Author

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I have completed my Bsc. Hons. in Mathematics under Kalyani University. I am currently involved fully into this degree program and also a IITM Bsc program Ambassador. I am interested in learning and making changes in our daily life with AI and Machine Learning. I am a beginner in the field of coding and App Development.
In my leisure time I love reading books and doing meditation.
I love to play Chess also.

Description

In this MAD1 final project I have created a web application on Flash Card which can be basically used for memorizing things. In this application a user can create his/her own decks. In each deck user can add his/her own cards with description on both sides.

The front side of the card will contain user provided question/word and the backside will contain the answer inserted by the user. For studying user can play the quiz which will show random card inserted by user one at a time and for each selected card user will be able to give marks to himself/herself. Also user can update or delete the cards as well as the decks.

Technologies used

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•SQLAlchemy – To create a communication between my Python program and my Sqllite databse.
•Flask_security – To secure the application with a login for every view page for a register user.
•Flask_login- It helps to login and logout for every registered user.
•Flask_security.utils-To autogenerate a hash password for each and every registered user. It is a most secure method to store the passwords in the database. Suppose anyone get the access of the database but he/she cannot understand the user given password.
•Sqlalchemy.sql.functions – To track date-time of user activity
•Also some basic javascipt method.

DB Schema Design

🚍Table names

- "user" ("id" INTEGER NOT NULL, "f_name" VARCHAR(100) NOT NULL, "l_name VARCHAR(100) NOT NULL, "email" VARCHAR(100), "password" VARCHAR(255), "active" BOOLEAN, "uscore" INTEGER, PRIMARY KEY("id"), UNIQUE("email"))

- "deck" ("id" INTEGER NOT NULL, "title" VARCHAR (255), "user_id" INTEGER NOT NULL, "last_view" DATETIME,"deck_score" INTEGER, PRIMARY KEY("id"), FOREIGN KEY("user_id") REFERENCES "user"("id") ON DELETE CASCADE)

- "card" ("id" INTEGER NOT NULL, "front" VARCHAR (255) NOT NULL, "back" VARCHAR (255) NOT NULL, "deck_id" INTEGER NOT NULL, "user_no" INTEGER NOT NULL, "last_review" DATETIME, "cscore" INTEGER, FOREIGN KEY("user_no") REFERENCES "user"("id") ON DELETE CASCADE, FOREIGN KEY("deck_id") REFERENCES "deck"("id") ON DELETE CASCADE, PRIMARY KEY("id"))
- "role" ("id" INTEGER NOT NULL, "name" VARCHAR(40), "description" VARCHAR(255), PRIMARY KEY("id"))

- """ I have created roles but haven't implemented it anywhere.""

- I have designed the schemas like this because it will be easy to track and query the Decks made by the user for him/her and also same for the cards under each deck.

API Design

- Due to lack of time i was unable to design the API and the corresponding Yaml file.

Architecture and Features

- All the controllers, Database schemas and other codes are in the file main.py.
- In the Static folder there are the images I used for my Web App.
- All the Html files are in the templates folder.
- In the requirements.txt file all the packages are listed that are to be installed before running the app in your local development.
- I have stored all the logs in the file named "debug.log"
- I have used many features that needs Bootstrap.
- For Designing I have mainly used internal css and external css and sometimes inline css also.
- I have taken many help from the website 'https://www.w3schools.com/' to complete this project.

Video

https://drive.google.com/file/d/15l1RYx29pTsbLdjpVbU75e0yoJSOqALj/view?usp=sharing

> The above link is of a video which is 11 minutes long and that is submitted in the form given to us previously, as i haven't noticed that time duration previously
> so in below i am giving another video link which is of approx 3 minutes long.

Pardon me for the above mistake and please consider the below video link.

New video link

-https://drive.google.com/file/d/1aj0PA-eHlMkF6RpxLUm_cB4SJDRu477g/view?usp=sharing