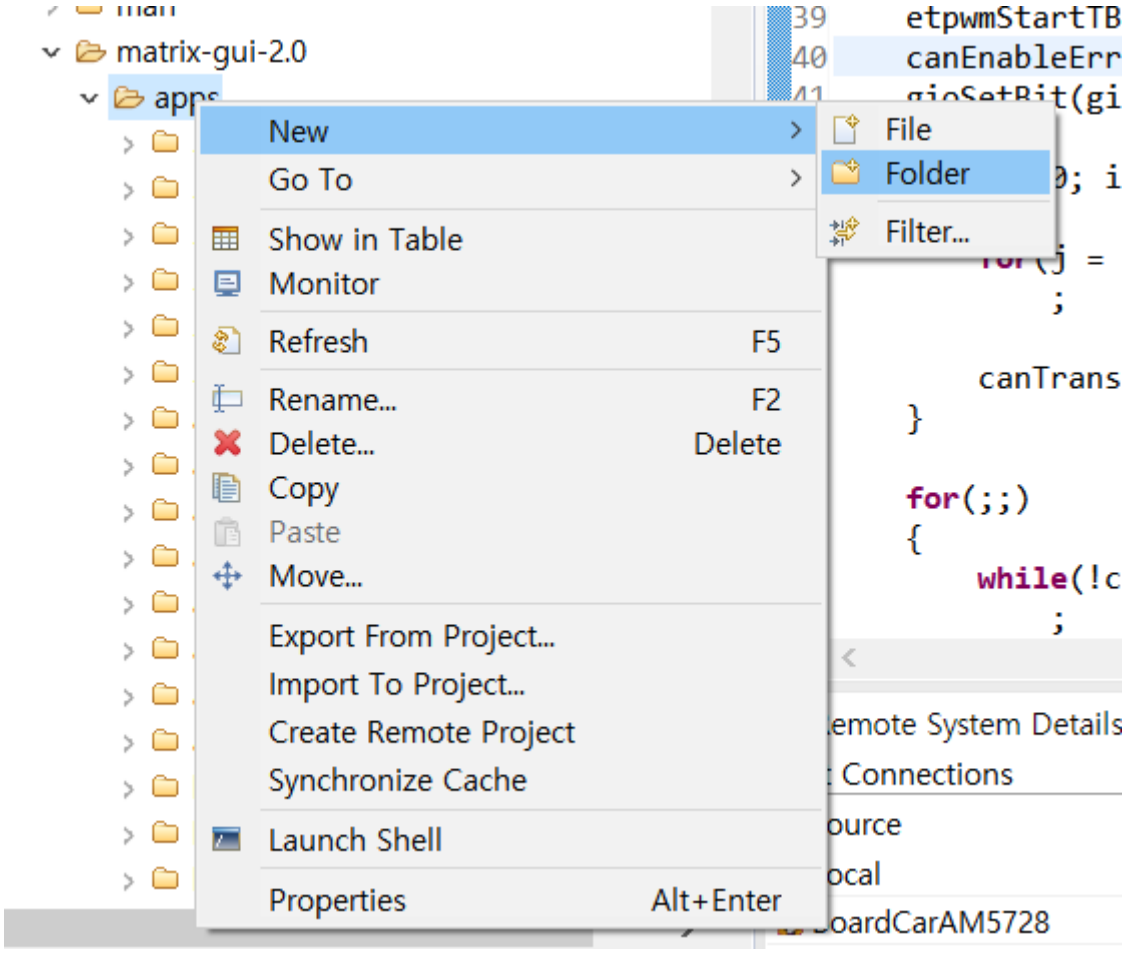
How to make AM5728 Matrix App(Wi-Fi)

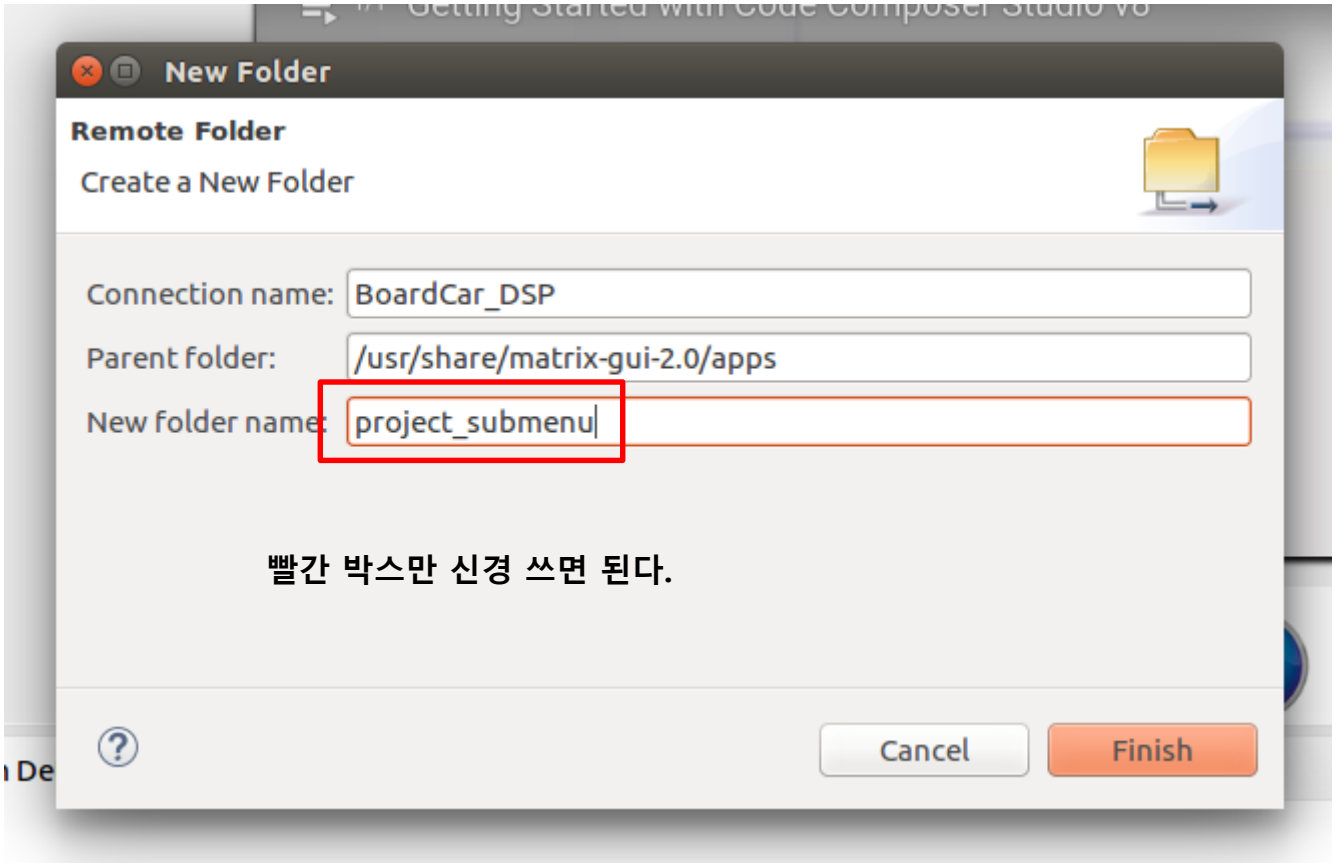
DSP 상에 /usr 디렉토리를 열어보자! (본 작업은 반드시 Linux 에서 진행해야만 한다)
그렇지 않을 경우 하나도 제대로 동작하는 것이 없을 것이다!



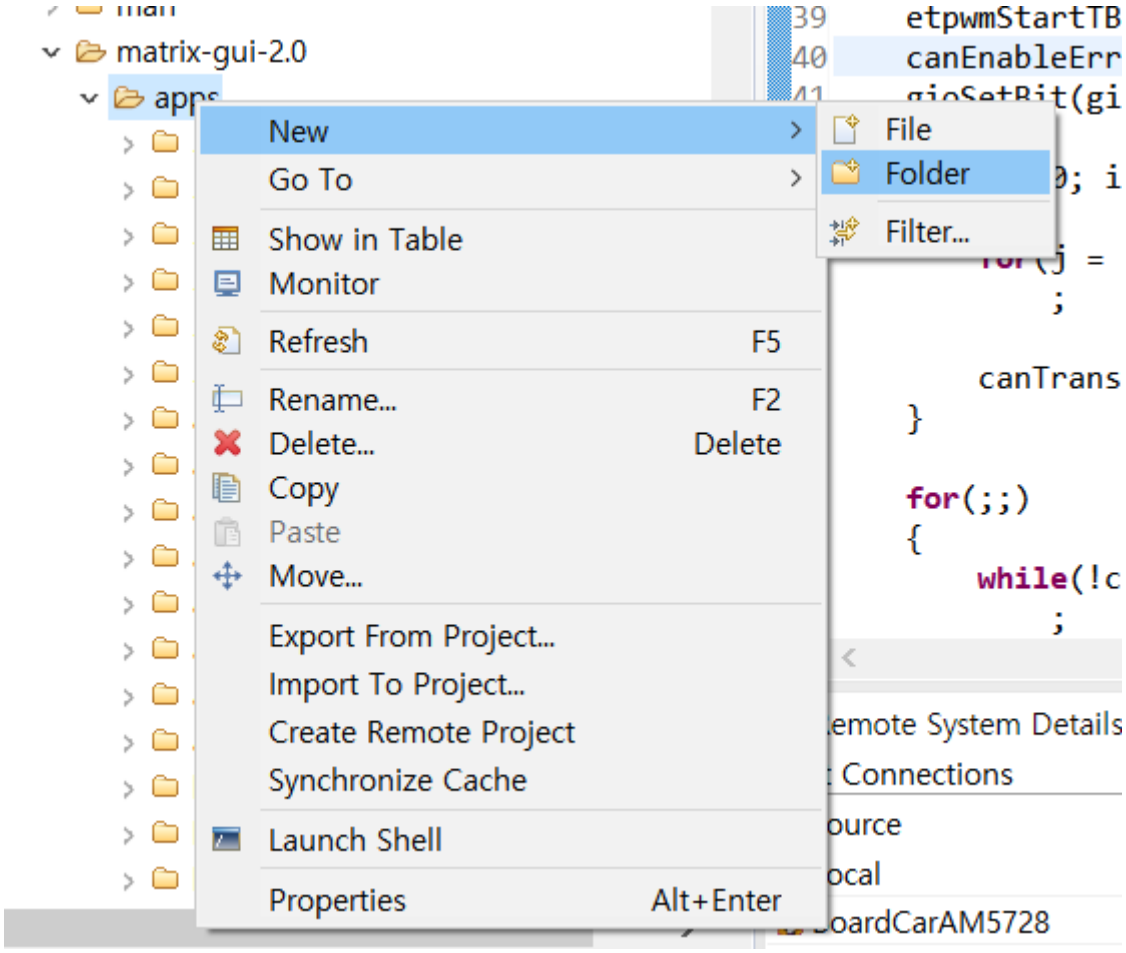
/usr/share/matrix-gui-2.0/apps 를 우클릭하고 New -> Folder 를 누른다.



