Life Balance Helper

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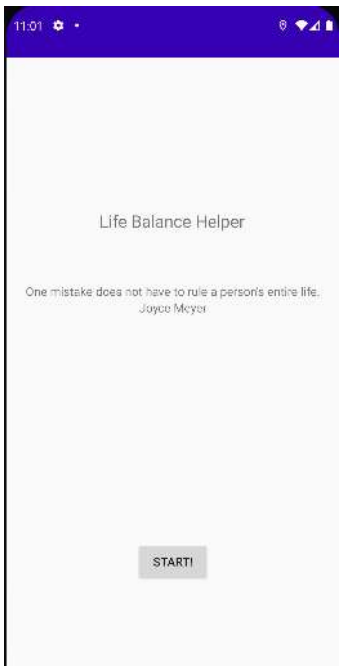
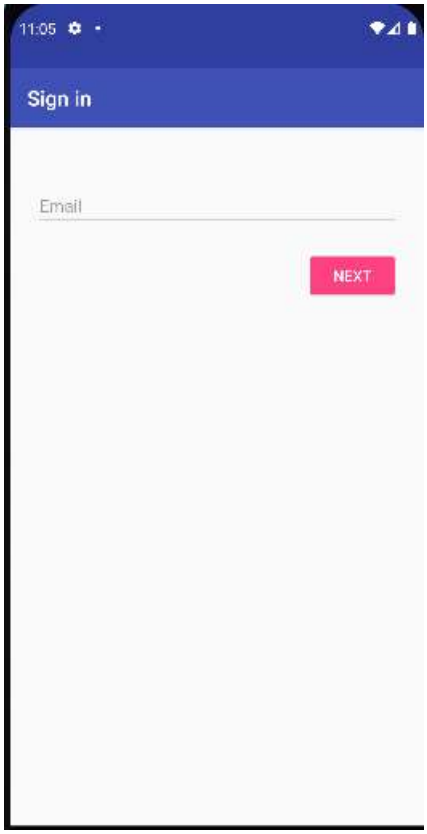
Description

This app will help you to plan and manage your daily work! Moreover, you can get a visualization of your satisfaction of your day based on your performance of your day.

