

Proposal for Orbital 23

Team Name:

P.O.S (*Personal Organization System*)

Proposed Level of Achievement:

Project Gemini

Motivation

"What is not defined cannot be measured. What is not measured, cannot be improved. What is not improved, is always degraded" - British Physicist William Thomson Kelvin

The motivation of our project is to first quantify personal productivity and thereby allow for the incentivization of productivity through the development of an individualized **personal organization system**. Many a times we are overwhelmed by the multitude of things we need to "address" in our lives, and the sheer amount of tasks to be completed everyday. This might include anything from "Go to the gym everyday" to "Code for 3 hours everyday" and any such repeating task or habit one might want to execute within a given period.

So how do we go about quantifying something intangible, let alone improve it? The user is allowed to set up a personalized organization system with all the tasks they wish to undertake in a given time period (usually a day). Each task is then assigned a maximum importance score, at the discretion of the user. Upon completion, said score is "awarded" to the user. At the end of the day, the total score awarded for each task is summed up and compared to the total score assigned. This ratio indicates the completion level for that given day.

[x] Wake-up before 7AM: 5 points
[o] Go to the gym: 4 points
[o] Drink 3 liters of water daily: 3 points
[o] Work for 3 hours: 10 points

Total: 22 points
Awarded: 17 points
Completion level: 77% [Rank = Bronze]

This process is repeated for each day and over a certain period of time, a dataset is generated which can be used to generate statistics and trends about the user's productivity habits. An average completion level (i.e. weekly, monthly, quarterly, rolling average) is awarded to the user and an associated "rank". Firstly, analysis of the data would allow the user to better understand their own productivity habits. Secondly, this gamification of productivity would incentivize the user to pursue greater completion levels and in doing so, being more productive.

Aim

We hope to be able to increase an individual user's productivity by quantifying and incentivizing the user's daily productivity levels by instituting a personalized organization system.

User Stories

- 1.As a student with relatively poor time management and a heavy workload, I want to be able to organise my time better so that I would be able to complete my assignments on time without any delay or stress.
- 2.As a student that generally lacks motivation to do work, I would like to use an app that would incentivise me to finish my assignments on time as well as catch up on my lectures and tutorials so that I do not fall too behind.

3. As someone that keeps breaking my resolutions, I would like an app that would help me track my progress and incentivise me to follow my resolutions (eg. going to the gym twice a week).

4. As an adult with numerous things to do on a daily basis, I keep losing track of the habits I decided to uphold, and the various administrative tasks I tend to forget, so I would like to be able to keep track of all of this in a single place, visually.

5. As a user who struggles with organization and forgetfulness, I would like to be able to "mentally offload" the list of things that I have to do and have a system that manages these things for me so that I am able to dedicate my focus and mental energy to more important aspects of my life.

Features and Timeline

The **User-Accessible Database** allows the user to set-up and modify tasks or daily habits along with the score assigned to it.

A **Daily Interaction Interface** which reminds the user to complete a specific task at an assigned time. This includes app reminders, notifications, as well as widgets (if using mobile)

A **Statistics Interface** that receives information from the Daily Interaction Interface, processes the relevant calculations (involving the scores and ranks) and provides the user with important information. This can include weekly, monthly, quarterly and daily average completion level (awarded score/maximum score ratio) and trends about task completion (e.g. "DailyTask A only completed on 50% of the days") etc.

A **Ranking System** which awards the user a daily rank based on the information from the Statistics Interface.

A **Periodic Analysis Interface** provides a breakdown of the activities done, consistency of activity achievement, and tracks the overall progress of the user, which allows them to understand on how they can further improve their productivity.

A **Goal Tracker System** allows the user to define what "rank" or completion level they want to attain, and automatically calculates the daily scores they would need to attain that level.

Upon further development, A **Gamification System** that allows users to 'compete' with other users based on the achievement score (and rank) that they have been awarded with. Local scoreboard - Users can form private groups within their social circles and compare amongst themselves. Global scoreboard - All users using the system in a publicly viewable scoreboard.

Features to be completed by the end of June:

1. User-Accessible Database
2. Daily Interaction Interface
3. Ranking system

Features to be completed by the mid of July:

1. Statistics Interface
2. Periodic Analysis Interface

3. Gamification system

Tech Stack

1. ElectronJS (Cross-platform desktop development)
2. Python/Django (For web development)
3. Java/Kotlin (For Android app development)
4. Obj-C (For legacy macOS app development)
5. Swift (For iOS/iPadOS/macOS Catalyst app development)
6. SQL/PostgreSQL (For backend)
7. HTML/CSS/Javascript (For webpage interface)
8. React Native (Cross-platform mobile development)