

# **Project Written Report**

## **Category 4: Resource Development**

**Project Group Number:  
4-096**

**Title of Project: Tranquille**

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## **ABSTRACT**

Tranquille is an app which aims to help Hwa Chong high school students with their time management problems and stress, as well as to alleviate problems related to sleeping. This is to help them to become more organised and to stay alert. With an increasing number of students being tech-savvy, resources in their electronic devices become correspondingly accessible.

## **1--INTRODUCTION**

### **1.1--Rationale**

We found out that many Hwa Chong students lacked sleep due to certain causes. These include poor time management and stress. The lack of sleep caused them to feel tired and weary very often, resulting in inefficiencies in their daily life.

### **1.2--Objectives**

We hoped that users with poor time management and were stressed could tackle those problems by using our app, allowing them to sleep well and live a happier life.

### **1.3--Target Audience**

Our target audience was high school Hwa Chong students who had poor time management and/or were stressed.

### **1.4--Resource**

The resources created for this project was an app which had three features to it:

- A music player with calming music
- An alarm and a timer to allow users to control their time spent on an activity
- A stopwatch
- Tips on how to have better time management, relieve stress and have better sleep

Although these are very conventional features, they still serve a good purpose in helping users solve their time management and/or stress problem to sleep better.

## **2--REVIEW**

There were many current resources serving similar purposes as our app. However, our app stood out in a few ways.

### **Difference 1: Convenience**

The current resources only have features to tackle either time management problems or stress problems. If one wanted to tackle both problems, he had to use more than one app to do so. However, our app would be able to tackle both problems. We believe that if users can have better time management and can feel less stressed, they can sleep better.

### **Difference 2: Price**

The current resources require users to pay for a premium subscription to access all the features. Without it, many features cannot be accessed. On the other hand, our resource is completely free of charge.

### **Difference 3: Suitability**

Our resource is more student-oriented, with a planner to allow our users, which are students, to keep track of their homework and examinations. However, the current resources are more suitable for work as they help adults keep track of events such as meetings.

## **3--METHODOLOGY**

### **3.1--Needs Analysis**

A needs analysis was conducted to ascertain the relevance of such a project. A survey was constructed, asking students about how long they slept everyday. It was shown that many people only slept for about 6-7 hours. However, studies showed that teenagers need around 9h of sleep every day. ("How Much Sleep Do We Really Need? - National Sleep Foundation", 2019) We found out that those who slept sufficiently everyday had good time management while those who lacked sleep tend to have poor time management. These people also were usually quite stressed and anxious about things.

This made us realise how important good time management was for people to have sufficient sleep and a better life, hence confirming our project would be useful.

### **3.2--Development of Resource**

To develop our resource, an app, we used an app developer, Android Studio. This allowed us to do the necessary coding for our app. We referred to videos online to do the necessary coding for the alarm and the tips. As for the music, we got them online as well.

### **3.3--Pilot Test (Part 1)**

After we had finished most parts of our app, we decided to conduct a pilot test to find out whether our product was well-received by others. It was found out that our product was well-liked, but there were some flaws. It was too dull and was not attractive enough. Also, the sleep timer was redundant too as users could not predict how long they were going to take to sleep.

### **3.4--Pilot Test (Part 2)**

After receiving comments from the judges regarding an issue in our previous pilot test, we constructed our questions for the second pilot test to find out whether our app was successful in achieving its objectives. It was found out that users thought that our app was effective in helping them tackle their time management problems. They also said that they experienced much fewer of the symptoms of the problems they used to face.

## **4--OUTCOME & DISCUSSION**

Our app was generally well-received by others, as seen during the pilot tests. They thought that the app has changed their habits as they used our app effectively.

However, there was still room for improvement. The interior design of our app can be improved. Although it is user-friendly, it may not look very appealing to some users.

From the previous pilot test they told us that it was too dull, however this pilot test they told us that the colour contrast was too bright, therefore it was very straining for their eyes and very difficult to see.

## **5--CONCLUSION**

Through this project, we all learnt how to appreciate coding more. At first, we were skeptical about it but after the project, we learnt that although coding could be tedious and confusing sometimes, the end product, which was our app successfully running after many tries, really paid off. However, along the way in the project we sure did face some challenges.

### **Challenge 1: We could not meet up very often**

As we all have different schedules, it was really difficult to find a time where all of us had the time to meet up to discuss our project. In addition, some of us had competition and to make matters worse, they were at different times of the year. Due to this, there were very few opportunities for us to meet up together as a group. Furthermore, during the competition season, we had extra training sessions and this caused us not to have enough time to meet up.

### **Solution 1: Create a timetable**

We created a timetable and found out there were still dates where we could meet up together as a group to discuss. Most of these dates were during the holidays when we had more time to spare. However, during the school term, there were really few instances when we could meet up together as a group as we are generally more busy during the school term. So for these few instances during the school term, we decided to meet up our mentor so that he could guide us down the right path and to ensure that we do not go off track. We also utilized the time during the June Holidays to meet up more as we had no school and less homework.

### **Challenge 2: We had a few arguments along the way**

There were many instances where we had very different views. During those instances, we would argue and our friendship got a little ruined. We had very differing views when it came to the ideas of our app and how we wanted it to look like.

### **Solution 2: We became more open-minded towards comments**

Our mentor advised us to not argue as it would not only affect the productivity of our progress in the project, but our friendship would also be ruined. Thus, we became more

open-minded, making us more accepting towards each others' views. This caused less arguments in the subsequent months, which increased our productivity.

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Android Studio: The app developer that we had used for creating the app

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