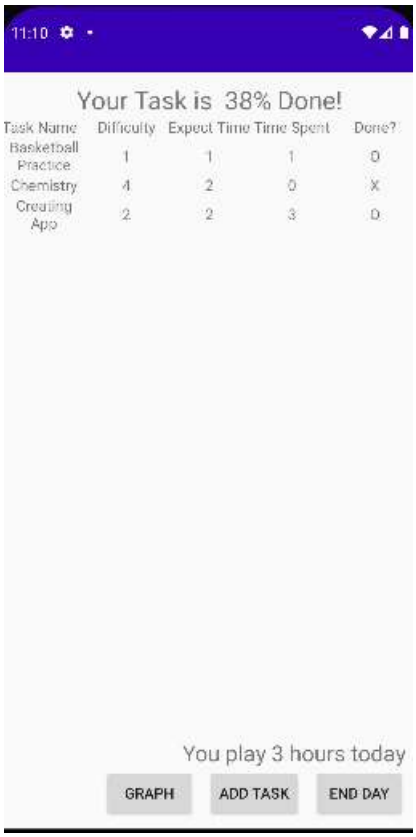
Screen Shot of App



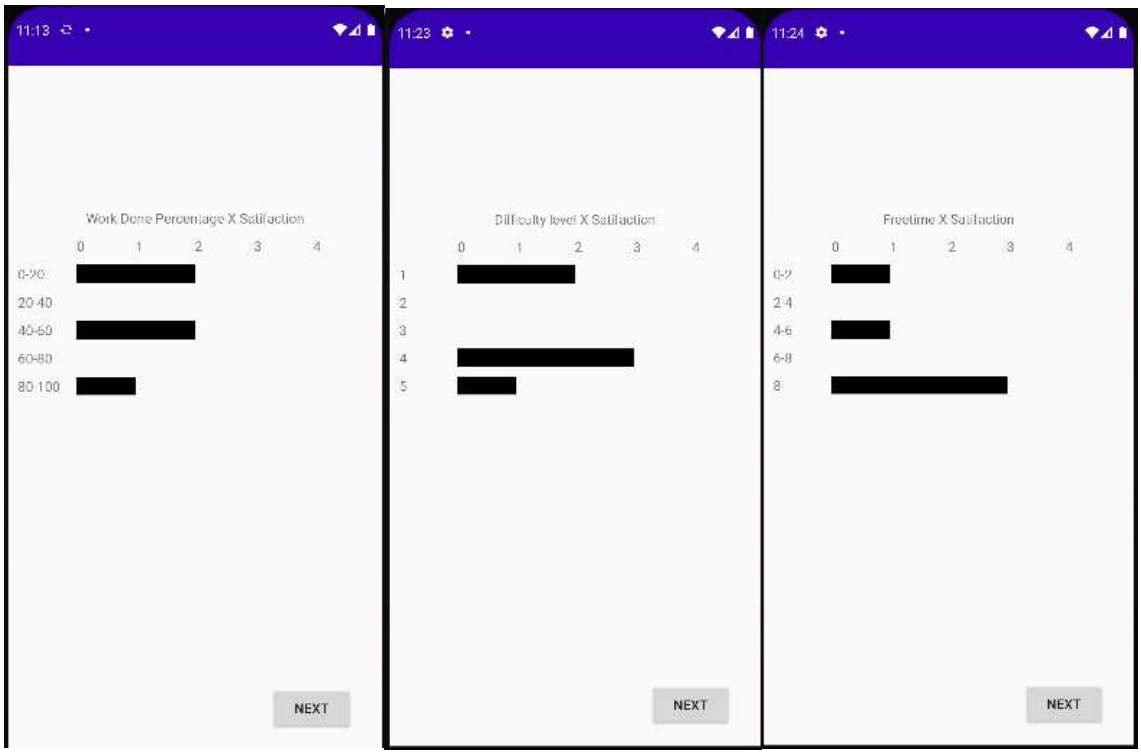
This is a page you can see in the beginning. You can see the name of the app, a quote, an author of the quote and a start button. I got this quote and author data from API, so they change whenever you start this app.



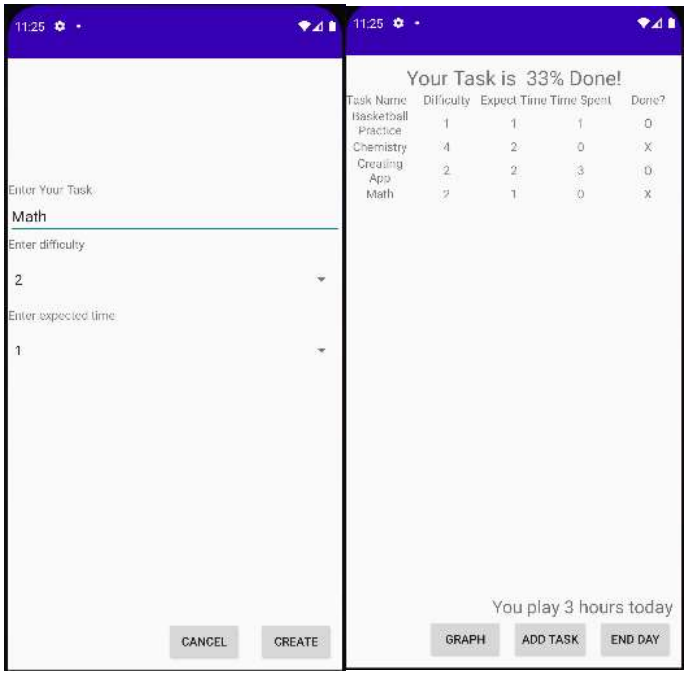
When you press start button, it will lead to a sign-in page. Currently, I have a shared database for all users. So, only one user can use this application.



