

# **G-EMC SRS Sheet**



**SAR Team - 정영환**

**EMC-RF Team - 박소빈**

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# 1. Introduction

## A. Intro

This document focuses on the G-EMC team's description of the requirements, objectives, and scope terms associated with the creation of a webbase-based task scheduling program.

## B. Purpose

The purpose of this SRS is to:

Produce a common task scheduler aimed at realizing open software that is unaffected by security within the scope of UL Korea SUW G-EMC's work.

The page is customized for G-EMC internal work procedures and is designed in consideration of flexibility and procedural characteristics in response to random unexpected situations in the work. The development and design of the service were led by Dankook University's mobile system engineering interns, and copyrights on the entire design and layout are given to the 2020 UL Korea intern.

## C. Project Scope

The scope of the project is as follows.

Function 1. Show the team's scope of work clearly

Functional2. Modification of team work will be possible

Function 3. Make it visible to facilitate communication within the team.

Function 4. Automatically generate test results and reports

Function 5. Report periodically to the responsible person in charge

Function 6. Maintenanceable design method

The above functions encourage the accuracy, professionalism, and communication between team members, and facilitate the convenience of employees through quick task identification.

#### D. Definition & Acronyms and Abbreviations

<b><u>NAME</u></b>	<b><u>Definition</u></b>
<b>SRS</b>	Software Requirement Specification
<b>Web</b>	A website (a meaningful bundle of web pages viewed through a common URL consisting of only domain names, IP addresses, and root paths in an Internet protocol-based network. In South Korea, commonly called homepages refer strictly to websites. The first website was <a href="http://info.cern.ch">info.cern.ch</a> , created by Tim Bernersley in 1990 on CERN (it still exists within CERN sites).
<b>Task Scheduler</b>	It refers to a distributed processing system that allocates and allocates work and takes into account the workload and labor intensity of each employee. Here, the system refers to the webbase-based service mentioned above, which allows multiple accesses, creating an environment where multiple people can handle their work at once.

<u><b>NAME</b></u>	<u><b>Definition</b></u>
<b>Security Programming</b>	Security programming refers to the security of users' personal information or important data within the company. It is the basis of the security program to fundamentally block access to untested personnel and enhance verification of permitted personnel. In this sense, the project used face recognition, one of the most powerful security measures, to enhance internal security issues.
<b>Report Automation Program</b>	The report automation program takes the form of a report that includes certification marks given to verified products that pass standard inspections based on UL internal standards and global safety standards, or contains information on collective failure of products that fail to pass due to failure to meet the standards.

## 2. Overall Description

This chapter describes the overall flow and outline of the project. It looks at the project from the needs of the project, from the perspective of the employees and from the perspective of the Director, and also describes the functional aspects of what should be included.

### **system requirements**

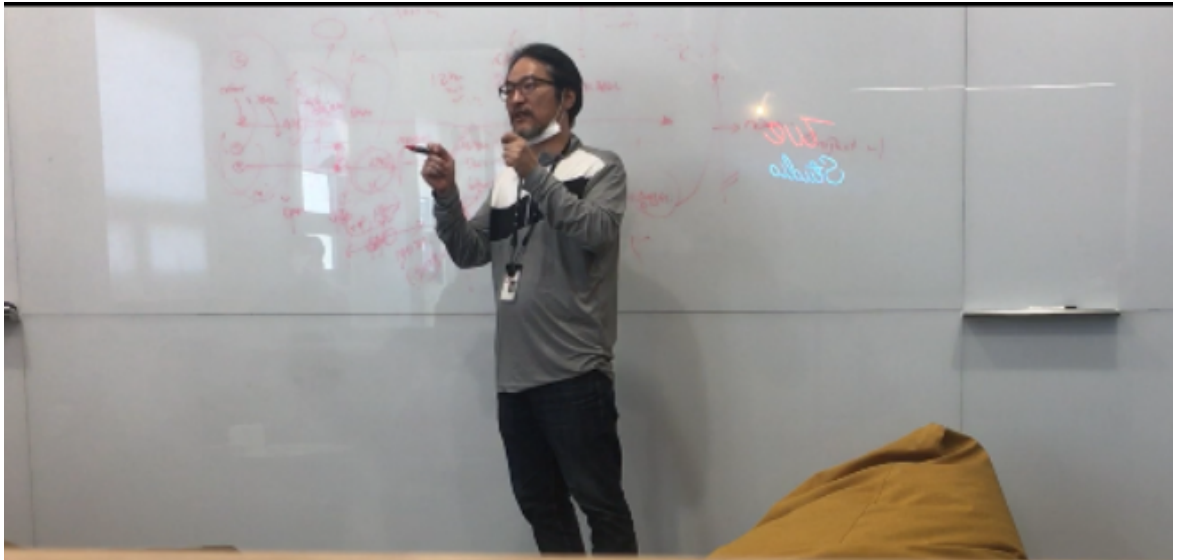
In the case of the G-EMC team, there is a great deal of work, and it is inevitable that many employees will be able to perform complex tasks simultaneously. Therefore, the Director wants to see a system that can observe the staff's work and the team's overall progress at a glance.

