

**“ PROJECT ”**

# **WORLD PUZZLE GAME**

## **Word Puzzle Game Documentation**

### Overview:

The Word Puzzle Game is a text-based console application implemented in C++. The game presents users with a menu to choose various options such as starting a new game, resuming a game, learning game techniques, or exiting the game.

### *Features:*

#### Main Menu:

Users are initially presented with a main menu that offers four options: Start Game, Resume Game, Game Techniques, and Exit.

Users can input their choice by entering the corresponding number.

#### Start Game:

Users can choose from four difficulty levels: Easy, Intermediate, Hard, and Very Hard.

Each level presents a word puzzle to solve within a limited number of attempts.

The user gains points for each correct word found.

The game provides feedback on successful and unsuccessful attempts.

### Resume Game:

Placeholder function (resumegame()) is available for future implementation of game resumption.

### Game Techniques:

Placeholder function (Gametechniques()) is available for future implementation of game techniques or instructions.

### Exit:

Users can choose to exit the game. Confirmation is required.

The exit() function allows users to either return to the main menu or exit the program entirely.

## *Levels and Word Puzzles:*

### Easy Level:

Users need to find five words within nine attempts.

The word puzzle is presented as a 6x6 grid of letters.

### Intermediate Level:

Users need to find ten words within thirteen attempts.

The word puzzle is presented as a 10x10 grid of letters.

## Hard Level:

Users need to find fifteen words within twenty attempts.

The word puzzle is presented as a 14x14 grid of letters.

## *Word Search Technique:*

Users input the words they find and provide the location of the first character (row and column).

The program then checks the validity of the entered word by traversing the grid in various directions.

Users gain different point values based on the direction in which the word is found (horizontal, vertical, diagonal).

## Usage:

Compile the C++ code using a C++ compiler (e.g., g++).

Run the compiled executable.

Follow the on-screen instructions to navigate through the menu and play the game.

## 1. main function:

This is the entry point of the program.

It initializes the console color, displays the game title, and waits for a key press to proceed.

Then, it calls the mainmenu function.

## 2. mainmenu function:

Displays the main menu with options for starting the game, resuming the game, learning game techniques, or exiting the game.

Takes user input and calls corresponding functions based on the user's choice.

## 3. Startgame function:

Displays game modes (Easy, Intermediate, Hard, Very Hard) and an option to exit.

Takes user input and calls the corresponding difficulty level function.

#### 4. Gametechniques function:

Currently marked as "N/A," indicating that there is no content for game techniques.

#### 5. Exit function:

Asks the user for confirmation to exit the game.

If confirmed, exits the program.

#### 6. exit function:

Similar to the Exit function but designed to return to the mainmenu instead of directly exiting the program.

#### 7. Easy, Intermediate, Hard functions:

Each represents a difficulty level of the game.

Displays a word puzzle grid and prompts the user to find words.

Keeps track of points and provides feedback to the user.

Returns the total points earned.

#### 8. Word Puzzle Logic:

The word puzzle logic involves presenting a grid of characters and asking the user to find specific words within that grid.

The user inputs words and is awarded points based on correctness and uniqueness.

The program provides feedback about found words, remaining attempts, and points.

#### 9. Additional Word Finding Logic:

The Intermediate and Hard difficulty levels involve finding words in different directions (horizontal, vertical, diagonal).

The program calculates points based on the user's input and the location of the first character of the word.

#### Conclusion:

The Word Puzzle Game is a basic console application that can be extended and improved to create a more engaging and feature-rich word puzzle experience for user

**The End.**