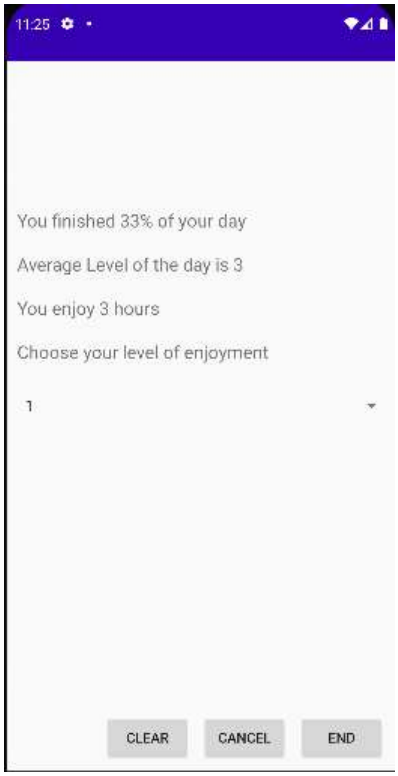
This is the main page of my application. On the top of the application, you can see the percentage of your daily work done. Then, you can see the recycler view in the middle. By clicking "Time spent" section, you can increase the time. By clicking "Done?" section, you can mark your work as done or undone, and it will change the percentage value on the top. You can see time of enjoyment in the bottom. By clicking this text view, you can inclement the enjoyment time. You only can add up to 20 daily works in a day, which means the sum of free time and time spent cannot exceed 20. The buttons in the bottom will lead to other layouts.



This is the page what you see when you click "Graph" button. It will show you the average of satisfaction based on the percentage of your work done, free time, and the level of your day. By clicking the next button, it will lead you to a next stage.



This is the page for adding a task. You can enter the name on the top. If you do not enter a name, it will show you a log that you can't create a task without a name. You can choose difficulties and expected time. The image on your left show you how it shows after adding a task. You cannot add task time if you have more than 18 hours to work.



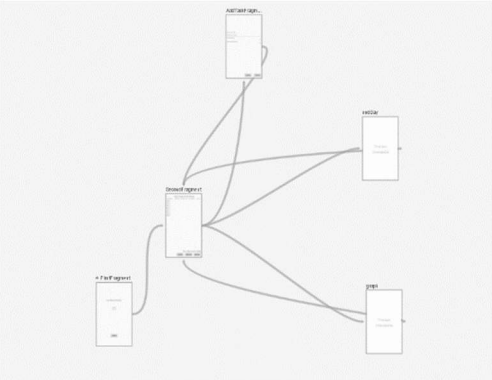
This is a page you can see when you click "End" button. You can clear all tasks here. You can submit it to the database. You cannot enter to this page, if you have no task in your task list.

API and Android Features

-API

I use https://zenquotes.io/api/ to get a quote and an author of the quote to make better UX.

-Android Features



I use a navigation in Android Studio. Also, I remove an action bar in my application, because I don't need an action bar and want better UI for user.

Third Party Libraries

I use retrofit in my application, because it is the most familiar one, and it is the best one for using JSON.

Noteworthy about your UI/UX/display code

I am not an artistic person, so I want vivid and clear design. These are the parts I spent my time for better UI/UX/display code.

-Removing Action Bar

-Adding a quote in the front

-Uniformity of placement of buttons and rows

I believe the most interesting UI/UX/display code is graphing a satisfaction graph based on the daily performance. To draw this area, I need to gather data, classify it, and make a visualization.

Noteworthy about your back end or processing logic

I have many good uses of back end and processing logic: API, View model and navigations. I believe the two most interesting back end and processing logic is using firebase and analyzing data.

By using firebase database, I could maintain the daily work and time of enjoyment even though my application is ended. Also, by saving a daily performance and rate of satisfaction, I could gather data to find the best life-balance sequence.

Analyzing data is the most important aspect of my application. I needed to define a daily performance, and daily satisfaction. Then, I needed to create an equation for daily performance. I needed to choose how to gather information that I need, and how to set a limitation of the data to avoid unrealistic data. Then, I needed to choose how to show this data and analysis effectively to users for better UX.

Most important or interesting thing you learned doing your project

First, I learned the importance of brainstorming and planning. Even though I spent most of my time planning and designing my application, I needed to change my plan a lot due to an incorrectness of my design and algorithm.

Second, I learn how data can be useful in our life. I want to be a data scientist in the future, and this project helped me to learn how to collect data and use this data to build a useful analysis for a better life.

Third, I learn how stressful and sensitive programming is. Even I tried to make my application without an error, it is hard to remove all the error, and even some of my errors cannot fix, and cannot understand why they happen.

Difficult challenge you overcame and/or your most interesting debugging story

Designing how to define and analysis data was the most difficult work for me. I needed to choose which data to collect and use, and how to define "the performance of a day" and "daily satisfaction." Then, I needed to design how to show credible outcomes to users.

