

# S-Gether: Web Application for sharing goal

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**Abstract.** As social distancing is enforced due to COVID-19, direct meetings have become difficult. But many people do the same thing, sometimes competing, to motivate or increase their effectiveness. The goal of this project is to create a platform where can share schedule, record progress on goals, or compete. Existing todomate or Gongstagram is inferior in quantitative evaluation of achievement rate and social function to communicate with others. Therefore, this project uses MySQL and Express as the backend and React and Figma as the frontend, adding functions such as individual goal sharing, personal feed, social function, group study, and challenge. and Through this, functions such as quantitative measurement of goals, motivation, and goal sharing will be obtained.

**Keywords:** Web Application · Goal · Sharing

## 1 Introduction

Due to COVID-19, modern people are wearing masks and keeping a distance from each other. The currently enforced social distancing limits the number of gatherings. However, the increase in untact activity seems to indicate that people tend to be more efficient and motivated when they are doing the same thing with each other and prefer to share work with each other. For example, students engage in untact activities that give the effect of studying together without actually meeting, and share their activities through todomate, public Instagram, and Challengers to increase each other's motivation. Therefore, an application that helps to achieve goals by managing, sharing, and sometimes competing with others will motivate and increase efficiency.

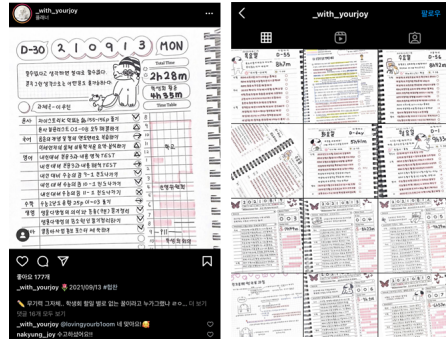
*1-A Objectives* Todo mate and Gongstagram that people currently use have problems such as a lack of social network function or lacks quantitative evaluation of achievement. Through this project, we will improve the convenience of sharing schedules and create a system for quantitative evaluation.

*1-B Configuration* [Frontend] React, Figma [Backend] MySQL, Express

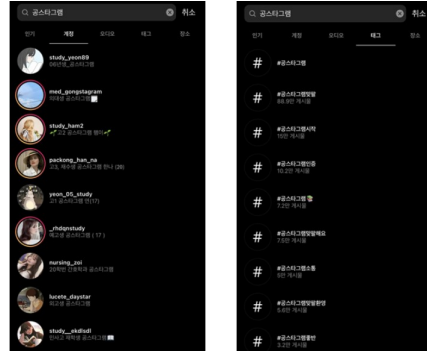
*1-C Functions* It will provide functions such as individual goal sharing, personal feed, social function, group study, and challenge.

## 2 Background

### 2.1 Gongstagram



'gongstagram' takes pictures of study progress and shares them every day. It is meaningful in that it records what has been studied. In addition, if it is difficult to keep the plan on your own, the fact that others see the plan creates responsibility to keep the plan. As a result, it functions to increase learning motivation.



Anyone who has a purpose in studying, uses 'gongstagram' regardless of age. Also Considered that there is 6.17 million hastag, it can be seen that there are many 'gongstagram' users. Therefore, the necessity of a platform that provides the function of 'gongstagram' is clear. If a platform is created, users who use 'gongstagram' will be targeted.

## 2.2 Group Study



When looking at online communities, we can find many needs of a study group that sets a several condition. There are many studies with a variety of rules and purpose. However, they do not have their own platform, so they use chat rooms such as kakao talk.

In this background, we intend to implement a it's own platform for study groups. And we would like to differentiate from other similar service by implementing some additional functions. Instead of entrusting the Group master with study management, we will add automated function to systematically.