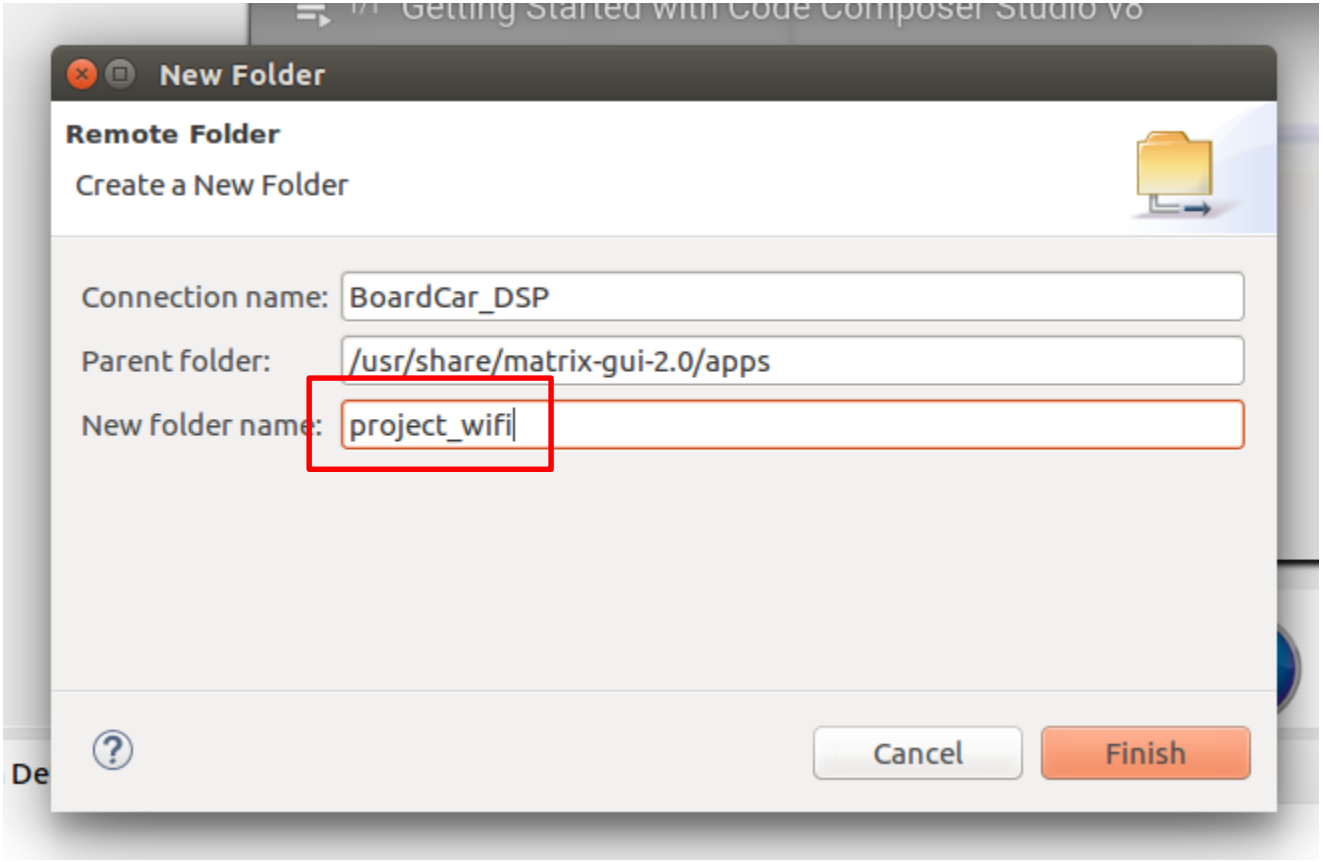
아래와 같이 project 라는 이름의 폴더를 만든다.
현재, 그리고 앞으로 우리가 작업할 Matrix App 들은 이 부분에 배치될 것이다.



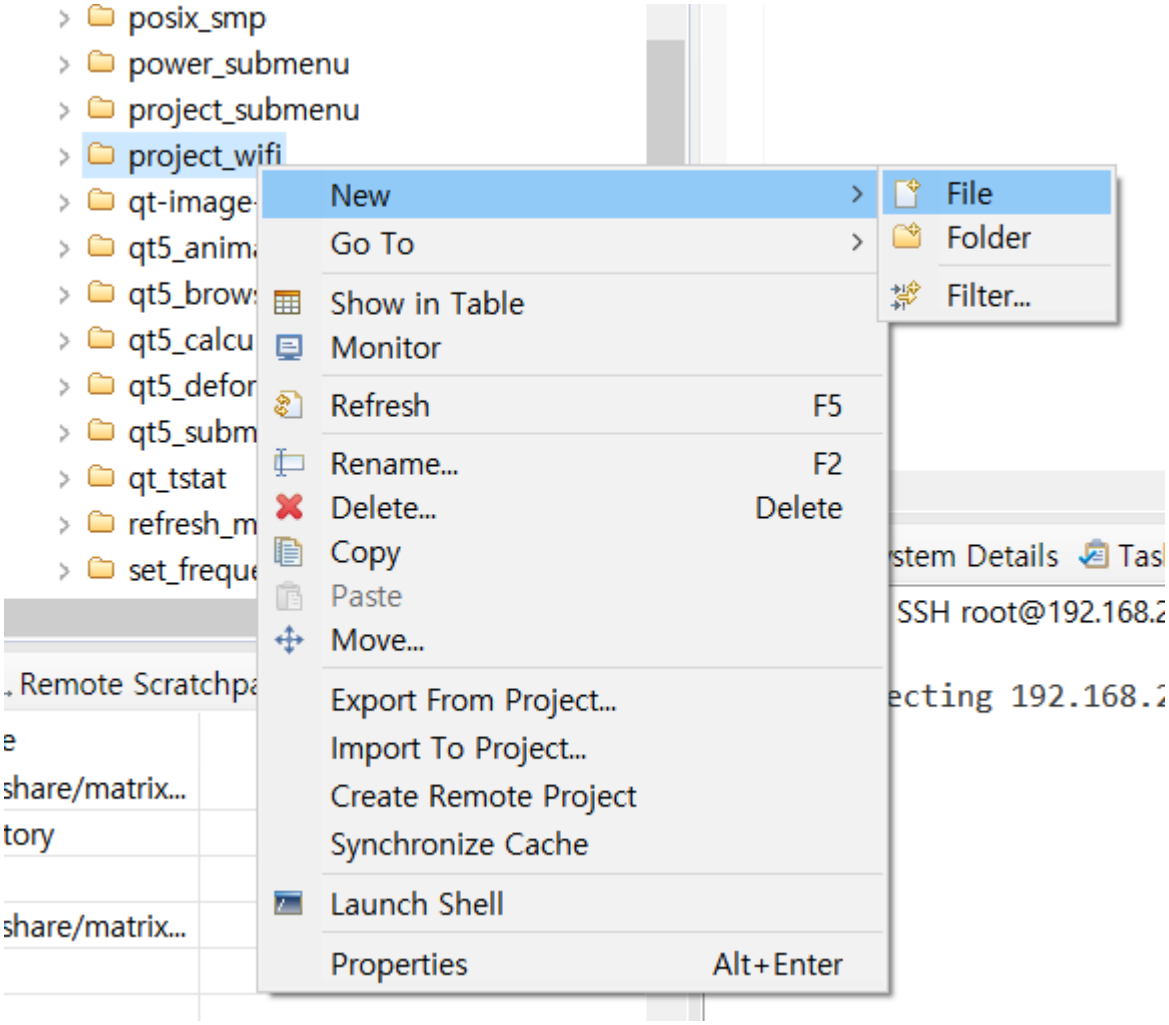
다시 한 번 /usr/share/matrix-gui-2.0/apps 를 우클릭하고 New -> Folder 를 누른다.



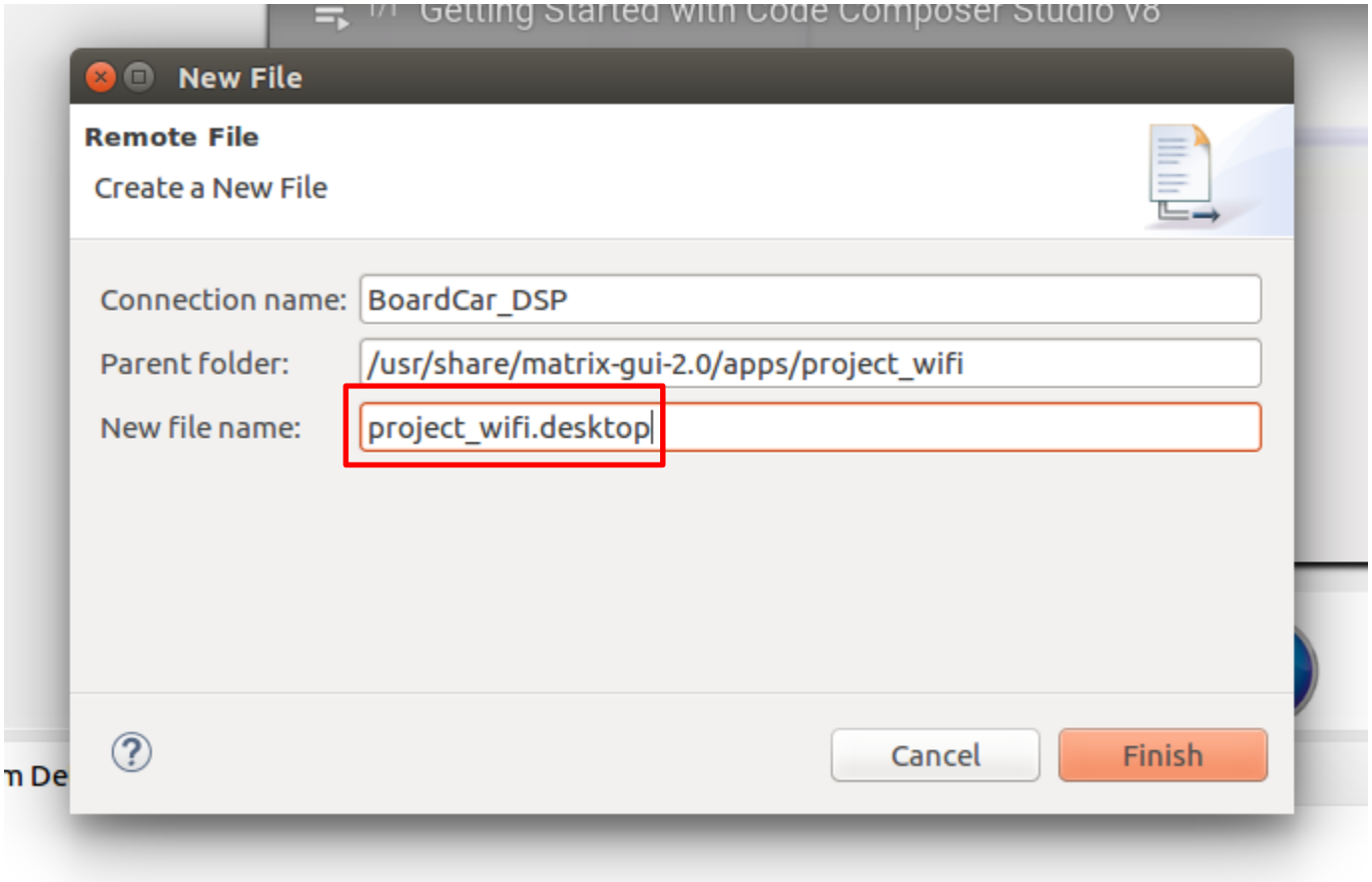
Wi-Fi Matrix App 을 만들 것이므로 project_wifi 라고 이름 짓는다.