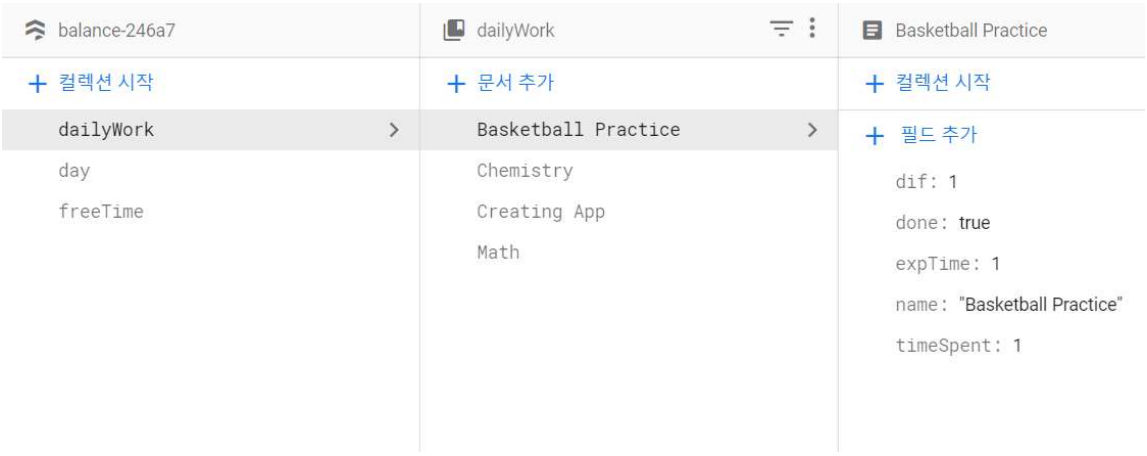
briefly tell us how to build and run your project. Include details about how to set back-end services

Most of instructions of my application is on the explanation of the screenshot, and there are some few things to follow.

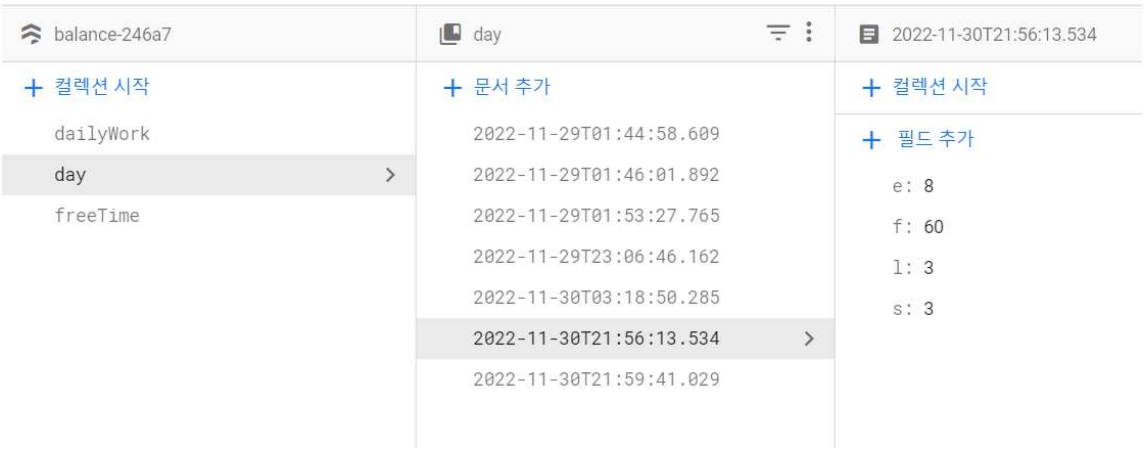
-You should use fake@example.com for user id and 123456 for user password. I only create one database for one user. I don't have time to create a database for multiple users.

-If the application crushes when you start to run it, you need to restart an emulator. I did not have enough time to find the reason of the error and fix it.

