

# Individual Project Report

## Basic Information

**Project Title:** Word Search Game

**GitHub Repository URL:** <https://github.com/daniajaison13/WordSearch>

## Milestones with Deadlines:

**Week 1:** Basic grid generation and word placement algorithm implemented

**Week 2:** Flask integration for basic UI setup

**Week 3:** Category selection and difficulty levels implemented

**Week 4:** Integrate backend and frontend

**Week 5:** Final testing and bug fixing

## Technologies Used:

**Front-end:** HTML, CSS, JS, Node

**Back-end:** Flask, Python

## Algorithms/AI Schemes:

**Grid Generation:** Generate a grid of letters with rows and columns. Randomly select letters to fill the grid.

**Word Placement Algorithm:** Use techniques such as backtracking to strategically place hidden words. Ensure words intersect and do not conflict with each other or violate constraints.

## Market Space and Selling Points:

- The application targets users of all ages who enjoy puzzle games.
- Selling points include multiple categories, varying difficulty levels, and an intuitive user interface.