

Productivité: Managing Academic Procrastination

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INTRODUCTION

- Productivité - An iOS application to manage time and academic procrastination, designed for college students
- The main function in Productivité is to allow users to plan with Calendar, use Pomodoro timer and To-do list
- Productivité is to manage reminders to students for important deadlines.
 - This feature can prompt students to reprioritize schedule to spend more time on essential tasks.
 - Other functionalities - chart for self-assessment, get reminders on important deadlines such as assignment submission, test and exam dates, self-assessment and disable notifications while timer is running.
- Thus, able to track the productivity progress to boost motivation

PROBLEM STATEMENT

- Academic procrastination is known to be as one of the common habits among college students
- Students tend to lose the motivation and put off important tasks until the last minute.
- Some students making the error in time calculation to finish academic tasks punctually.
- Academic procrastination are due to poor time management, variables of self-regulation, self-efficacy and other descriptive variables.
- Procrastination has shown to affect academic performance negatively
- Students who were considered high procrastinators performed below average in their academics, whereas low procrastinators scored average or above average in their academic performance

Literature Review - Pomodoro technique

- A time management method is implemented in the application to promote better focus while working on a specific task.
- The timer will be programmed flexible according to students' preference because everyone has different attention span.
- A to-do list for daily tasks is one of the functionalities to help students to be more productive to list tasks. This enables students to tackle the tasks periodically

Literature Review - Related Work

- Minimalist

- A to-do list and reminder application to help users in organizing life and getting things done
- Some of the features of Minimalist is a simple user interface design, which makes it extremely easy to use.
- Each task can be enabled with a timer so that users can focus to finish the task.
- Reminders can also be enabled for each task so that users are able to receive notifications for when it is set.

Literature Review - Related Work

- iStudiez Pro
 - Offers a planner to allow users to manage and arrange schedule, categorizing it into different subjects Pro
 - The main aim for this application is to organise all school or college related tasks and deadlines.
 - Each task can be sorted by date, priority and subject and due date.
 - Users can track grades received and by inputting it into the application.

Literature Review - Related Work

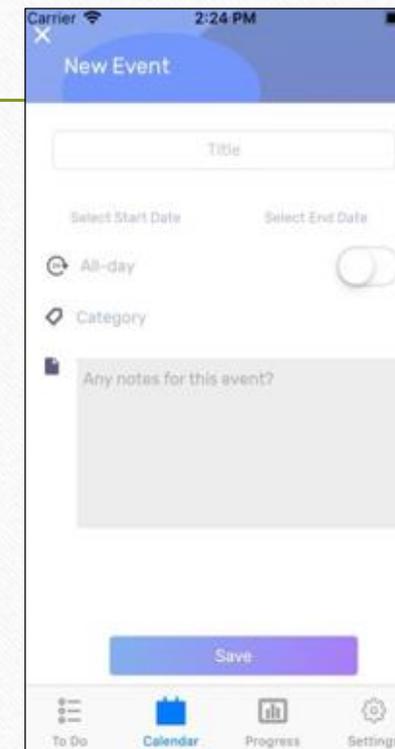
- Pomotodo
 - Combines to-do list, reminder, notes and Pomodoro timer and report to track users in tracking productivity
 - The main feature of this app is emphasized on using the Pomodoro technique. Each task is tracked by the number of Pomodoro cycles used to complete it. This enables users to record the time needed to complete different types of task so that users are able to predict time consumption better in the future.
 - Pomotodo generates detailed work statistics, allows users to analyze their work pattern and get to know themselves better.
 - Users can use '#' keyword to segregate tasks into categories for easy organization.
 - The application is also available on multiple platforms such as Android, Mac, Windows, and Chrome web extension.

METHODOLOGY - Development Platform

- Productivité is developed using the Swift programming language for iOS platform for faster development as compare to Android development
- The IDE chosen for this project is Xcode. XCode provides an interface designer which is called storyboard to simplify the process of designing the user interface
- XCode supports Git version control which helps programmers to revert to older versions of the code and add new features without risking the progress on the application that is currently in progress.
- The chosen database for Productivité++ is the Firebase Realtime Database. Firebase requires less time for the backend maintenance of the database because it is handled by Google.