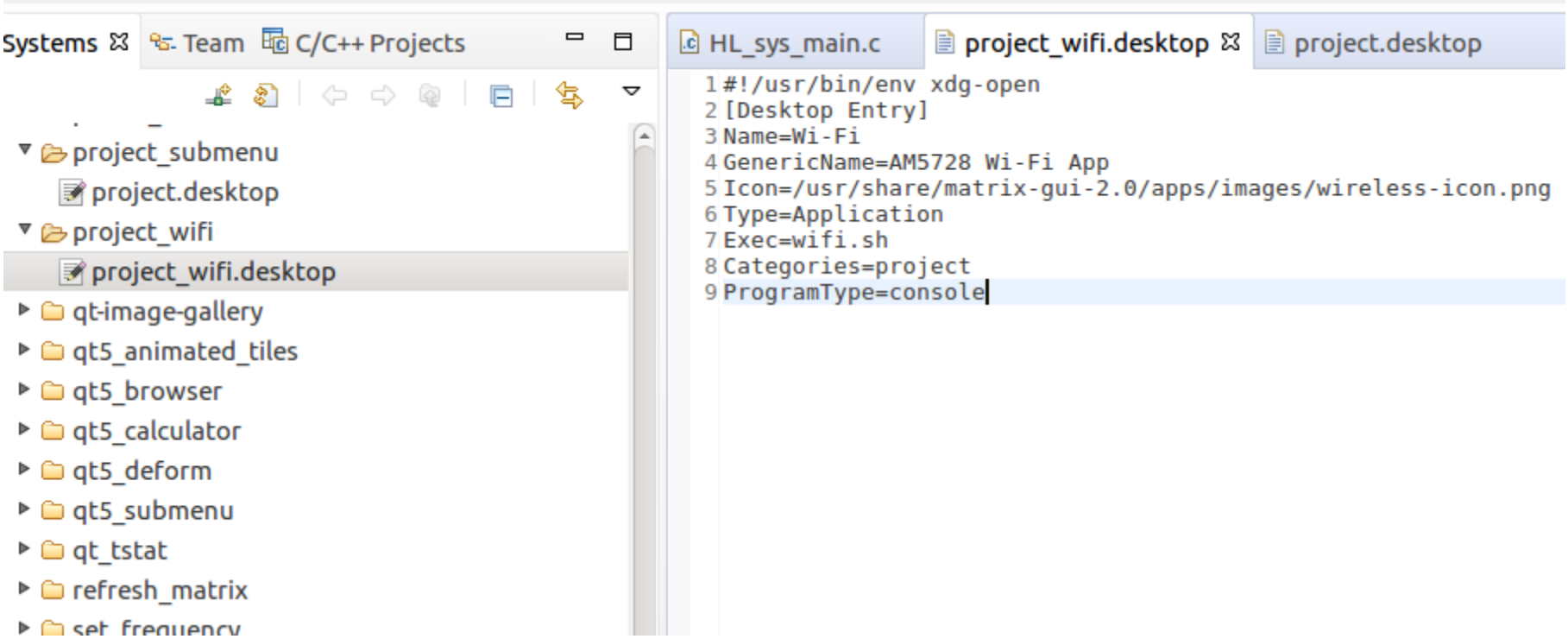
생성된 project_wifi 폴더를 우클릭하고 New -> File 을 누른다.



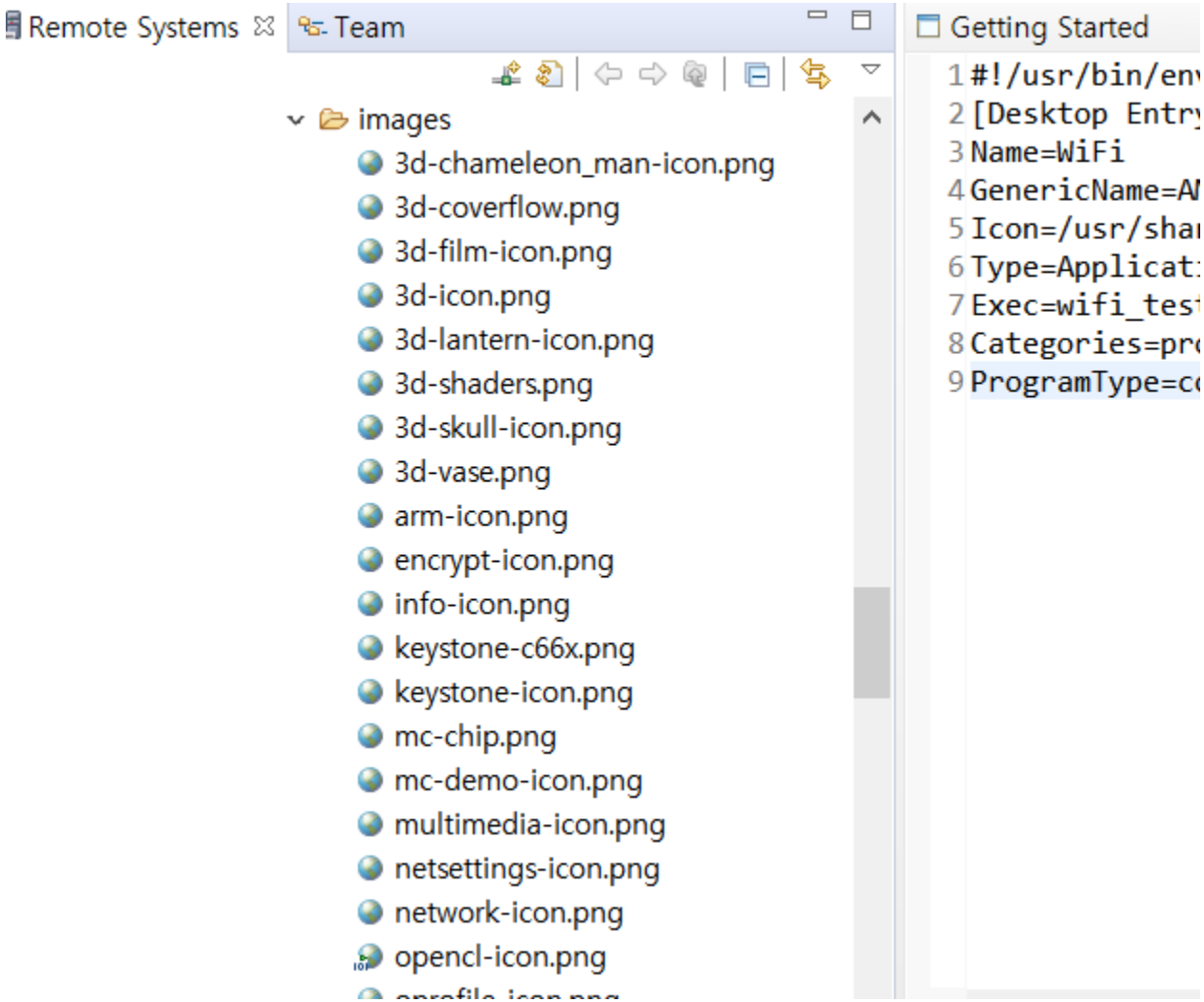
파일명을 project_wifi.desktop 으로 만든다.