## 2.3 Increasing Untact activities

사회적 거리 두기 단계별 기준 및 방역 조치					
구분	1단계	1.5단계	2단계	2.5단계	3단계
개념	생활 속 거리두기	지역의 위험 감소	지역 위험 감소, 전국 확산 방지	지역 위험 감소, 전국 확산 방지	전국 확산 방지
기준	주요 시설 및 단체장 방역 강화 -수도권 100명, 전국 50명 이하 -수도권 100명, 전국 50명 이하	주요 시설 및 단체장 방역 강화 -수도권 100명, 전국 50명 이하 -수도권 100명, 전국 50명 이하	주요 시설 및 단체장 방역 강화 -수도권 100명, 전국 50명 이하 -수도권 100명, 전국 50명 이하	주요 시설 및 단체장 방역 강화 -수도권 100명, 전국 50명 이하 -수도권 100명, 전국 50명 이하	주요 시설 및 단체장 방역 강화 -수도권 100명, 전국 50명 이하 -수도권 100명, 전국 50명 이하
주요사항	방역 강화와 사회적 거리두기 강화 -수도권 100명, 전국 50명 이하	방역 강화와 사회적 거리두기 강화 -수도권 100명, 전국 50명 이하	방역 강화와 사회적 거리두기 강화 -수도권 100명, 전국 50명 이하	방역 강화와 사회적 거리두기 강화 -수도권 100명, 전국 50명 이하	방역 강화와 사회적 거리두기 강화 -수도권 100명, 전국 50명 이하



Figures show the distance policy due to the corona epidemic. Currently, Seoul is at level 4 and other areas are at level 3. In particular, in Seoul, up to 4 people can be together during the day, and it is difficult to find a place to gather.

### 코로나19가 바꾼 대학가, 시험기간 앞두고 비대면 스터디

코로나19 확산으로 대면 모임이 어려워지자 비대면 스터디 모임인 '헝스터디(카메라+스터디)'에 나서는 학생들이 늘고 있다.

응답자의 92.8%가 주로 집에서 이용한다고 답했다. 응답자의 78.2%가 20대다. 스터디 인원은 8명(22.5%)이 가장 많다. 이들은 함께 공부할 수 있고(36%), 서로에게 자극이 되기 때문에(24%) 앱을 사용한다고 했고, 공부시간(63%)이 늘거나 집중력(18%)이 올라 효과를 봤다고 답했다.



It shows the increase of students' untact study group activity. As it became difficult to meet in person due to the corona virus, they created a study group using the untact service, and they are getting positive effects.



### 비대면 시대에 일 잘하는 방법? “공유하고 또 공유하라”

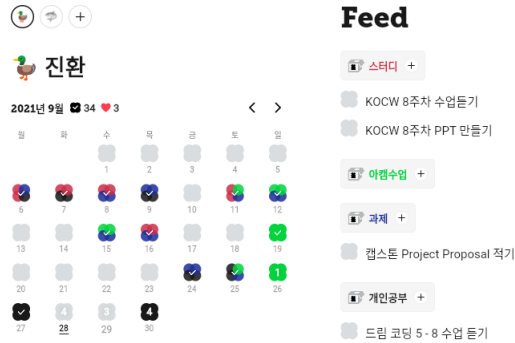
코로나19 확산으로 국내 기업 10곳 중 5곳이 재택근무를 도입했다. 지난해 9월 고용노동부가 발표한 ‘재택근무 활용실태 설문조사’ 결과에 따르면, 조사대상 기업 중 48.8%가 재택근무를 운영하거나 운영 중이라고 나타났다. 코로나19 이후에도 재택근무를 계속 시행하겠다는 응답도 51.8%를 기록해 재택근무 등 유연근무제 도입이 늘어날 가능성이 커졌다.

마지막으로 글로벌 IT리서치 회사 ‘가트너(Gartner)’에서 발표한 김규원 전 대리가 업무의 핵심은 공유, 업무 관리 잘하는 비결에 대해 발표했다. 가트너는 데이터 분석부터 프로젝트 자료, 일정과 미팅 등 모든 업무에서 공유를 활성화했다. 부서마다 다른 데이터나 반복되는 자료 사용을 방지하고, 불필요한 보고 체계를 바꾸는 등 업무의 효율성과 질을 극대화하는 방식이다.

Figures show the increase in untact activity due to the corona virus. Since 2019, when the corona virus spread, the use of video conferencing programs has increased significantly, and many companies have introduced telecommuting. Also, It shows the need for sharing. By preventing repetitive work and increasing reliability, work efficiency and psychological stability can be obtained.

## 3 Related Work

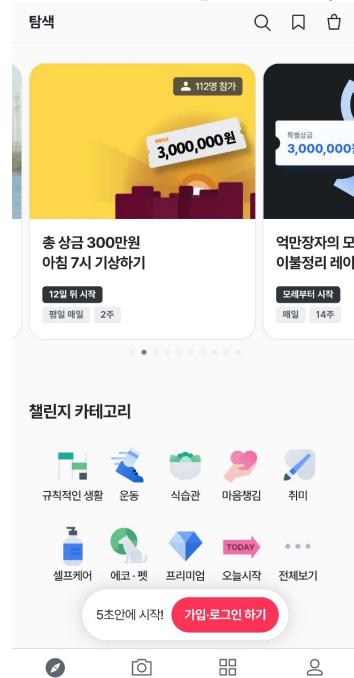
There are apps that function similar to the app we are going to create. First, an app called Todo mate has a to-do list sharing function that we are trying to create. User can write down what to do every day and check whether they have completed their success.