### **Product Function**

1. There will be a channel in which team members can share
2. Sharing work among team members will be possible
3. The person in charge will be able to identify all the tasks
4. Stay true to security
5. You will be able to automatically print your report.
6. Flexible system for each test mode

Additional staff requirements are collected to produce meaningful work schedulers to meet the above needs

Based on the information received from Director Choi and Song Hye-rim, the entire flow chart is planned and applied to the system.



Attachments : Director Choi's Lecture

제품명	Airpods PRO	
모델명	APPLE 2019 F/W	
담당자	HyeRim	
프로젝트 시작일	2020-05-22 15:27:48	
시험항목		
EMI	RE	120V, 60 Hz
		220V, 60 Hz
		230V, 50 Hz
	CE	120V, 60 Hz
		220V, 60 Hz
		230V, 50 Hz
	Harmonic	120V, 60 Hz
		220V, 60 Hz
		230V, 50 Hz
	Flicker	120V, 60 Hz
		220V, 60 Hz
		230V, 50 Hz
ESD	120V, 60 Hz	
	220V, 60 Hz	
	230V, 50 Hz	

## Song HyeRim's Data Description

The data include the test plan and schedule on what tests EMC does and what criteria results are produced.

Based on the above data, the expected sample interfaces are as follows.



2020년 5월 22일 15:38:6

예상되는 종료일은? 2020-05-23

Model, 'Airpods PRO'

SoBin ON

전체 프로젝트 현황

EMI

TASK

모드별 진행상황

RF

TASK

규격별 진행상황

성적서 TDS

TASK MANAGE

성적서

저장

FC

Power 측정

Conducted Test

Radiated Test

CE

Power 측정

Conducted Test [Tx]

Conducted Test [Rx]

Radiated Test

KC

Power 측정

Conducted Test [Noraml]

Conducted Test [Low,High,Hummid]

Radiated Test

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## **Program Tools**

- Python 3.7
- Flask
- html
- css
- JavaScript
- Ajax
- Atom
- Sklearn
- Keras
- Excel
- Word

## **Restriction**

**The constraints are as follows:**

Too busy employees.