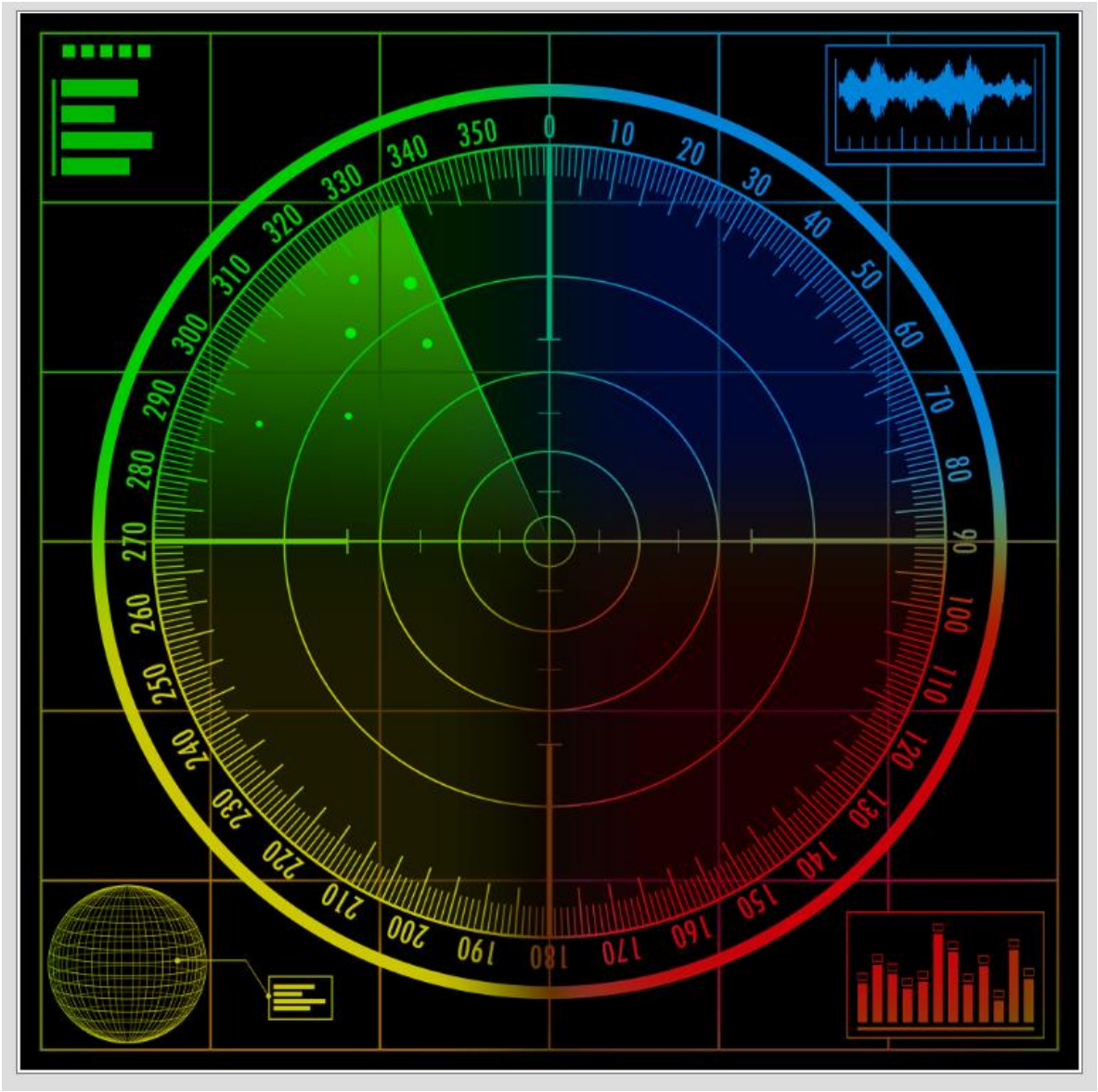
project_wifi.desktop 을 더블 클릭하고 아래와 같은 내용을 기입한다.



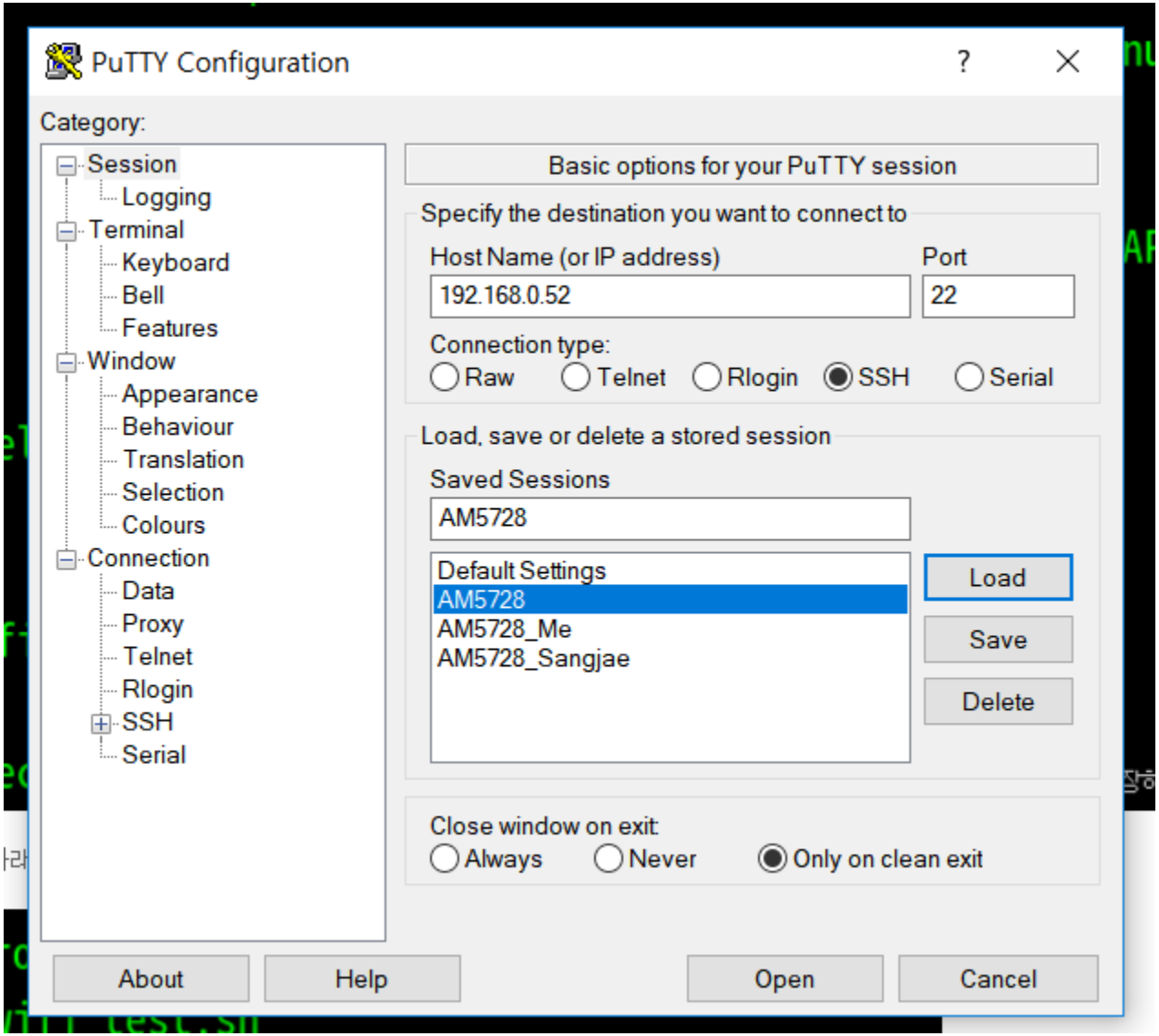
images 폴더를 열어보면 다양한 아이콘들이 존재한다.
직접 Custom 하고 싶다면 아이콘을 직접 만들어도 무방하다.



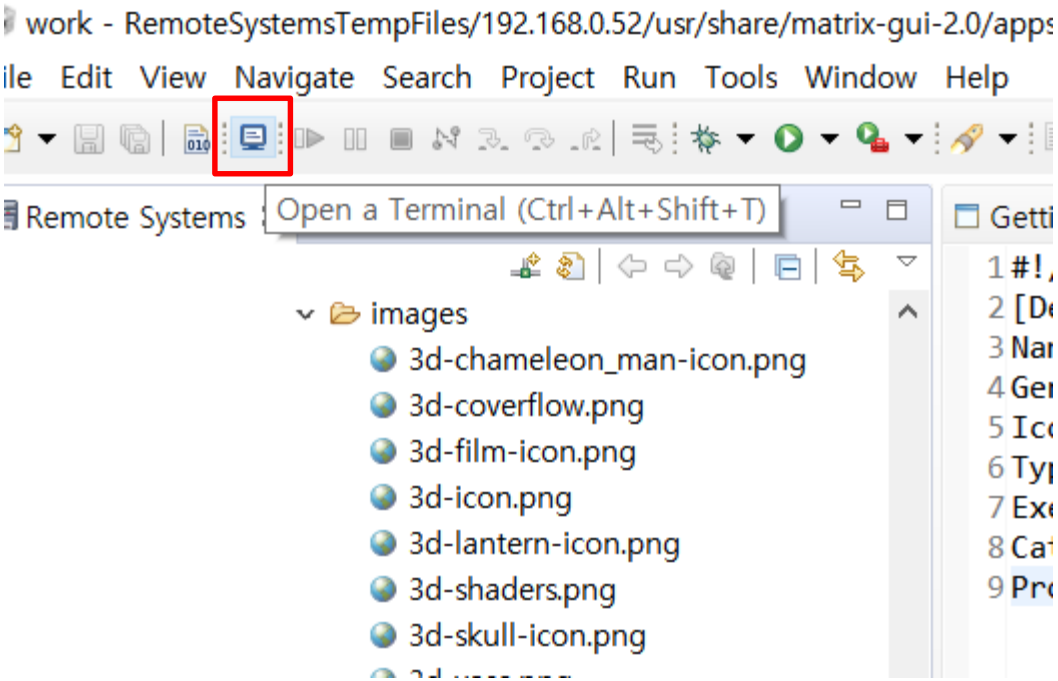
Lidar 전용으로 만들 App 에 사용할 Icon 에 해당한다.
요런식으로 직접적으로 Custom 할 수도 있다.
포토샵을 좀 할 줄 안다면 발군의 능력을 발휘 할 수 있을 것임



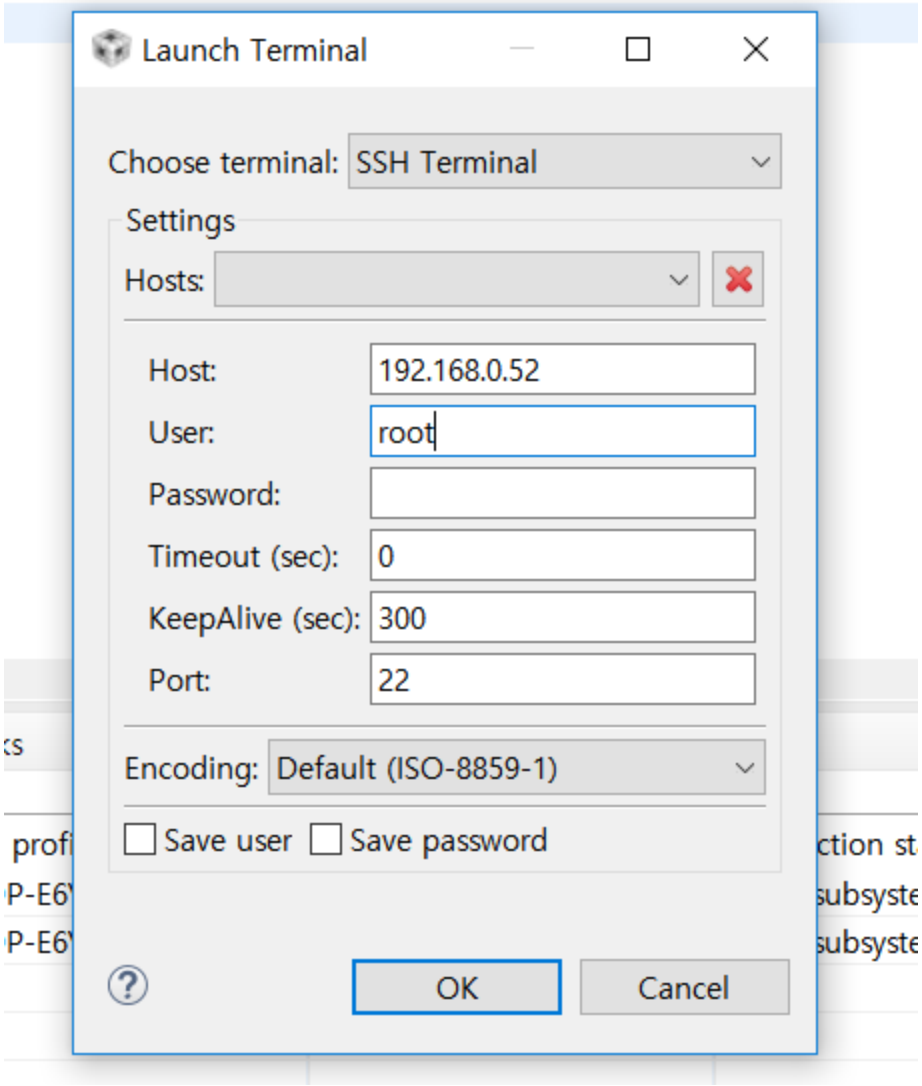
이제 Putty 로 AM5728 에 접속하도록 한다.