As you can see in Figure 1, if you write down what you have to do every day, you can see how the things you have done are distributed on the left calendar. For example, you can find out how much you study about personal goal by checking how much black color is distributed on the calendar. In addition, when these tasks are completed, notifications are sent to those who have made friends, so they can respond to the tasks they have completed.

However, the app lacks quantitative evaluation of achievement rate and communication with other people. In the current app, after I write down goals, I can't quantitatively evaluate how well I've achieved it within the deadline or what I've done by category. In addition, when others achieve a specific goal, they cannot leave any other response other than leaving simple emoticons in response to it.

Second, there is an app called Challengers. Challengers is an app that allows user to continue their goals for a specific period of time while authenticating them with other people every day when you set a goal. Participants pay participation fees when they enter the challenge. These participation fees are refunded when the goal is achieved. However, if it is not achieved, the participation fee will not be refunded. Participation fees paid by those who fail to achieve these goals are paid in the form of prize money to those who achieve their goals.



However the biggest disadvantage of the Challengers app is that it can only aim to perform certain task every day. Therefore, complex goals cannot be set. For example, there must be detailed goals to set big goals and achieve them, but such complex goal design cannot be done with this Challengers app. The limitations of the app are clear because there are many such complex goals besides simple goals.

## 4 Problem Statement

Platforms that share what they have studied or goals have been steadily needed. In the online community, you can find announcements for creating study groups and recruiting people for various purposes. In addition, if you check the number of hashtags on "Gongstagram" on Instagram, you can see that the number of users is large. The need for a platform with the ability to share these studies or goals is certain, but it does not exist yet. With the advent of the COVID-19 untact era, things that had been carried out offline have begun to be replaced online. The same goes for studying. Studies that were conducted offline

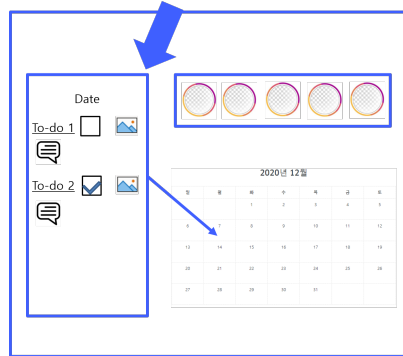
have been replaced online, and classes are also conducted online. With these social changes, a platform that provides community functions that can share study goals, seems to be more necessary.

## 5 Proposed Solution

Our project aims to develop a web application that can provide a service that combines several functions. The functions are sharing each study record, online study that has each rules, and provide challenge.

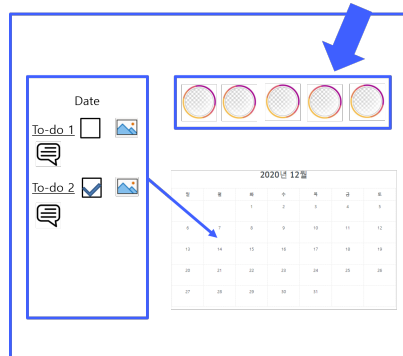
The first function is to put one's study records and various goals on the feed and communicate with friends. This was conceived from the function of instagram (Gongstagram). I added more functions on Instagram, which simply shoots and uploads a timer that measures study time.

### 5.1 Personal Feed Function



User can make Todo List each day and schedule their list by date. This is a different part of instagram. (Gongstagram). User can upload the picture of study like instagram. Then, user can share above things with friends, and can see other's comments on list.