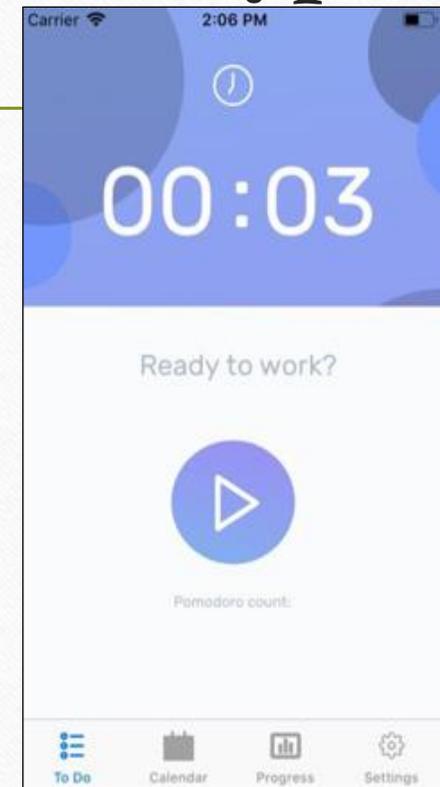
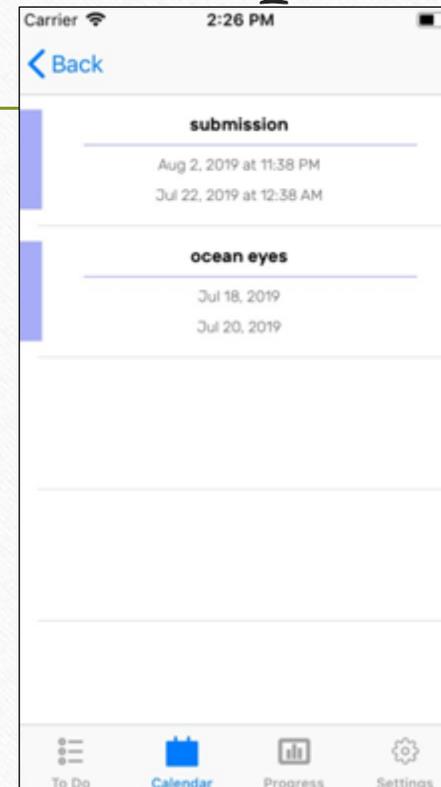
METHODOLOGY - Developed Prototype

- Productivité imports the Firebase library to deal basic functions such as login, sign-up, and change password.
- The main function in Productivité is to allow users to plan with Calendar, use Pomodoro timer and To-do list.
- Users may customize the categories and assign colors to each category.



METHODOLOGY - Developed Prototype

- Productivité also has a method to track progress. The functions include adding, editing, deleting, and retrieving events.
- The progress tracking feature is derived based on data stored from the running timer.
- The time measurement in this application is counted as a Pomodoro. This means, every 25 minutes is considered as one Pomodoro.

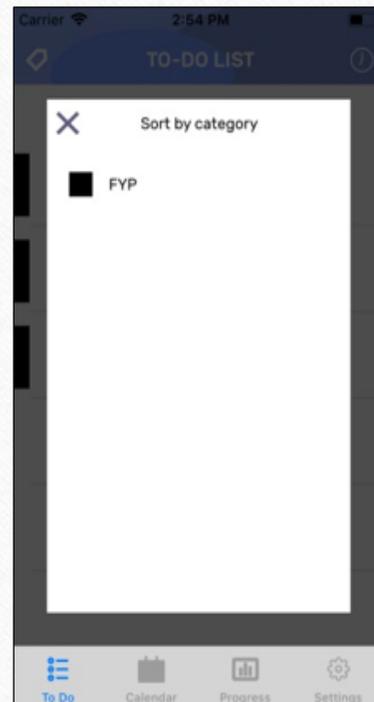
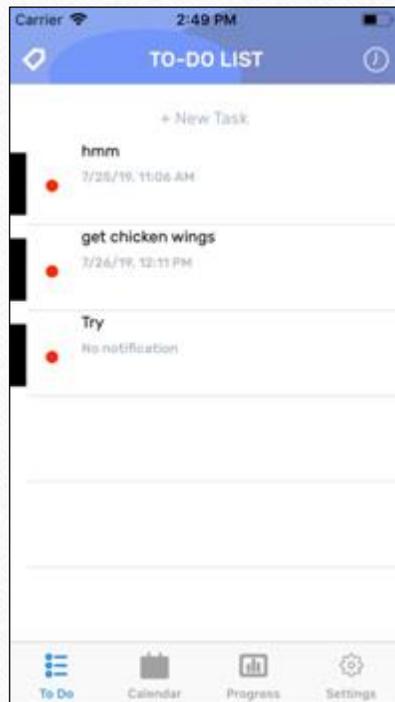


