

Game Design Document

Game Name - The Scholar's Dilemma

2 Game Overview

2.1 Game Concept

A student is having a hard time keeping up with the fast-paced academic environment and their grades have been on a decline. The player turns to cheat to score grades. Roam around the examination hall and find the most efficient way to collect answers from others while avoiding getting caught by the invigilator.

2.2 Genre - 2D Strategy/ RPG/ Arcade(variant of PacMan)

2.3 Target Audience - Ages 9+

2.4 Game Flow Summary - One-player, level-wise play

2.5 Look and Feel - Vibrant, Colourful, Joyous

3 Game play and Mechanics

3.1 Gameplay

3.1.1 Game Progression

The game is played in levels. With each passing level, the difficulty of the game increases. This is done by expanding the classroom size, introducing more invigilators and creating more distributed reliability and marks attributes among the students.

3.1.2 Mission/Challenge Structure

The mission of each level is to collect answers from other students and achieve more than the target marks for the level while avoiding being caught by the professors who are invigilating the test. All this should be done within the given time of the exam.

3.1.3 Puzzle Structure:

Score passing marks by calculating a path that selects students with better marks and reliability and at the same time minimises our distance walked, so as to complete the level in time.

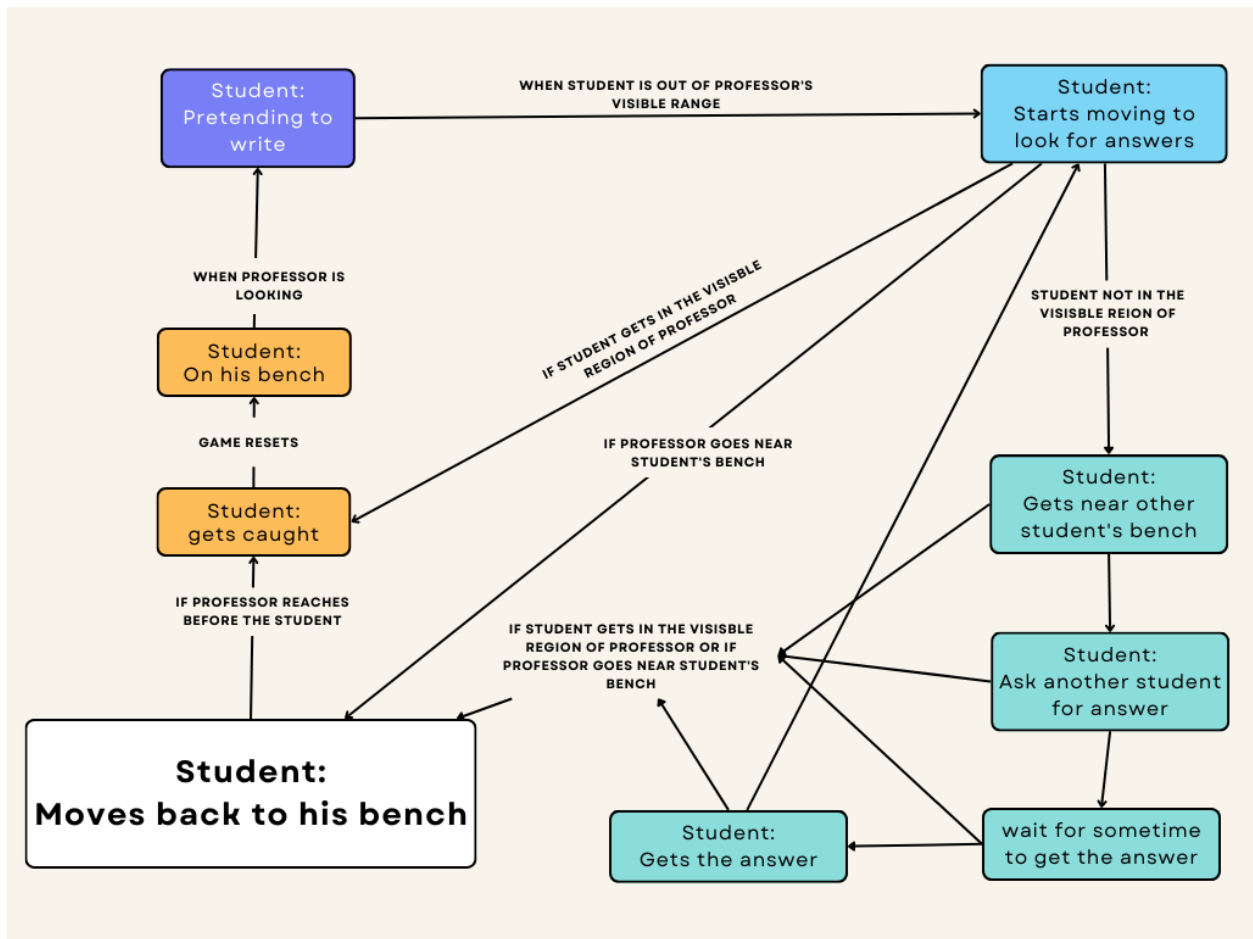
3.1.4 Objectives

The player starts with a certain *knowledge* attribute. With each passing level, the player's *knowledge* decreases by a factor of marks obtained minus the passing marks. Hence the player is punished for cheating more than required. The objective of the game is to maintain the *knowledge* factor, because as the level increases if this factor falls drastically due to over cheating, the player will not be able to pass the levels with any amount of cheating. Complete all the levels in order to win the game.

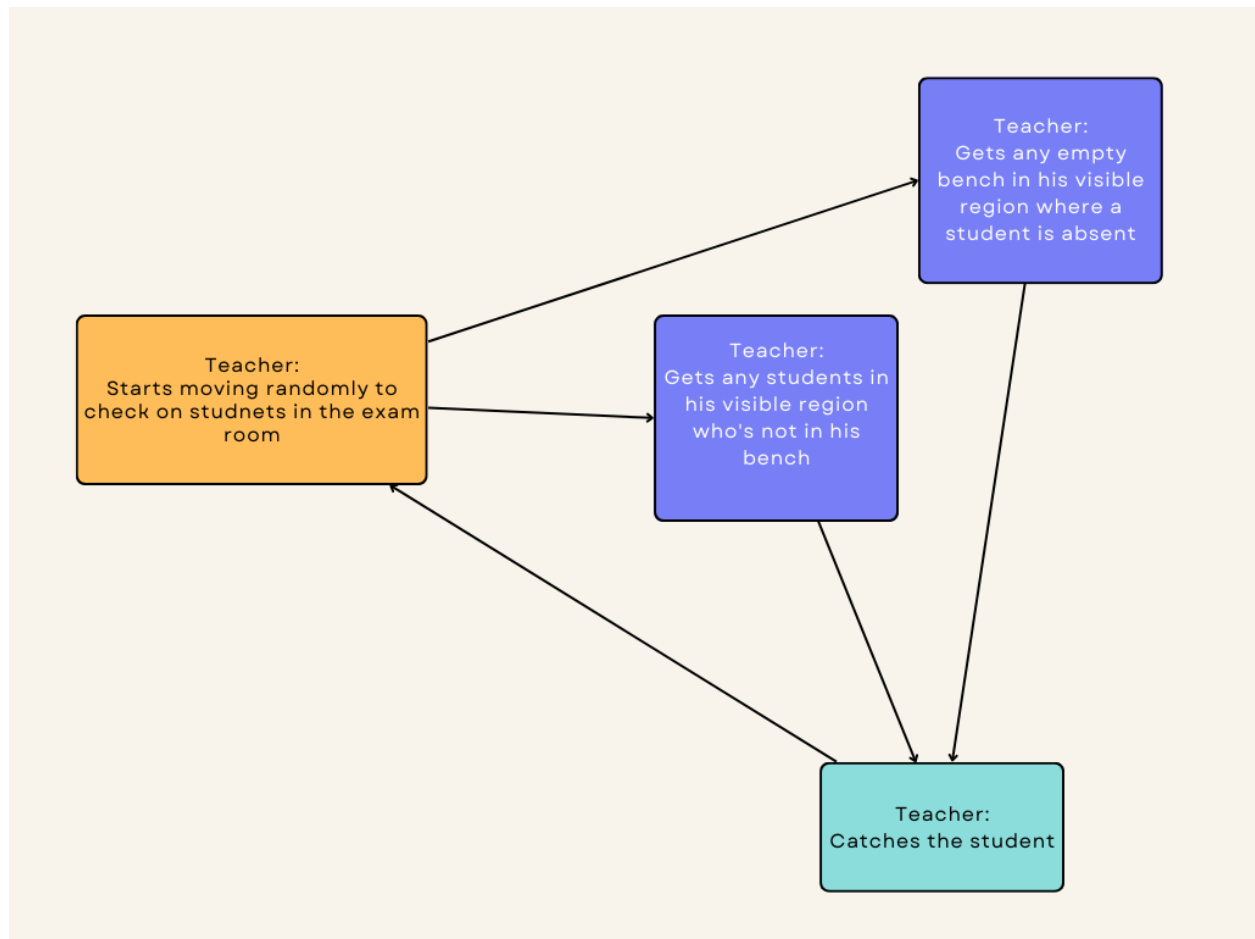
3.1.5 Play Flow

The game is played in a level wise manner. This is a one player game that requires strategy.

