

****Title:** Paralogic Game Implementation**

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****Subject:** Programming**

****Introduction:****

The Paralogic game, developed by Xavier Moreno as part of the programming course, involves creating a text-based word game. The game reads words from a text file, Palabras.txt, or accepts it as a parameter. Players are tasked with forming words using a set of given letters, with words limited to seven letters. The objective is to score points by correctly forming words. The game also incorporates helpful commands, allowing players to seek assistance, exit the game, receive hints, and explore additional features for an enhanced gaming experience.

****Design:****

The top-down design approach has been employed to craft the Paralogic game solution. The game involves selecting a random word from the provided dictionary, determining the central letter, and generating a set of unique letters for the player. The program guides users through forming words and incorporates various commands to facilitate gameplay. Additional features, such as shuffling letters, restarting the game, and difficulty levels, contribute to an engaging user experience.

****Test Set:****

The testing phase involves verifying the correct functionality of the Paralogic program. Various test cases are designed to evaluate scenarios such as word formation, scoring, repeated word detection, and the effectiveness of help commands. Test data includes different sets of letters, varying word lengths, and challenging cases to ensure the robustness of the game. The tests aim to validate the program's ability to handle different inputs and provide accurate feedback to the user.

****Conclusions:****

The development of the Paralogic game has provided valuable insights into programming concepts and practices. The top-down design approach facilitated a systematic development process, ensuring a clear and organized code structure. Challenges were encountered and overcome during the implementation of features like shuffling letters and incorporating additional help commands. The testing phase proved crucial in identifying and rectifying potential issues, contributing to the overall reliability of the game. The experience gained from this project has enhanced the author's understanding of programming principles and their practical application in game development.