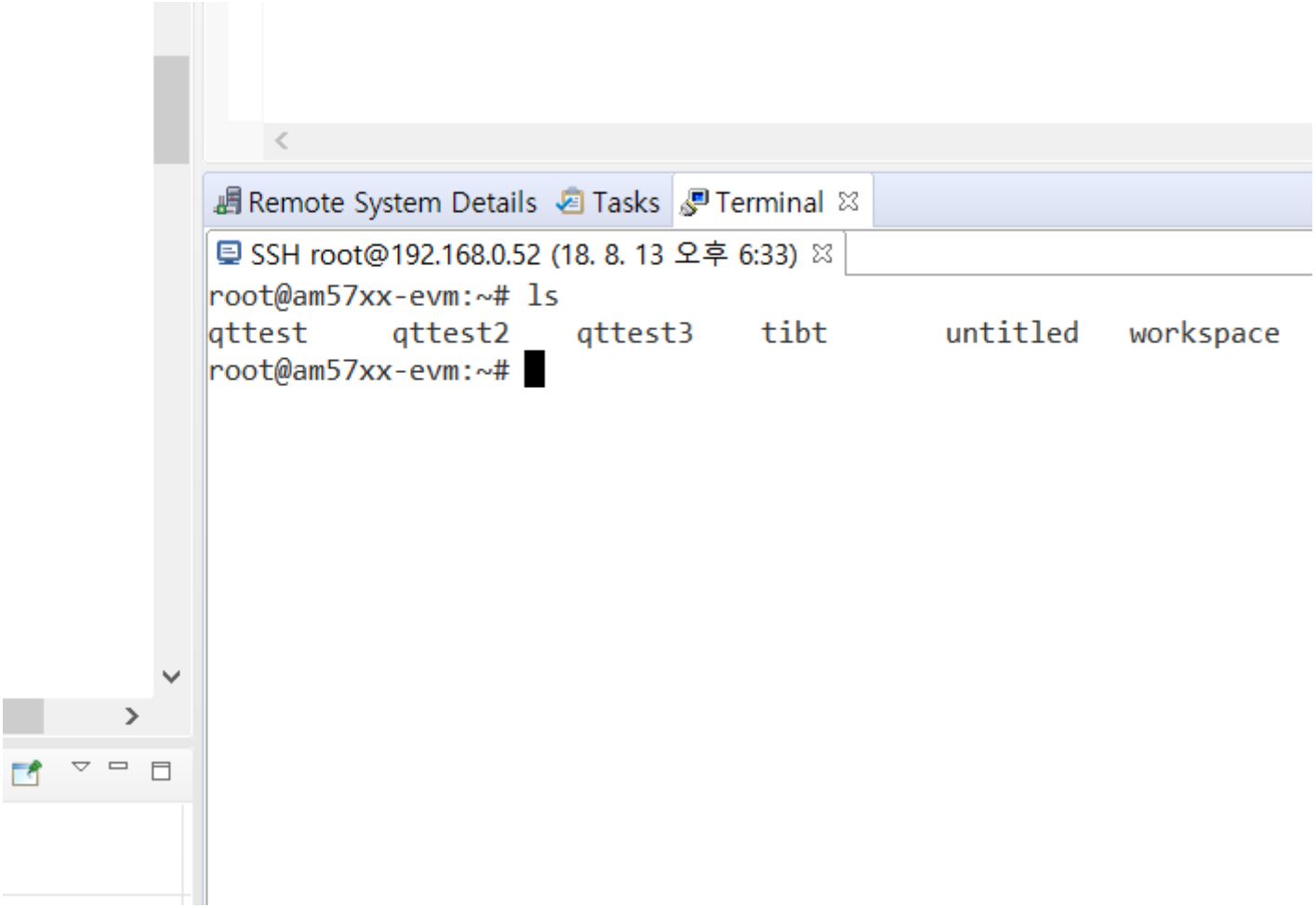
혹은 CCS 상에서 Terminal 로 DSP 에 접속해도 무방하다.



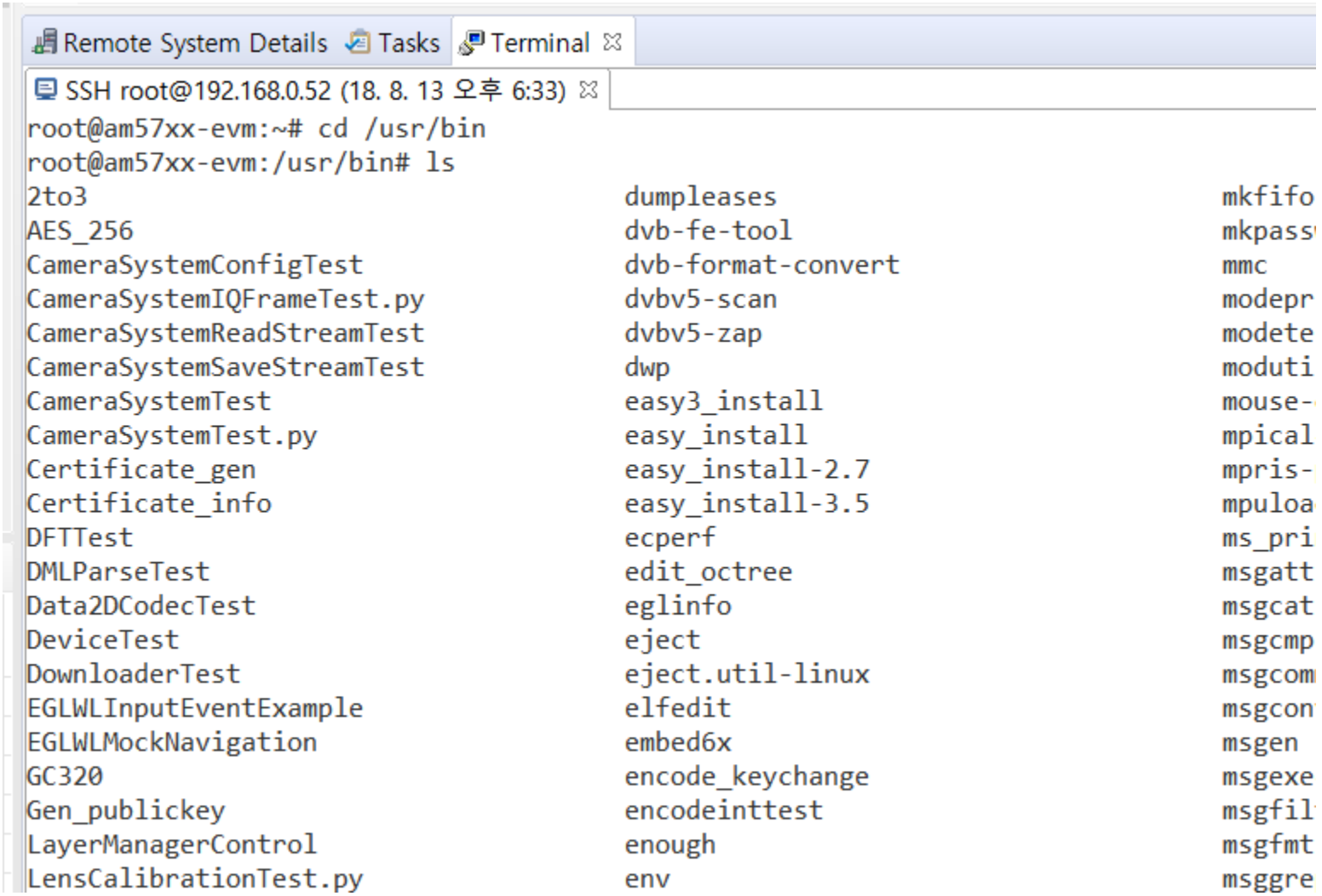
아래와 같이 CCS 상에서 AM5728 에 접속한다!



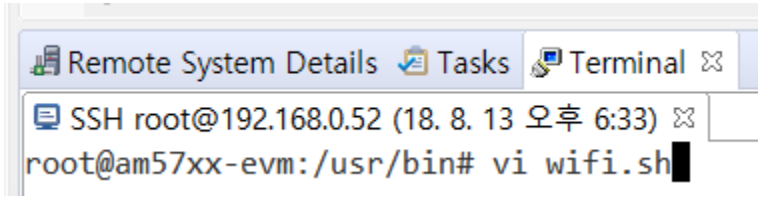
접속이 잘 되었다면 아래와 같이 나올 것이다.

