## Author

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### **Description**

To design a login authenticated web application having quiz like environment which calculates & stores the scores of each user after each game (set of 10 multiple choice questions having 4 options each) & also have three difficulty level (easy, medium, hard) options for users to choose from.

## Technologies used

■ Flask

for running web application

■ Flask-SQLAlchemy

for connecting & querying database

■ Flask-RESTful

for restful api

■ Werkzeug.Exceptions

for HTTP exceptions

■ Json

for formatting json

OS

## **DB Schema Design**

users

for storing users details

- user\_id (Integer, Primary Key, Not Null, Unique)
- username (String, Not Null, Unique)
- password (String, Not Null)
- score (Integer, Not Null, Default = 0)

easy

for easy questions deck

- word (String, Primary Key, Not Null, Unique)
- synonyms (String, Not Null)
- medium

for medium questions deck

- word (String, Primary Key, Not Null, Unique)
- synonyms (String, Not Null)
- hard

for hard questions deck

- word (String, Primary Key, Not Null, Unique)
- synonyms (String, Not Null)

# **API Design**

RESTful API is created using Python's Flask-RESTful library. APIs are implemented for users & decks

#### **Architecture and Features**

- > main.py
- Project Report.pdf
- Read Me.txt
- > applications
  - apis.py
  - > controllers.py
  - > errors.py
  - > models.py
- database
  - ➤ database.sqlite3
- static
  - > css
    - > index.css
  - > js
    - > quiz.js
- > templates
  - admin dashboard.html
  - > admin login.html
  - decks.html
  - > decks level.html
  - error.html
  - index.html
  - > play.html
  - > play level.html
  - user dashboard.html
  - user\_login.html
  - > usres.html
- It has two login options (Administrator & User)
- ❖ Administrator Login Password is set to "P@ssw0rd"
- New users can login directly & the password entered will be used for further logins
- ❖ Old users have to use their previous password for authentication
- ❖ Administrator can view all users with their score & all decks
- User can only play the game
- The game has three difficulty level options (easy, medium, hard)
- ❖ Each game has a set of 10 multiple choice questions having 4 options each
- One question will be displayed at a time
- Scores will reflect at the end of game

## Video

https://drive.google.com/drive/folders/1QRjdNslIUDjA4LKNScSpTsVJXTAgaIKW?usp=sharing