

The Song Game: PHP Application with MySQL Database

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Outline

- How the game works
- Structure of database
- Demo

The rules, more or less:

- Articles, e.g. ‘a’, ‘the’, ‘an’, etc. don’t count as words.
- Proper nouns are not allowed. (No “Dear Prudence”.)
- Your title must contain at least two words and can’t be a song already used.
- Each player’s title must match at least one word in the prior player’s song..
- You can match by using the same word or the same word with (or without) a suffix.
- You can match by using a word that sounds the same.

The Song Game* by Melissa Job Perry

Player 1: “Bad dancer”

Player 2: “Let’s dance”

Player 1: “Let it be”

Player 2: “My little bee”

The organization of the game company

→ Boss

- ◆ Needs account, password to login.
- ◆ Can select, update, insert, delete to the adjective, adverbs, verb, and noun tables as well as user tables.

→ Employee

- ◆ Needs account, password to login
- ◆ Has limited access to update, insert to adjective, adverb, verb, and noun as well as the usertable.

→ Player

- ◆ Can only play the game. Can't alter any tables.

The tables

- Adjectives
- Adverbs
- Conjunctions
- Contractions
- Homophones
- Nouns
- Prepositions
- Verbs
- Songs
- Users
- Words

For instance, the verb table.

(base_verb, past, past_participle, third_person, gerund,
related_noun_1, related_noun_2)

(play, played, played, plays, playing, play, player)

After a user inputs a song....

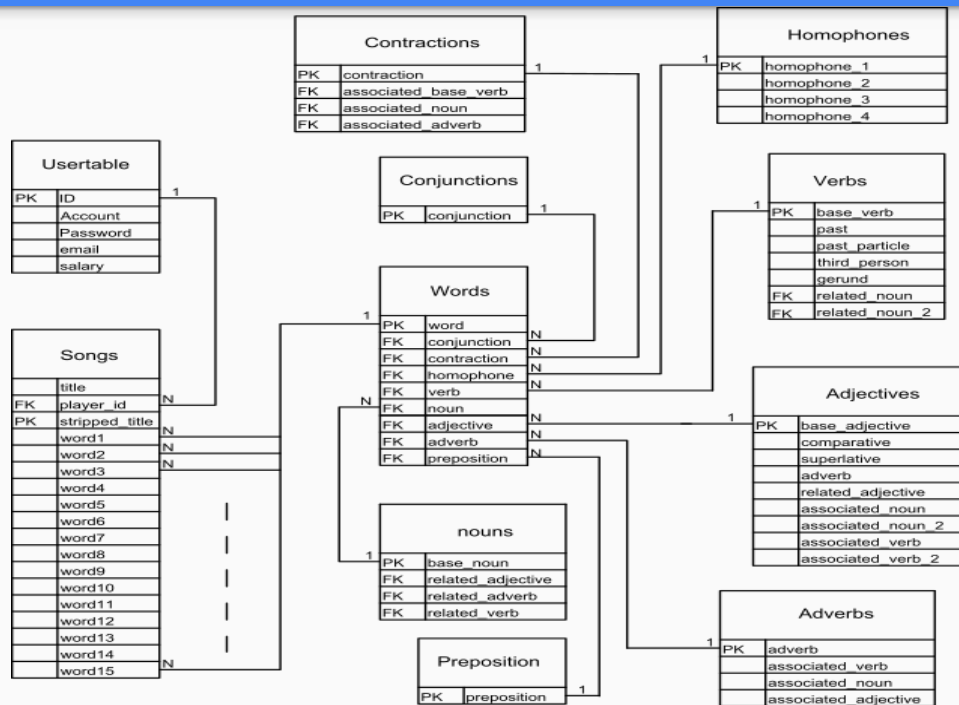
The song is broken into words, “diagnosed” and put in the words table.

Then each word is compared to the words of song from the prior turn.

word	conjunction	contraction	homophone	verb	noun	adjective	adverb	preposition	ID
look				look	look				1

word	conjunction	contraction	homophone	verb	noun	adjective	adverb	preposition	ID
looking				look	look				26

ER Diagram



Command Injection Prevention

You must input all of four of them.
What do you want to insert?

BOSS INSERT

Account

Password

Email

Salary

xxx drop table
usertable

xxx drop table
usertable

xxx drop table
usertable

xxx drop table
usertable

Game process

- Players input their names.
- Players input songs.
- PHP compares the two songs to see if they have a “matching” word.
- If there not a match or a player has input a duplicate song, PHP complains and ends the game. Otherwise, there is a match and PHP outputs you win.

Demo Time

Questions?