Student's Play Flow:



Teacher's Play Flow -



3.2 Mechanics

Implicit rules of the game:

1. The player can move in all four directions.
2. Player will lose the current level if any of the following is true. If all the following are false, the player passes the level.
 - a. The player comes inside the range of sight of the professor
 - b. The professor finds the player's bench empty.
 - c. The time of the exam ends and the obtained marks are less than passing marks.

You can only take one question's answer from one student.

Explicit rules of the game:

1. All the objects must stay in the functional space.
2. If you lose the current level, the game will restart from this level itself.
3. If you win the current level, you will move on to the next level.

3.2.1 Physics

- The Player has 2 Degrees of freedom
- You cannot go outside the game boundaries.
- The objects are fixed and cannot be moved (other than the player and the professor)
- You cannot pass through objects.

3.2.2 Movement in the game

- Left
- Right
- Up
- Down

3.2.3 Objects

1. Player - The student that users can control and move around.
2. Marks bar - Shows the current and the passing marks.
3. Dashboard - Withholds information about attributes of all the other students
4. Professor - The invigilator is responsible for surveillance in the classroom and moves around looking at the students within their range of sight.
5. Students - Students are the rest of the students in the class giving the same exam as us.
6. Benches - Discreet locations in the game space where students are seated.

7. Answer paper - It is a piece of paper that the player will use to write their own answers on.

3.2.4 Actions

1. Meta actions - The professor Moves around the classroom randomly.
2. Move Up / Left / Back / Right to navigate in the class.
3. Collect answer: The player will wait near a student's desk for a fixed number of seconds and copy the answer on their answer paper.

3.2.5 Combat

The combat is the one-sided chase between the player and the invigilator, as well as the answers and the time limit.

3.2.6 Economy - N/A

3.2.7 Screen Flow

The screen will display a classroom with all the objects, the classroom will be in the main window and the sidebar will have the player's score as well as the skill attributes of each student along with their reliability levels. The professor's range of sight will be displayed as a red circle around the professor.

3.3 Game Options

1. Tutorial mode: getting caught here will not affect the score, or the marks in this phase will not be included in the overall grades. this part can be skipped by the player.
2. Story mode: This is where the actual game begins. The story will progress in levels, where you have to pass each level to unlock the next one.

3.4 Replaying and Saving

The game is saved after each level is completed and can be replayed from any saved level.

3.5 Cheats and Easter Eggs - N/A

4 Story, Setting, and Character

4.1 Story and Narrative

You are a student, who just entered a very prominent university. The university is known to be academically very rigorous and its students are known to be quite competitive. You find it difficult to keep up with your fellow students in academics. Despite studying well for the exams, your honest hard work is outshined by many others, who are just simply smarter and grind more than you. Due to this, the class average is always raised, which in turn decides the passing marks (relative grading) and hence you end up failing the exam. Having already failed a few of the exams, you are already part of the minority “weak” students of the college and a center of humiliation. But what is even more alarming is that you and your parents have received a mail from the dreadful academic office that this is your **last chance**! Once you fail again, you will be expelled.

So now it is “do or die” for you. You want to somehow pass the exams, so you start to cheat in exams. No need to worry about the plagiarism-checking software run afterward, as in this universe no one developed such a thing!

The game begins from here where each level is an exam, and you have to cheat within the time to pass and win the level. The game progresses as we pass exams. In between and across levels, there would be dialogue boxes showcasing the conversation between the characters.

4.2 Game World

4.2.1

The game is set in a classroom environment. There will be desks placed along a grid of rectangular size. The professor will invigilate the class by moving in it.

The classroom shape and size will vary at each level.

4.2.2

Benches are locations where students write answers but they also act as obstacles to your movement since you have to walk around them. There will be an area near your own bench, where you will not get caught. Once inside this area, you can write your own answers. To copy from someone else, you need to get near the area of their bench.