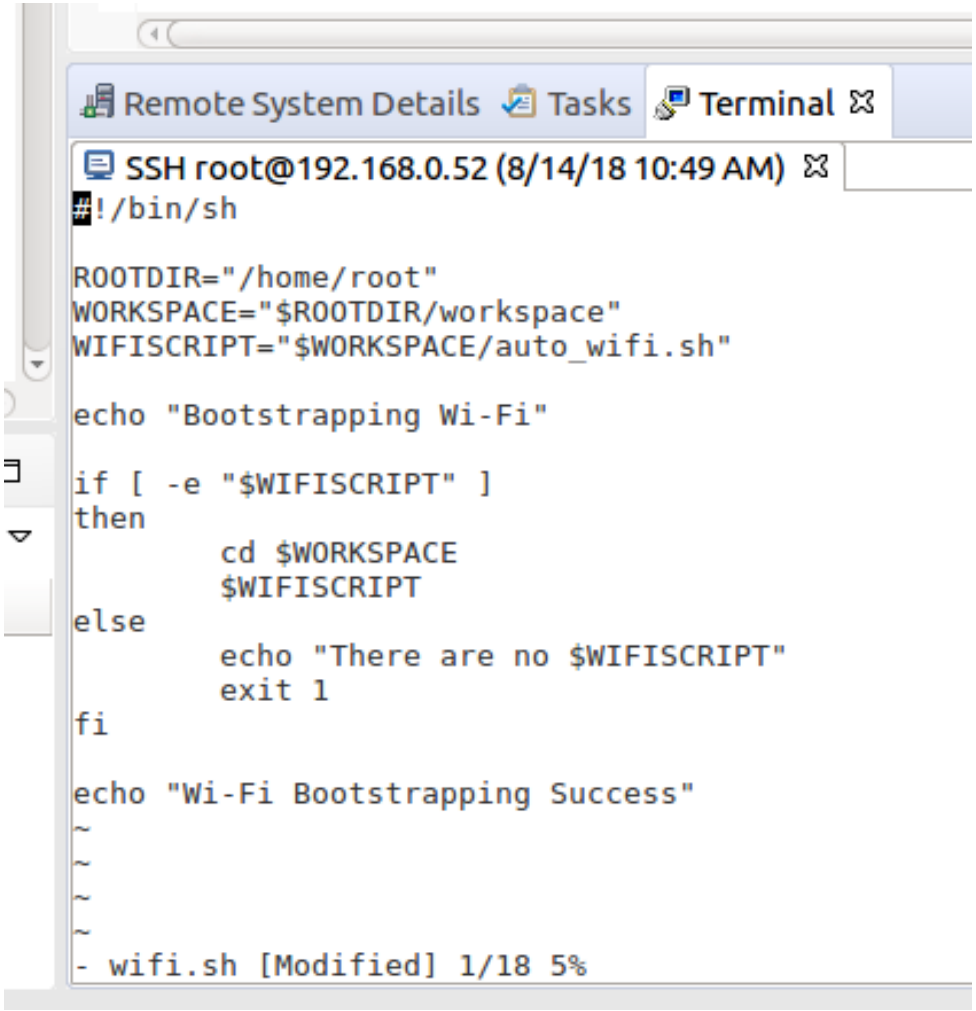


이제 /usr/bin 으로 이동하도록 한다.
AM5728 상에서 지원하는 방대한 양의 실행 파일들을 볼 수 있다.

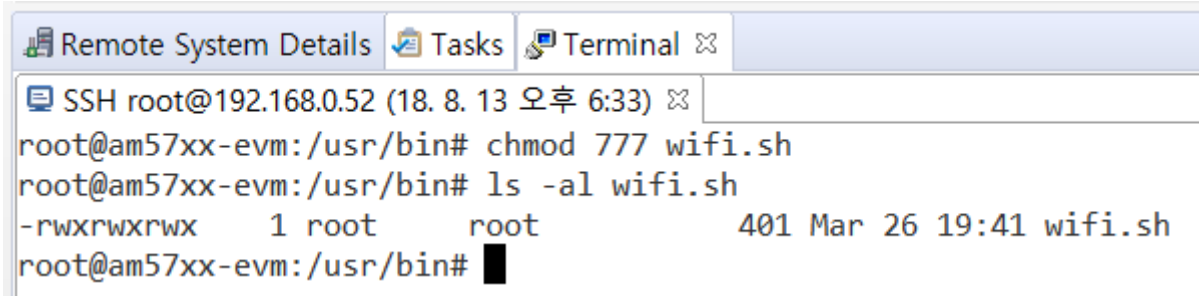


아래와 같이 wifi.sh 라는 파일을 하나 작성하도록 한다.

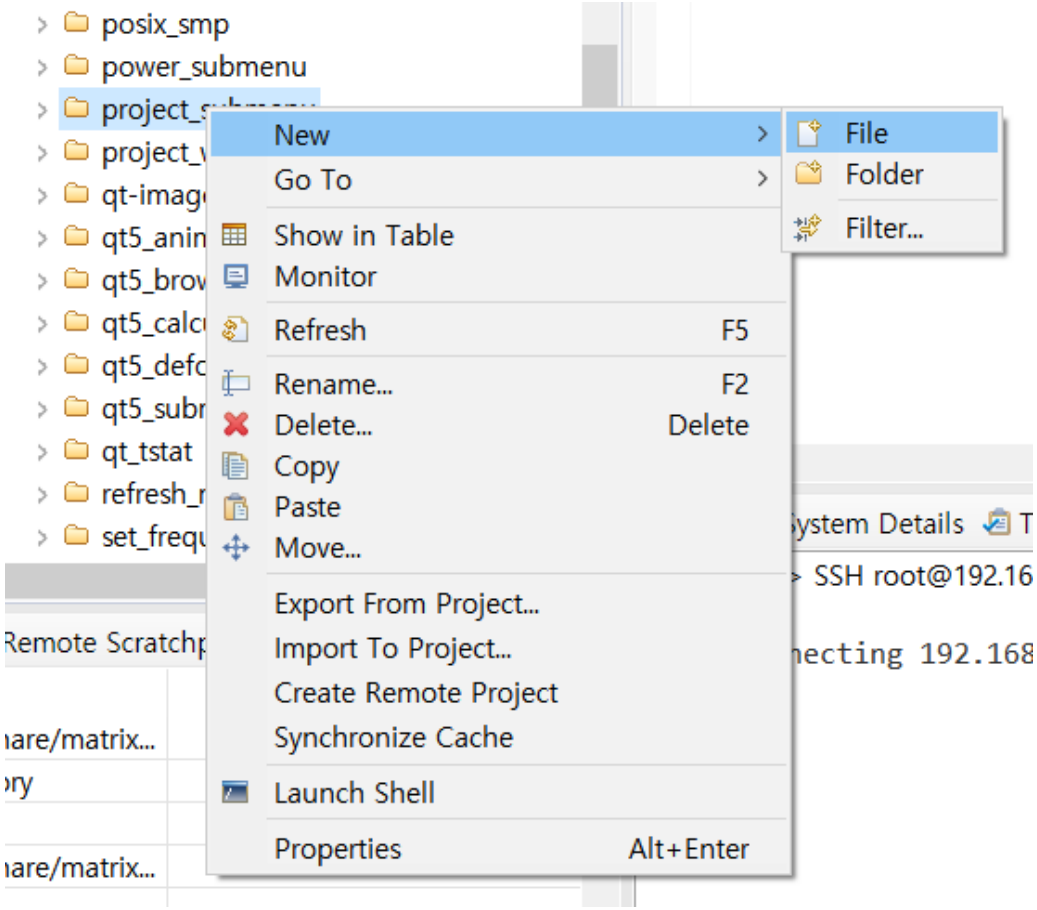




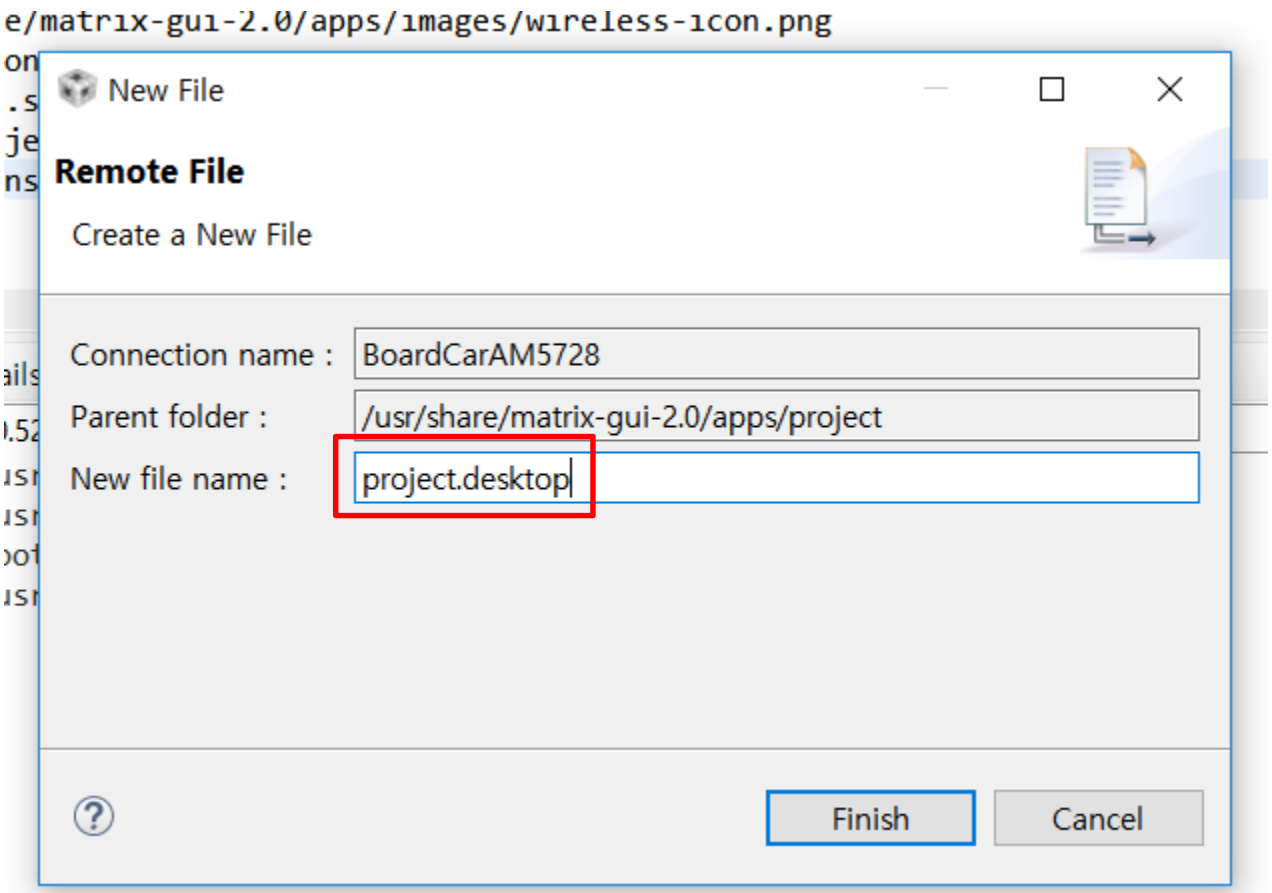
실행을 할 수 있도록 권한을 준다.



