

IT Application - Mental health in student (Helping students to learn how to make better decisions)

Problems/Business needs

Industry: Education (MOE).

Key Trend: The industry is shifting from pure academic grades to "Holistic Education" (Mental wellness, resilience)

Target Audience: Singapore Students (Secondary to Tertiary)

The Stakeholders:

Schools: Need better tools to teach Character and Citizenship Education (CCE)

Students: Need a safe space to fail and learn life management

Problem Statements

Problem Statement 1: Rising Student Burnout

Detail: Students often prioritize grades over mental health, leading to burnout.

Current educational tools focus on content (Math/Science) but not on how to manage the student lifestyle

Problem Statement 2: Lack of Time Management Skills.

Detail: Many students transition from Secondary school to Polytechnic without knowing how to balance social life, study, and rest.

Problem Statement 3: Disengagement with Traditional Advisory

Detail: Teachers telling students to "study hard" is boring. Students learn better through doing and experiencing consequences in a safe environment

Problem Statement 4: The Need for "Soft Skills" Training

Detail: Schools need a way to teach decision-making and risk management without real-world academic penalties

Solution

Core Concept: An interactive simulation RPG where the player acts as a student managing limited resources (Time & Energy) over a set period (e.g., 7 in-game days)

Key Features (Technical/Scratch implementation):

Resource Management System: Use variables to track Study_Level, Mental_Health, Physical_Health, and Social_Meter

Event Randomizer: A "Daily Event" system where the code picks a random number to decide an event (e.g., "Teacher Surprise Quiz" or "Friend asks to hang out").

Every choice has a +/- effect (e.g., Study Late: +10 Knowledge, -15 Energy, -5 Mental Health).

Mayb a few possible endings:

- Good Ending: Study > 70 AND Health > 50 (Passed & Healthy).
- Bad Ending 1 (Burnout): Mental_Health < 0 (Game Over: Exhaustion)
- Bad Ending 2 (Parent Trouble): Study < 30 (Fail Exam)
- Bad Ending 3 (Hospital): Physical_Health < 0 (Critical Illness)
- Secret Ending: Study = 100 AND Social = 100

Work delegation

Member 1 Game logic and system

Responsible for the "Game Engine" in Scratch (Coding the variables, IF/ELSE conditions for endings)

Member 2: UI/UX Designer.

Responsible for drawing/finding the sprites (Student character, background rooms), designing the buttons, and creating mayb different screens like the Game Over screens.

Member 3: Narrative & Content Writer

Responsible for writing the dialogue ("Teacher says go study"), creating the scenarios for the random events, and writing the text for the different endings

Member 4: Version controls, documentation

Responsible for testing the game (finding bugs where variables don't add up) and managing the GitHub documentation/Final Report

Benefits/Advantage of our solution (Why us?)

User Empathy (Student Perspective):

Understand that students feel overwhelmed. This tool helps them to find balance

It provides a safe environment for trial and error. It is better to get the Bad Ending in the game than in real life

Educational Value:

Teaches Strategic Thinking: Players realize they cannot do everything; they must sacrifice one stat to gain another.

Able to be replayed: The multiple endings encourage students to try again and learn different strategies to balance it

Feasibility:

Since it is built on Scratch, it is web-accessible, and easily modifiable by teachers who might want to change the text. And won't be complicated for people that would like to try out