Complex tasks and unstructured ways of doing things

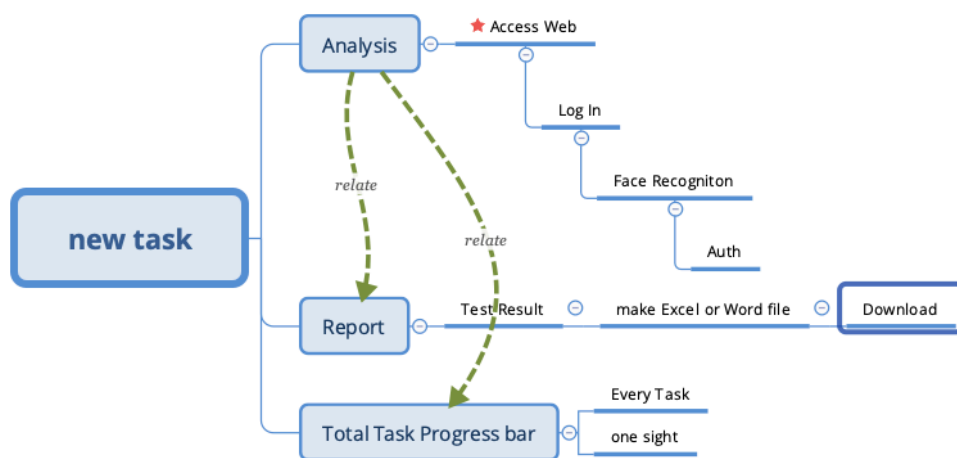
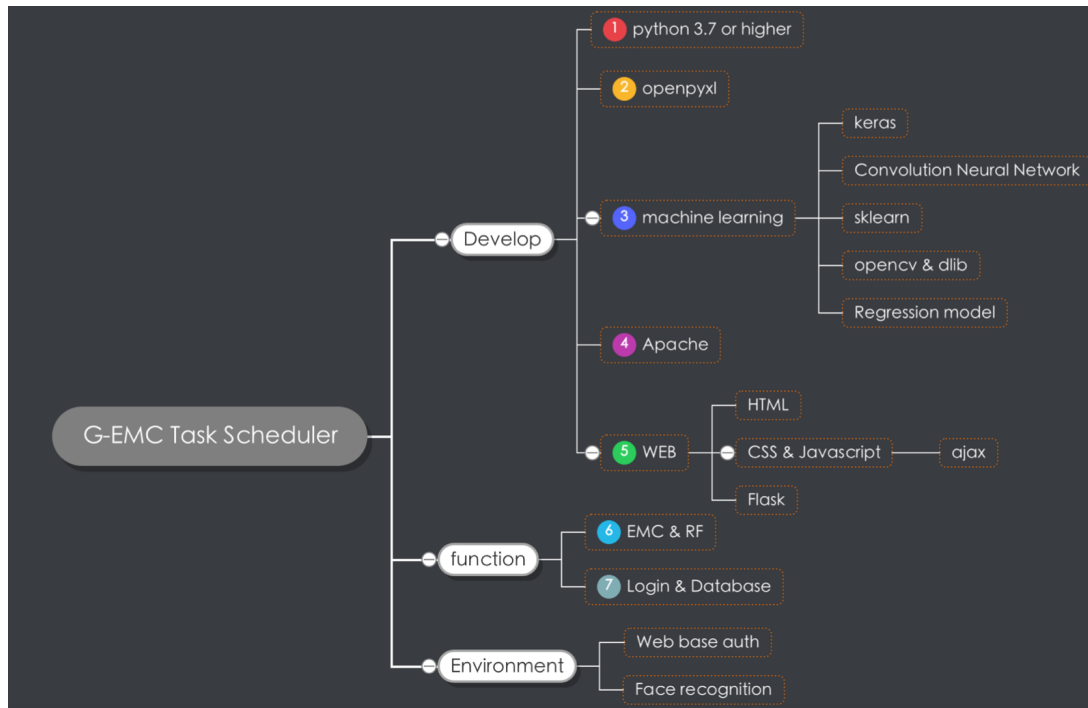
Developer's Low Work Degree

Poor development (small computing resources)

No Server Access

An environment in which maintenance costs cannot be borne

### 3. System Feature



### hardware interface

프로세서: Intel(R) Core(TM) i5-5300U CPU @ 2.30GHz (4 CPUs), ~2.3GHz

메모리: 8192MB RAM

페이지 파일: 6471MB 사용됨, 2879MB 사용 가능

DirectX 버전: DirectX 12

## 4. Functional & Nonfunctional Req

**Target User : G-EMC members**

### Functions

The system covers both the overall operation and the overall work within the team. Therefore, employees who do not have an understanding of their duties should be able to quickly grasp the progress of the work and provide a bounding and guideline to understand how much they are joined in the work.

In this sense, the overall flow of system operation is expressed as follows.

1. Generate ID (first team member with face recognition)
2. User Login (Database-Based Access Allowed)
3. Creating a login user access project
4. Creating a team-wide project viewer
5. Grant project-specific access and access to data
6. Setting Up Mode
7. Test start based on test plan
8. Daily cumulative test results
9. Base Accumulated Results

10. Data Base Sharing and Business Identity

11. Sending Notifications to Managers

## **NON- Functions**

- team-to-team communication
- Increased business understanding

## **5. Conclusion**

This document contains the outline of the project.

It is important to recognize that all content is only a high-level matter, and that future changes or employee requirements may result in different outcomes.

Additionally, the project will be carried out in a wide range of ways that can include these realistic situations, since not all team members share the results in establishing the work plan.

Therefore, important documents must be produced by themselves and, in the case of high-grade security documents or tasks, it is right to handle them individually.

We would like to thank Choi Chang-young for allowing me to proceed with the project.