Word Search Game

1. Introduction

The Word Search program generates a 10x10 grid filled with random uppercase letters. This grid forms the foundation for a word search game where the player can enter a word, and the program will check if the word is present in the grid, either horizontally or vertically.

2. Features

- **Randomized Grid**: Every time the program runs, it generates a unique 10x10 grid filled with random letters.

- **Word Search**: Allows the user to search for a word within the grid.

- **Directional Search**: The program searches for the entered word in two directions - horizontally (left to right) and vertically (top to bottom).

- **Case Insensitivity**: The user can enter the word in any case; the program automatically converts it to uppercase for consistency.

3. How to Play

1. Run the program.

2. Observe the generated 10x10 grid displayed in the console.

3. Enter a word you want to search for in the grid. Make sure the word is 10 characters or less (since the grid is 10x10).

4. The program will check if the word appears horizontally or vertically.

5. The program will inform you whether or not the word was found in the grid.

4. Example Output

Word Search Table:

F Z Y W N L A O M K

G X C V L S Q T H Y

J H R U T O N P E B

A D I N M B G O K Q

S K L T F Y E M C X

Y U W N I Z O T L S

R N T P F K D Y Q W

E M O B I J L Z V H

O G F H A N K Q R T

P I C T U Z M E Y L

Enter the word to search: NOTE

The word 'NOTE' is found in the table.

5. Requirements

- **Java**: The program is written in Java, so you need to have Java Development Kit (JDK) installed to compile and run it.

- **Text Editor/IDE**: Use any text editor or IDE like Eclipse, IntelliJ IDEA, or VS Code to write and run the code.