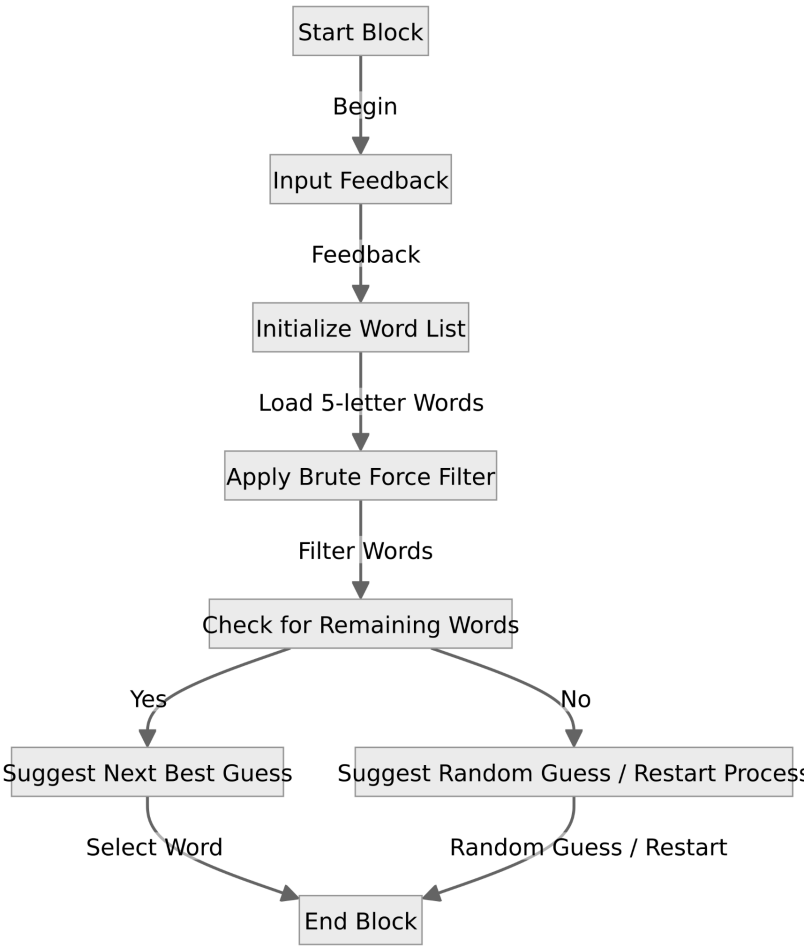
INDIVIDUAL PROJECT REPORT

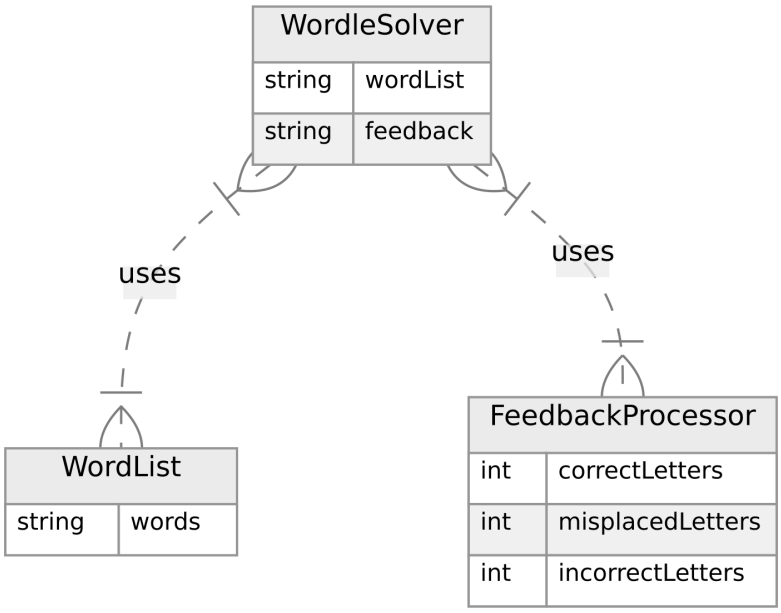
Project Description

End Product Overview:
The Wordle Puzzle Solver is a web application designed to assist users in solving the popular word puzzle game, Wordle. The application offers suggestions for the next best guess based on the feedback (correct letters, misplaced letters, and incorrect letters) provided by the user after each guess in the Wordle game. It aims to minimize the number of guesses needed to correctly solve the puzzle.

Flow Chart



ER Diagram



Methods Used in the Puzzle Solver:
Brute-Force Method: The application starts with a complete list of possible 5-letter words. As feedback is provided, words that do not fit the criteria are eliminated.

Frequency Analysis: The solver analyzes the frequency of letters in the remaining words and prioritizes guesses that include the most common letters.

Market Space and Selling Points:
Market Space: Educational tools, puzzle games, and cognitive training applications.

Selling Points:
Enhances problem-solving skills.
Provides a learning platform for improving vocabulary.
Engages users in a fun and interactive way to solve puzzles.

Functional Specifications

Features:
Guess Suggestion: Suggests the next best guess based on the feedback provided.
Session Management: Keeps track of each attempt and feedback within a session to refine guesses.
Word List Management: Manages a comprehensive list of 5-letter words, allowing for updates and customizations.

Deployment

Using Heroku to Deploy the application.
Create a Heroku App.
Deploy the app.
Open the app in the web browser.

Milestones with deadlines

Week 1: Basic Flask & Github Setup.
Week 2: Authentication & Login
Week 3: Wordle Algorithm Implementation
Week 4: Frontend design and integration
Week 5: Testing and deployment