Title: "Test Your Study IQ!!"

1. Description:
Period: Period 7
Group Members: Jonathan Valdez

Group Name: Rock Hard
Project Title: Test Your Study IQ!!

Description:
Our project, "Test Your Study IQ!!," is a challenging game designed to test your knowledge and problem-solving skills. The game is inspired by the concept of "The World's Hardest Game." Players will face a series of difficult questions and puzzles that they must solve to progress through the game. The objective is to challenge the player's study IQ and provide an engaging and educational gaming experience.

Functionalities:
- Multiple Levels(2 levels because it is so hard): The game consists of multiple levels, each containing a unique set of challenging questions and puzzles.
- Timer (maybe): A timer will track the player's progress, adding an element of urgency to the game.
- Scoring System: Players will earn points based on their performance in answering questions and completing puzzles.
- Leaderboard(maybe): The game will feature a leaderboard to showcase high scores and promote competition among players.

What have been completed or working:

- Created the classes based on what will be needed:
     1. Coins: yellow coins will spawn in the map depending on what level it is. If the red square lands on the coins then it disappears but will not be counted if the red square did not reach a checkpoint or the finish line which will be filled in green
     2. Levels: The position of the player and the setup of the levels in each level as well as the tiles needed in each level since it differs. I might make it random or just make 2 levels because it's a lot and there are time constraints.
     3. GameLevel: Intro to level so there is a pause and a gameWindow that has a message and setsup the level before the player starts playing.

4. thePlayer: keybinds using AWDS for up down left and right. If it collides with an obstacle then it resets.

5. Dots: the blue obstacles that will be lying around and move while the redsquare has to figure it out.

Later or needs to work on:

- make the code work
    - Create a scoring system on the top and no timer needed. Scoring will reset once you die. If you die more than 20 times, the score will start going negative.
    - Make a background and maybe include an intro but I may just get to the game
    - Create a death count and it will reset.
    - No LivesIndicator, just respawning after death
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2. How does it work?

To run and use our game "Test Your Study IQ!!," users should follow these steps:

Step 1: I/you will click the play button on processing and it will light up the game for you.

Step 2: click on the button that says Play.

Step 4: The game will present you with a series of challenging questions and puzzles. Read the questions carefully and think critically to come up with the correct answers or solutions.

Step 6: Complete each level solving all the puzzles within the maybe given time limit.

Step 7: The game will track your score and display it at the end of each level. Try to achieve the highest score and improve your study IQ.

Step 9: Have fun and challenge yourself to improve your study IQ with each gameplay session!

I hope you enjoy playing "Test Your Study IQ!!" and find it both entertaining and educational. Good luck on your quest to become a study IQ master!

3. UML DIAGRAM

ProcessingLibrary

+PApplet()

Game

-Level:Int
-Player: String

+startGame()
+endGame()
+updateLevel()

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thePlayer

-x:Int
-y: Int
-lives:int
-score:int

+moveUp()
+moveDown()
+moveLeft()

Level

-Level:Int
-Player: String

+startGame()
+endGame()
+updateLevel()

1.1

1.0

Dots

-Obstacles:Obstacle[]
-enemies:Enemy[]

+generateObstacles()
+ generateEnemies()
+ getObstacles()
+ getEnemies()
+crash()

Moving Enemy

+move()

Score

+reachEnd()
+decrementSc()