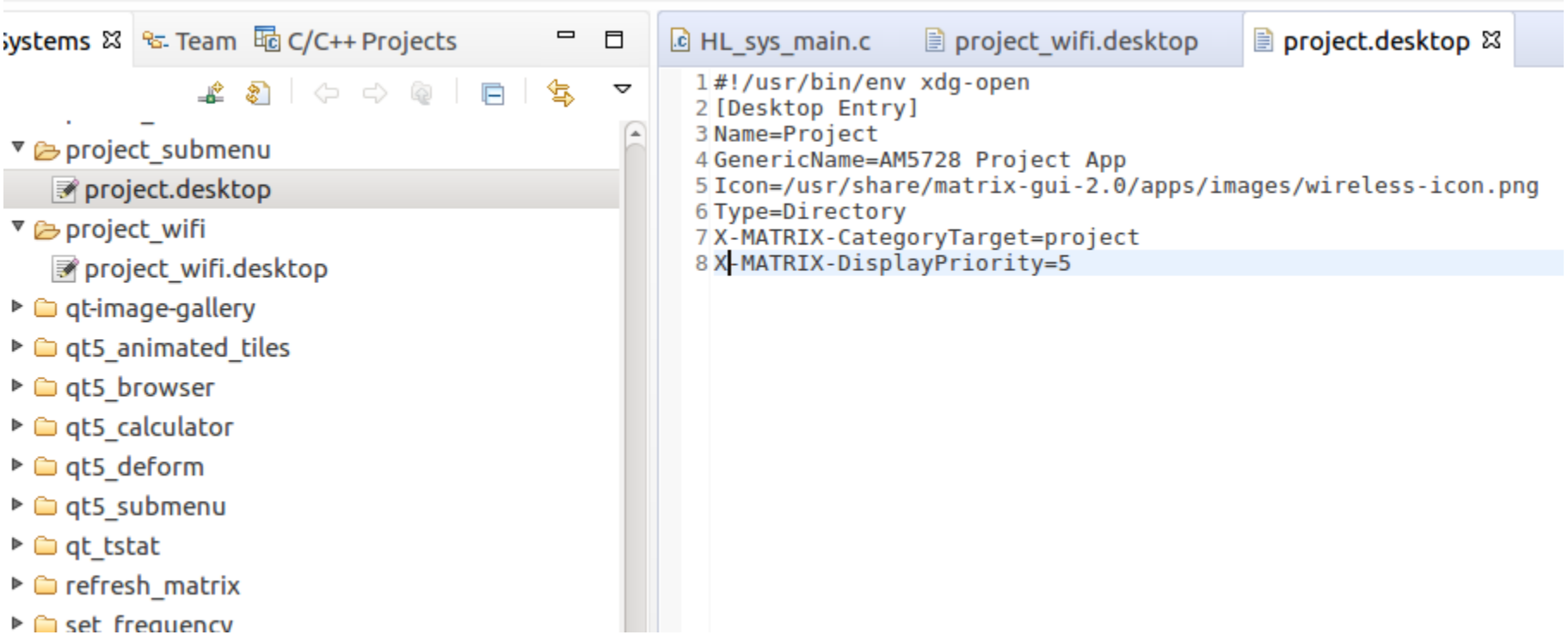
project_submenu 디렉토리를 우클릭하고 New -> File 을 누른다.



아래와 같이 project.desktop 이라는 파일을 만들도록 한다.

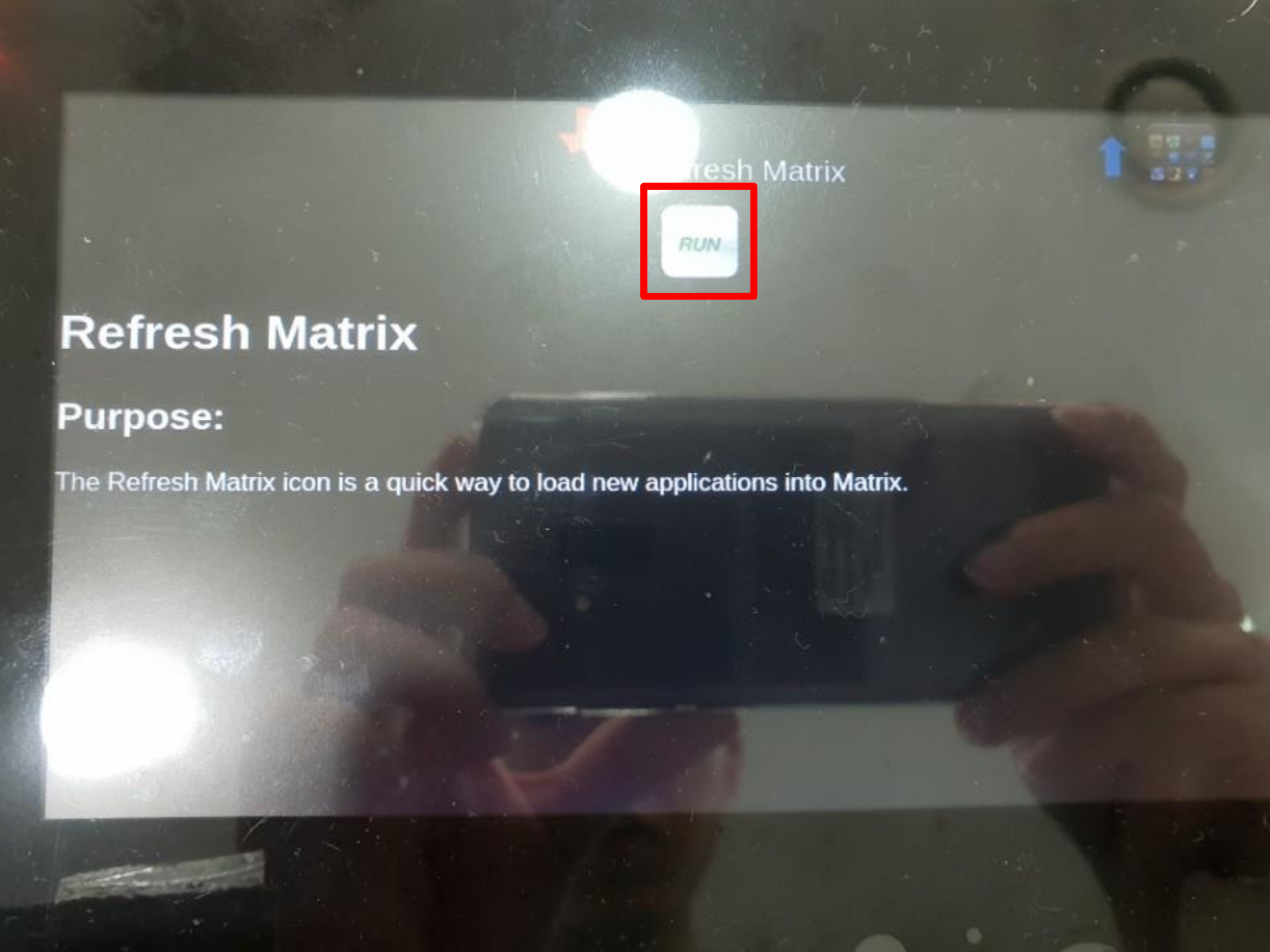


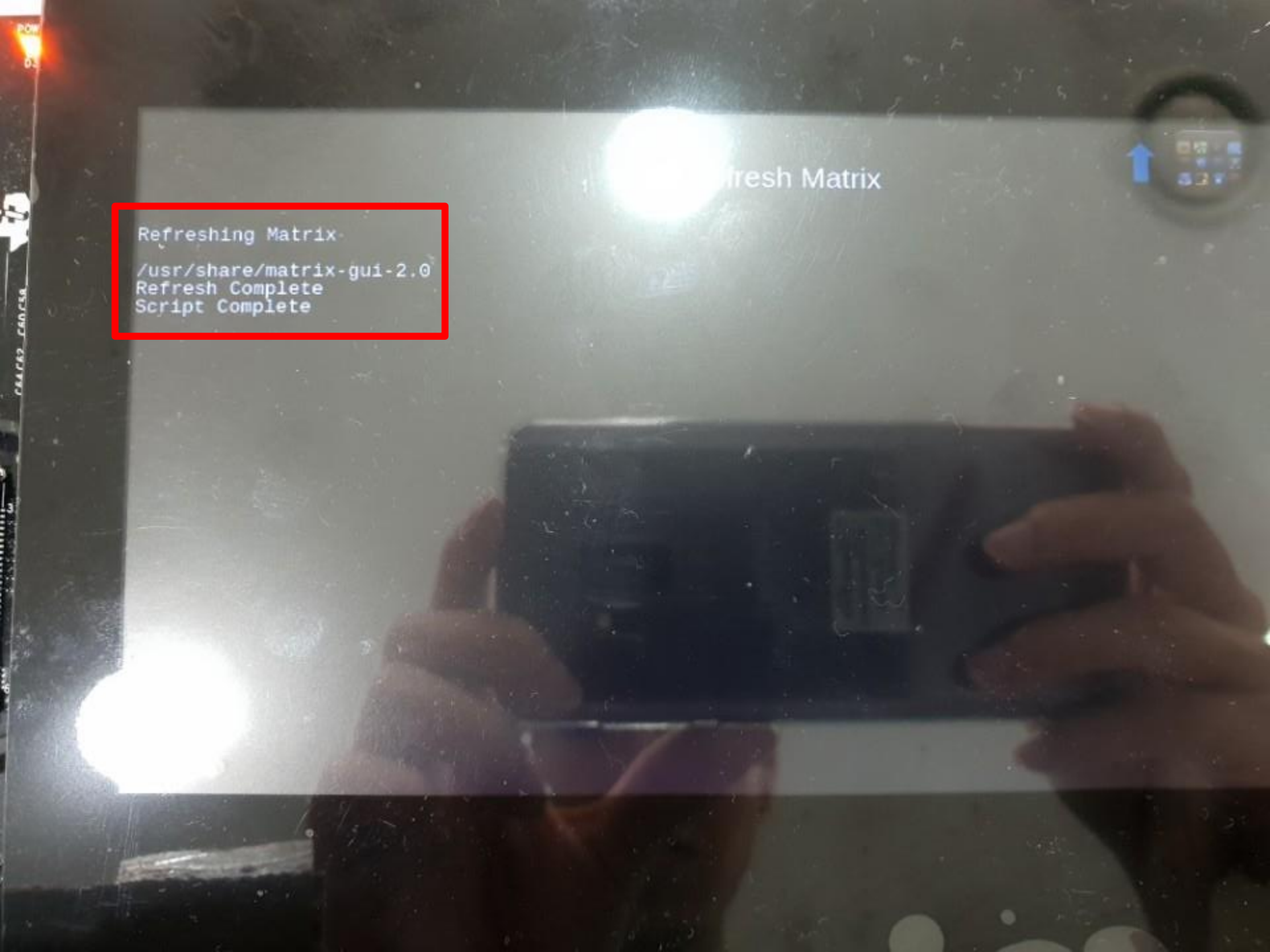
project.desktop 을 아래와 같이 작성하도록 한다.



