Speed Increase

How it Works

The `SpeedIncrease` class is responsible for dynamically adjusting the game speed as the player progresses. It ensures a challenging and engaging experience by gradually increasing the dropping speed of Tetriminos.

The class utilizes the following attributes: - `tetris`: Reference to the Tetris game instance. - `increase_interval`: Time interval (in milliseconds) between speed increases. - `max_speed`: The maximum speed the dropping counter can reach. - `counter`: Internal counter to track elapsed time for speed adjustments.

The `increase_speed` method is called during the game loop, and it adjusts the frames per second (`fps`) and the dropping counter based on predefined conditions. The dropping counter determines how frequently Tetriminos move downwards.

User Expectations

Players can expect the following behavior from the "Speed Increase" function: - The game starts with a moderate dropping speed. - As the player progresses, the dropping speed gradually increases at defined intervals. - The maximum speed is capped at a challenging but manageable level. - The game's pace becomes more demanding, requiring quicker decision-making as the speed increases.

Piece Saving

How it Works

The "Piece Saving" feature allows players to store a Tetrimino for later use. This can be strategically employed to manage challenging situations or plan ahead for future moves.

The `SavedPiece` class manages the saved Tetrimino and provides methods for saving, retrieving, clearing, and swapping pieces.

User Expectations

Players can expect the following behavior from the "Piece Saving" function: - The ability to save the current Tetrimino by pressing the 'F' key. - The saved Tetrimino is displayed in a designated area on the screen. - The ability to swap the current Tetrimino with the saved one by pressing the 'F' key again. - If no Tetrimino is saved, the next Tetrimino becomes the saved one. - Clearing the saved Tetrimino by using it does not store the current Tetrimino.

Piece Preview

How it Works

The "Piece Preview" feature provides players with a glimpse of the next Tetrimino that will enter the game. It helps players plan their moves in advance.

The `PiecePreview` class manages the display of the upcoming Tetrimino and offers methods to draw and set the next piece.

User Expectations

Players can expect the following behavior from the "Piece Preview" function: - A visual representation of the next Tetrimino is displayed on the screen. - The upcoming Tetrimino is shown in a designated area, separate from the main game board. - The displayed Tetrimino corresponds to the one that will enter the game after the current one. - The preview updates every time a new Tetrimino enters the game. - Information about the upcoming Tetrimino, such as type and color, is provided for strategic planning.