4.3 Characters

The main characters are professors and students. They are described below:

- Professors - These are the main professors who would be invigilating our exams.
 1. Michael: He has been a teacher for 30 years, and is a man of morals and believes in strict discipline. Despite being in his 60s, his routine lifestyle has kept him in good shape and form. This helps him keep an eye out for indiscipline students cheating in a class by being quick on his feet. This makes his speed and range of sight attribute very high.
 2. Mary: Mrs. is a friendly and approachable teacher who has studied very hard to reach the position where she is now. Her stressed life and lack of care for herself have given her poor eyesight. She believes that students should study hard as well and this should be reflected in their evaluations. This makes her speed high but her range of sight attribute quite poor.
 3. Thomas: He is a lazy guy. Despite being an academically brilliant student when he was young, with time he has lost his interest in the field of teaching. But he has to keep his job because it offers a stable income and he needs to send his kids to college. So he would just come to the class, read the slides and leave. During the examination, he wouldn't care much about the fraudulence happening around. You would wish he is your invigilator.

Attributes: The attributes of the professors are based on their characteristics.

S. No.	Professor	Speed (out of 10)	Range of Sight (out of 10)
1	Michael	10	10
2	Mary	8	6
3	Thomas	3	4

- Students - These are the students of your university who are taking exams along with you.
 1. Liam: He is the smart and competitive “snake” guy who would pretend that they don't study but somehow end up scoring the highest marks. He would act all nice and helpful, but wouldn't actually be of help when you ask him doubts or discuss something.

2. Henry: He is your best friend. Academically, he is an average student, but he participates in different extra-curricular activities and is an honest person.
3. Sophia: Another smart student, you can even call her “kassi”. But even though she is not a snake, you and her share a story. She is your ex! During your early induction days you and she were a thing but then broke up. Now you both seem to have moved on, but you can never say for sure whether she's lying or saying the truth
4. Olivia: She is a hardworking student who is good at memorizing things. Due to this, she has been a good scorer. But you don't know her very well, so cannot trust her much.
5. James: He is that one rare student who is very smart and works hard, while at the same time is very helpful and humble. He sees everyone as his friend and everyone respects him the most
6. Anonymous students: These are the rest of the students. They are anonymous and don't have recurring storylines.

Attributes: The attributes of the students are based on their characteristics.

S. No.	Student	Reliability	Academic Performance
1	Liam	20%	Very good
2	Henry	90%	Average
3	Sophia	50%	Good
4	Olivia	60%	Above Average
5	James	80%	Very good
6	Anonymous	Random	Random

5 Levels -

The game will have three levels, each level will get tougher as the amount of cheating required will increase and the invigilation methods will get more strict:

The quiz: is the introductory level, the passing threshold is 75 marks (out of 100), the player has a base knowledge of 50 marks and needs to score 25 more by copying from others. the invigilator on this level will be slower and have a smaller visual range. Most of the students in this level will have good subject knowledge and you will be seated near your friends (people who have high reliability).

The Midsem: this level will have a random seating arrangement, and the base knowledge of the player will be reduced according to how much you cheat in the previous level. The prof will be more actively monitoring the students.

The Endsem: The purpose of this level is to portray how inefficient it is to rely on cheating as the only means to score marks, the player's base knowledge will be further reduced and this exam will be conducted in a larger classroom. Due to player's "bad luck", all the students with high reliability are seated far from the player. Here the player has to deal with not one but two Invigilators, tightly checking misconduct in the classroom. And strategically decide the best players to go to for answers (there will be a close trade-off between students' subject knowledge and reliability level)

6 Interface

6.1 Visual System

HUD will have the player score and game menu that has the pause, restart or quit options as well as the time remaining for exam completion.

6.2 Control System

The following will be the controls for the players :

W: Move up

A: Move left

S: Move down

D: Move right

F: Copy answers

6.3 Audio, music, sound effects

NA

6.4 Help system

There will be an interactive tutorial at the beginning of the game to help the player get comfortable with the controls and the general strategy to cheat without being caught.

7 AI

The plan is to use a bot to simulate the invigilator's moves around the classroom, they will change accordingly to players' performance (will balance the game difficulty so that it is not too easy or completely unplayable)

8 Technical

8.1 Target Hardware

Web game/ PC app: Played on the browser or on Windows computers.

8.2 Development of hardware and software

Will use Procreate and Photoshop to create the game assets and materials for game objects.

The integration of these along with game interaction design will be done on the unity engine (2D).

And use "itch.io" for deploying the game online.

8.3 Network requirements

For the online mode application, there needs to be a stable internet connection present throughout, in order to sync with the website properly. Connection speeds of 1 Mbps would be adequate for the companion app to function properly, but higher bandwidths are better.

Game Art

The game art will be mostly developed through Vectornator, Procreate, and Photoshop and might use After Effects for editing videos.