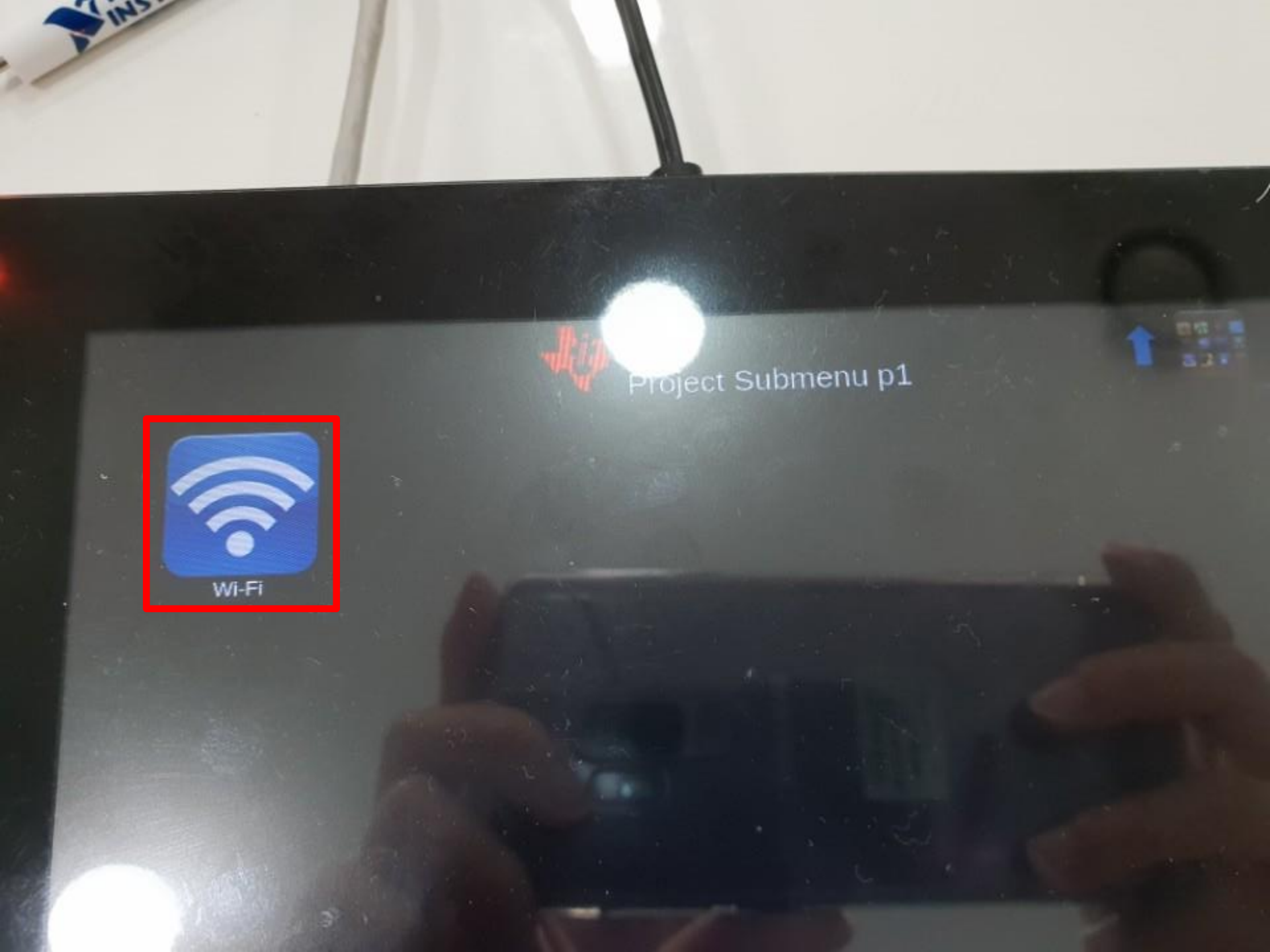

Launcher v2 p1
Project
ARM
3D
Power
Browser
MachineVision
Ethernet
Qt5
Settings
Touch
Video Analytics Demo
USB

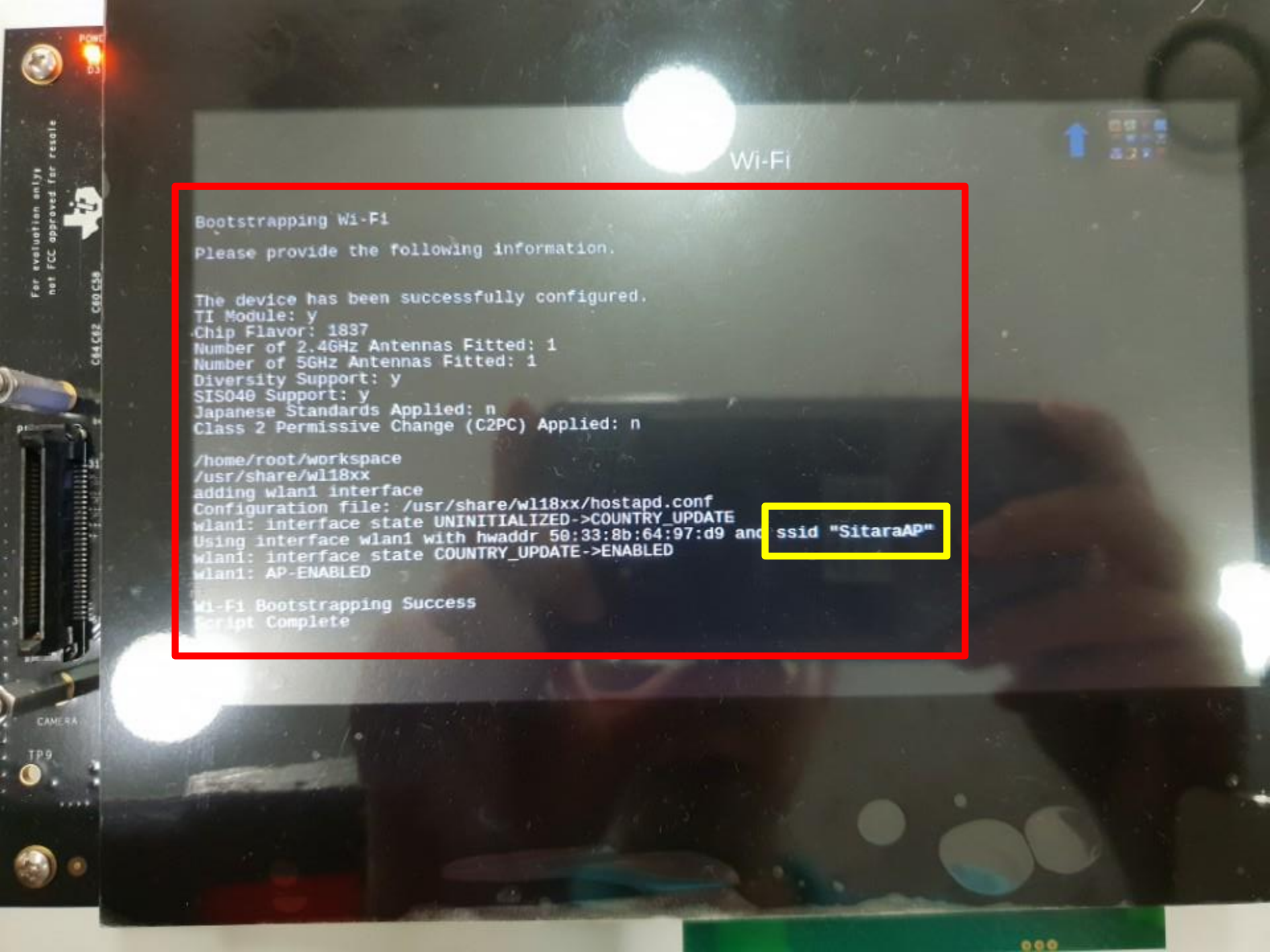

Submenu p1
Matrix Shutdown
Refresh Matrix
Task Info
System Info
System Shutdown
Terminal
Network Settings
Memory


resh Matrix
RUN
Refresh Matrix
Purpose:
The Refresh Matrix icon is a quick way to load new applications into Matrix.


resh Matrix
Refreshing Matrix
/usr/share/matrix-gui-2.0
Refresh Complete
Script Complete


Launcher v2 p1
Project
ARM
3D
Power
Browser
MachineVision
Ethernet
Qt5
Touch
Video Analytics Demo
USB


Project Submenu p1
Wi-Fi


Wi-Fi
Bootstrapping Wi-Fi
Please provide the following information.
The device has been successfully configured.
TI Module: y
Chip Flavor: 1837
Number of 2.4GHz Antennas Fitted: 1
Number of 5GHz Antennas Fitted: 1
Diversity Support: y
SISO40 Support: y
Japanese Standards Applied: n
Class 2 Permissive Change (C2PC) Applied: n
/home/root/workspace
/usr/share/wl18xx
adding wlan1 interface
Configuration file: /usr/share/wl18xx/hostapd.conf
wlan1: interface state UNINITIALIZED->COUNTRY_UPDATE
Using interface wlan1 with hwaddr 50:33:8b:64:97:d9 and ssid "SitaraAP"
wlan1: interface state COUNTRY_UPDATE->ENABLED
wlan1: AP-ENABLED
Wi-Fi Bootstrapping Success
Script Complete


87% 오전 11:12
Wi-Fi
Wi-Fi 다이렉트
사용 중
현재 네트워크
SitaraAP
연결됨
사용 가능한 네트워크
KOITT_01
KOITT_실습실02
KOITT_실습실03
KOITT_안내데스크
KOITT02-5G
SK_WiFiFB09
TONY-STARK
jeitv2
oxy_egg_5GHz
네트워크 추가