GROUP 1
PROJECT 2

WORDLE
GAME

LEADER AND MEMBERS' NAMES:

LEADER:
MEMBER 1: LAMA BANDER ALSAEDI
MEMBER 2: HAYA NAIF ALNFAIE
MEMBER 3: LAMA KUDISH
MEMBER 4: RIMAS HASSAN ALSHEHRI
MEMBER 5: GHALA ABED

PROJECT IDEA SUMMARY

The project is about a Wordle game that uses JavaFX for the graphical user interface (GUI) and MySQL for database management. In this game, a player must guess a five letter secret word within six attempts. After each guess, the game provides feedback by highlighting:

Letters in the correct positions.
Correct letters in the wrong positions.
Letters not in the secret word.
The game will include user accounts and a score tracking system to track the player's performance.

DATABASE DESIGN

THE DATABASE FOR THE ENHANCED WORDLE GAME INCLUDES:

1. **USERS TABLE:**
   - PURPOSE: STORES PLAYER INFORMATION.
   - COLUMNS:
     - USER_ID (PRIMARY KEY).
     - USERNAME.
     - PASSWORD.
     - HIGH_SCORE.
     - GAMES_PLAYED.

2. **GAMEHISTORY TABLE:**
   - PURPOSE: LOGS DETAILS OF EACH GAME.
   - COLUMNS:
     - GAME_ID (PRIMARY KEY).
     - USER_ID (FOREIGN KEY).
     - SCORE.
     - ATTEMPTS.
     - IS_WIN.
     - DATE_PLAYED.

3. **WORDS TABLE:**
   - PURPOSE: MANAGES WORDS USED IN THE GAME.
   - COLUMNS:
     - WORD_ID (PRIMARY KEY).
     - WORD.
     - DIFFICULTY.

RELATIONSHIPS

- **USERS ↔ GAMEHISTORY (ONE-TO-MANY):** EACH USER CAN PLAY MULTIPLE GAMES, LINKED VIA USER_ID.
- **WORDS ↔ GAMEHISTORY (OPTIONAL, MANY-TO-ONE):** A WORD CAN BE USED IN MULTIPLE GAMES, LINKED VIA WORD_ID.

APPLICATION'S SCREEN

Welcome to Wordle Game

Start Game

View Leaderboard

Settings

Exit

Enhanced Wordle Game

Start Game

View Leaderboard

Settings

Exit

Game Screen

Type your guess | Submit

Back to Menu

Enhanced Wordle Game

Start Game

View Leaderboard

Settings

Exit

Leaderboard

Rank	Player Name	High Score	Games Played
1	John	500	10

Back to Menu

Settings

Difficulty Level: Easy ⌄ Theme: Light ⌄ ☐ Enable Hints

Save Changes

Reset Scores

Back to Menu

Enhanced Wordle Game

Start Game

View Leaderboard

Settings

Exit

Settings

Difficulty Level: Easy ⌄ Theme: Light ⌄ ☐ Enable Hints

Save Chang

Light
Dark

Reset Scores

Back to Menu

Settings

Difficulty Level: Easy ⌄ Theme: Light ⌄ ☐ Enable Hints

Easy
Medium
Hard

Changes

Reset Scores

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