METHODOLOGY - Developed Prototype

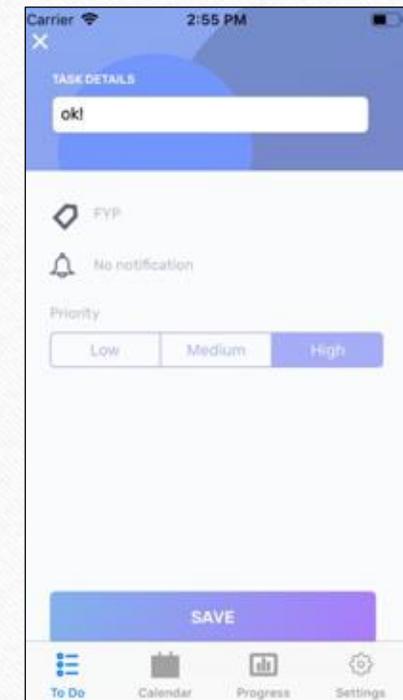
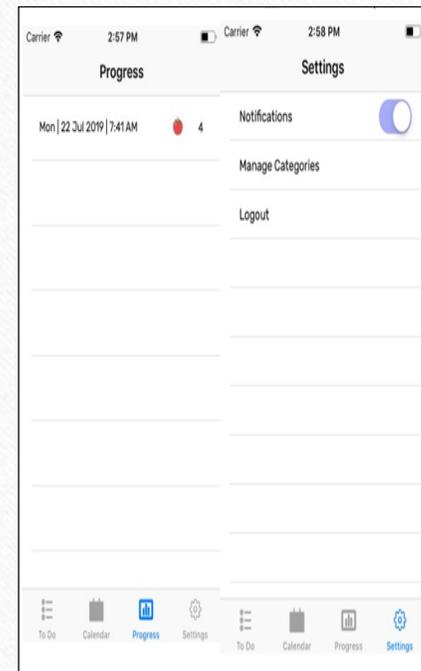
- If the 25 minutes ends, then `shortBreakInterval` will be called. This is when the user gets to rest.
- The `updateTimerDisplay` is called to change the format of time in `UIViewController`.
- `startTimer` function calls class timer and trigger the timer.
- `timeInterval: 1` means it will decrease by 1 second every time it runs.
- The `timerTick` function validates when to call the right time interval.
- `PauseTimer` function just pauses the time when pause button is pressed.

METHODOLOGY - Developed Prototype

Shows the populated task from database in a To-do list and sorting function by category.



Shows the screen for setting the task prioritization and adding on new task for the main category



EVALUATION

- The UAT for Productivité was performed via a questionnaire set distributed to 31 random participants based on their experience using the system
- The UAT helped to understand what users are expecting by measuring the satisfaction level. This will be helpful during delivery of final product.
- After the feedbacks were collected, it was found that most respondents suggested a lot of things to improve on.
- One of the main limitations of the research conducted is the lack of respondents gathered from giving out questionnaire, which is a bare minimum number of 31 participants.
 - Because of this, the results may not be fully representative of the entire population. Nevertheless, the results from questionnaire have managed to support the assumptions about the ideas behind the research. From the results, it could be seen that most students identified lack of time management skills for the cause of procrastination.

CONCLUSION

- In conclusion, the next area of research is to improve on the requirements of the application and overall quality of the application's functionalities.
- The application development will prove to be useful in helping the intent for managing academic procrastination by providing tool for time management via mobile application.
- This will hopefully be carried out to encourage students to manage their time and procrastination habit better.

THANK YOU