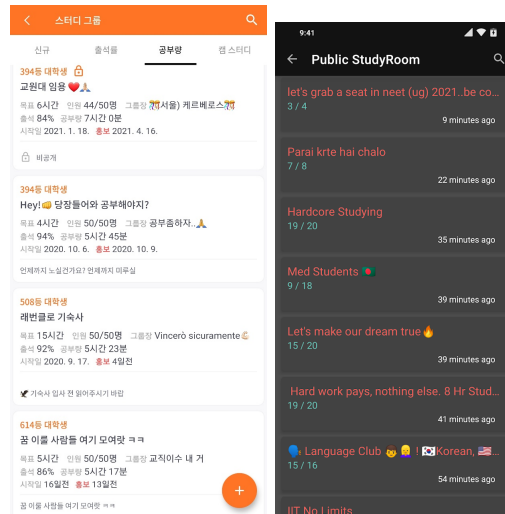
### 5.2 Social Function



Second, we plan to add social network services in our application that similar as instargram. User can visit to friend's feed and they can leave a comment other's picture and todo list. So, user can communicate each other and they can get feed back or give feedback to others.

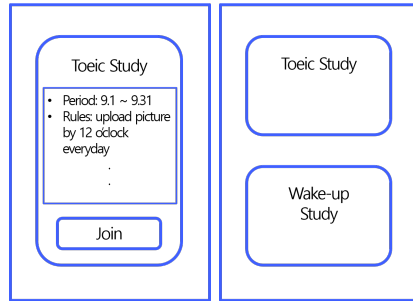
As a result, we would like to change the photo upload and comment functions of Instagram 'gongstagram' to be more suitable for sharing study record or plans, and add a todo llist function to develop a new platform for studying and sharing plans.

Next is the online study group function, and the application of rules and the study compensation system. As we mentioned in the background above, you can see that in so many communities, lots of people find the online study group. In this way, functions such as online study rooms are provided by apps such as '' and 'Study Mate'.



However, the online study room provided by these applications simply for the purpose of measuring the time studied with a timer and sharing it. So there are no additional functions. Therefore, we want to automate and apply various rules that people need to the application we will create, and strengthen penalties and rewards to achieve the original purpose of the study.

### 5.3 Group Study Function



User can create or participate in each group with specific goal, rules, and period etc. The examples of goal like 'Study Toeic', 'Study CS', or 'Certify morning study (it just wake up in morning)'. The rules include things such as wake-up time and photo upload time. Then, this rule is set at the time of group create, and penalties are automatically given if group members do not follow the rules. User have to pay a deposit when participate in the study.

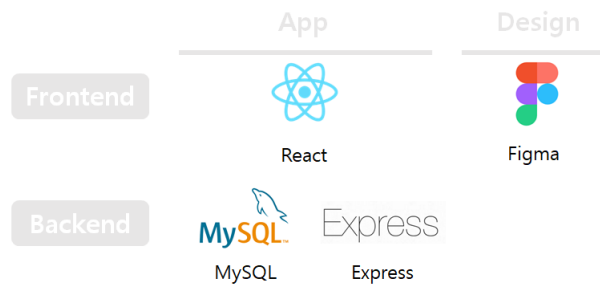
### 5.4 Rule and Challenge Function

Group member should follow the rules of that study group. Group members must take a picture of the part or authenticate it by a set time in each way to prove that they have performed all of today's to-do list. And they should check other member's picture and marked them until fixed time. If user don't share their picture or don't check other pictures, user will get penalty. (It means user do not follow the rules) In this application, penalty means that deducting a certain amount from the deposit. After the end of the period, the amount collected as a penalty fee (fine) is paid to the person with the highest achievement rate as a prize. Then, the remaining deposit will be refunded.

We would like to add differentiated features to the existing app to motivate the study participating members to achieve their goals. In this way, I think users will use our application to achieve their goals more reliably.

## 6 Planning in Detail

### 6.1 Develop Environment





*Front-end*

- React : React is one of the JavaScript libraries and is used to create a user interface.
- Figma : As a web-based UI/UX design and prototyping tool, it is suitable for use in front-end design.

*Back-end*

- MySQL : It is the most commonly used open-source relational database management system.
- Express : As one of the web frameworks for Node.js, it is used for front-end and back-end connections.

**6.2 Division of work**

*Front-end* Jisu Kim and Seyeon Park are in charge.

*Back-end* Mujin Gwak and Jinhwan Kim are in charge.

**6.3 Schedule**

	Sep	Oct	Nov	Dec
Proposal				
Design				
Development				
integration				
Validation&Verification				

*September* Project proposal is prepared.

*October* The user UI/UX is designed using Figma. When the design is finished, the front-end and back-end designs are started.

*November* The developed frontend and backend will be connected to exchange information.

*December* The results are directly used and evaluated by the people who participated in the development first. Compensate for the shortcomings through evaluation.

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