

Project Proposal

Title: Hangman Game: A Classic Word Puzzle Adventure

Project Summary:

The Hangman Game is a word puzzle game designed to test players' vocabulary and guessing skills. Players are given five attempts to guess a randomly selected word from a list of 50 words, each with a length of over five characters. The game features a detailed visual representation of the hangman that evolves with each incorrect guess, alongside proper prompts for correct and incorrect guesses. A leaderboard keeps track of the top players based on their performance (fewer attempts to win), with the data being saved to a file for persistence. The game ensures an engaging user experience through visual and interactive elements, including “You Win” or “You Lose” pop-ups. It encourages competition by displaying the top scores.

Modules and Their Functionality:

- 1. Word Management Module:** Manages the list of 50 words, selects a random word for the game, and checks word length criteria.
- 2. Game Logic Module:** Handles input validation, tracks remaining tries, checks guessed letters, updates the word display, and determines win/lose conditions.
- 3. Visual Representation Module:** Displays the hangman’s evolving stages with each incorrect guess and shows the word with dashes for missing letters and correctly placed guessed letters.
- 4. Leaderboard Module:** Tracks player performance, ranks players based on the number of attempts, saves data to a file, and retrieves/display top scores.
- 5. User Interface Module:** Provides an interactive interface for the player, including win/lose pop-ups, input fields, and visual feedback for guesses.