Firebase Database Schema



This contains the daily tasks

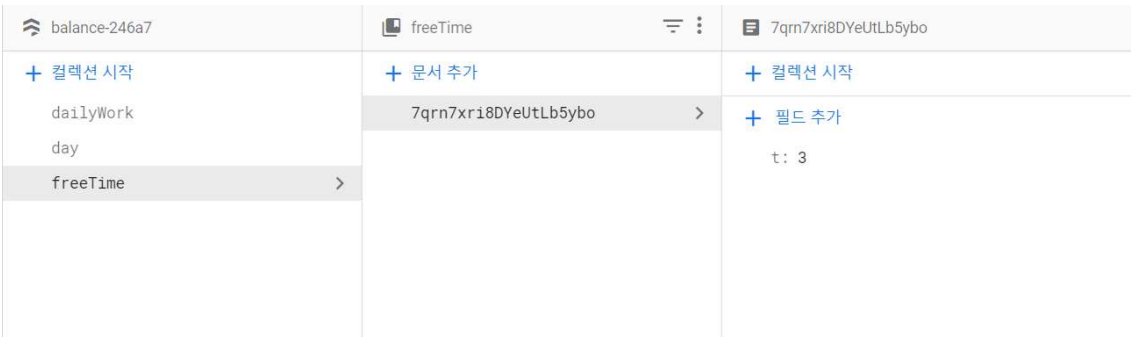


E for time of enjoyment.

F for finished percentage

I for level of difficulties

S for level of satisfaction



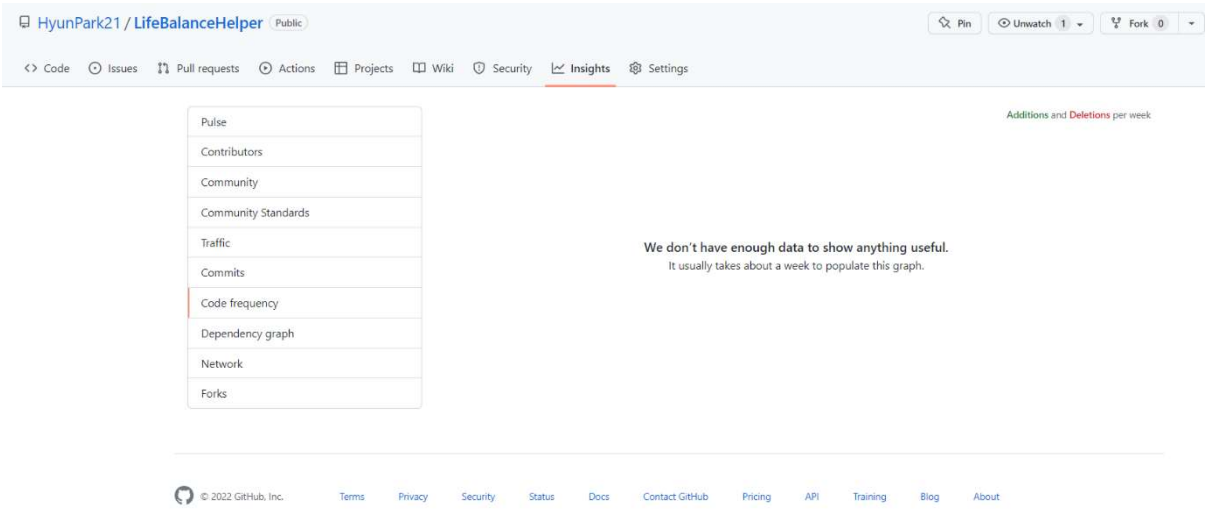
This contains a daily free time.

Count of Lines of Code

File	blank	comment	code
Layout₩graph.xml	45	0	292
project₩AuthInit.kt	6	6	250
project₩graph.kt	27	2	243
layout₩fragment_second.xml	18	0	106
project₩SecondFragment.kt	7	6	79
project₩TaskAdapter.kt	7	0	73
layout₩endtask.xm	9	0	73
project₩endDay.kt	5	2	70
project₩AddTaskFragment.kt	6	2	65
layout₩addtask.xml	10	0	64
navigation₩nav_graph.xml	3	0	56
project₩viewModel.kt	2	3	55
layout₩fragment_first.xml	6	0	52
layout₩row_task.xml	6	0	51
project₩FirstFragment.kt	6	5	44
main₩AndroidManifest.xml	4	0	29
project₩api₩quoteAPI.kt	5	4	21
layout₩content_main.xml	1	0	18
project₩MainActivity.kt	3	0	17
layout₩activity_main.xml	1	0	9
project₩task.kt	1	0	8
project₩api₩QuoteRepository.kt	3	0	6
SUM:	185	67	1959

Language	files	blank	comment	code
XML	23	107	37	1028
Kotlin	12	78	30	931
SUM:	35	185	67	1959

Code Frequency Graph



It is not working.