Pexeso README

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1 Introduction

Spexiso is a Python game developed using the `pygame` library. The project is based on the classic memory game *Pexeso*, where the player's goal is to find matching pairs of images. To make the gameplay more engaging, the game is enriched with a ninja-themed setting and a short storyline that immerses the player into the game world.

Instead of presenting a simple matching mechanic, the game introduces a small narrative, characters, animations, and interactive elements that increase player interest and motivation.

2 Game Structure

The game consists of several main states:

- **Main Menu** – allows the player to start the game, read the story, or exit the application.
- **Game World** – a 2D environment where the player controls a character and interacts with objects.
- **Pexeso Mini-Game** – the core logical challenge of the game, triggered by interacting with a character.
- **About Section** – provides background story and context for the game.

The transitions between these states are managed using a simple game state machine.

3 Gameplay Description

In the main game scene, the player controls a character using the keyboard. The character can move left and right and perform jumps. An animated sprite system is used to represent character movement.

The main objective is to approach and interact with a specific character (the cat). Once the player is close enough and clicks on the character, a Pexeso mini-game is launched.

4 Pexeso Mini-Game

The Pexeso mini-game is a memory-based puzzle consisting of a grid of cards. Each card hides an image, and the player must find all matching pairs.

The mini-game includes:

- Randomized card placement
- Turn counting
- Score calculation with rewards and penalties
- Time tracking
- Restart functionality

Correct matches increase the player's score, while incorrect guesses reduce it. Once all pairs are matched, the game displays a victory message along with the number of turns taken.

5 Technical Implementation

The game is implemented in Python using the `pygame` library. Key technical features include:

- Event-driven game loop
- Keyboard and mouse input handling
- Sprite animation
- Collision detection
- Modular game logic

Images, fonts, and sounds are loaded dynamically from external resources, allowing easy modification and extension of the game content.

6 Conclusion

Spexiso demonstrates how a simple logical game can be enhanced through storytelling, visual design, and interactive elements. The project combines algorithmic thinking, game logic, and creative design, resulting in a more immersive and engaging player experience.