## Author

C S Sruthi

6510

21f1006510@student.onlinedegree.iitm.ac.in

I am pursuing a Bachelor's in Pharmacy alongside this degree.

I hope to help leverage technology in healthcare.

I enjoy dancing, yoga and reading.

## Description

In the capstone project we were asked to build a flashcard application that will act as a memory aid when students are trying to learn a new language or memorise a formula. I was very excited to do this project because this solves a pain point I have faced a lot.

The primary areas to be addressed here were login, dashboard, deck management and review.

# Technologies used

Flask- micro web framework written in Python, helps us render html templates and manages the controllers. Fun fact: LinkedIn and Pinterest use the flask framework! flask-sqlalchemy

# DB Schema Design

<< Add structure of your DB, columns and details about the column, Also constraints>> << Reasons behind designing the way it's done>>

|         | CREATE TABLE "card" ( "c_id" IN   |
|---------|---|
| INTEGER | "c_id" INTEGER NOT NULL   |
| INTEGER | "c_d_id" INTEGER NOT NULL   |
| TEXT    | "question" TEXT NOT NULL  |
| TEXT    | "answer" TEXT NOT NULL  |
| INTEGER | "score" INTEGER NOT NULL  |
|         | CREATE TABLE "deck" ( "d_id" IN   |
| INTEGER | "d_id" INTEGER NOT NULL   |
| TEXT    | "deck_topic" TEXT NOT NULL  |
| TEXT    | "d_username" TEXT NOT NULL  |
| TEXT    | "last_reviewed" TEXT  |
| INTEGER | "d_score" INTEGER   |
|         | CREATE TABLE sqlite_sequence(   |
|         | CREATE TABLE "user" ( "usernan  |
| TEXT    | "username" TEXT NOT NULL  |
| TEXT    | "password" TEXT NOT NULL  |
|         | ·   |
|         | INTEGER TEXT TEXT INTEGER INTEGER TEXT TEXT TEXT INTEGER TEXT TEXT TEXT INTEGER |

User table -

- Primary key- username
- Foreign key- None

### Deck table -

- Primary key- d\_id
- Foreign key- d\_username relates to the user table

#### Card table -

- Primary key- c\_id
- Foreign key- c\_d\_id relates to the deck table

## **API** Design

Have created an API only for the cards model. Which allows us to GET/POST/DELETE/PUT cards.

### Architecture and Features

The project is hosted on the main app.py file. The html templates used are in a folder called templates and we have another subfile called static, static has images and a folder called "files" for the csv files uploaded by the user (during deck import)

Have also added a readme file for better understanding and use by others

### Features implemented

- Login/Signup with password check (frontend + backend validation)
- Dashboard -CRUD operation on deck (last reviewed, cumulative score for deck)
- Review each card is shown 1 by one and card scores are updated based on user response
- Editing Deck contents- CRUD operations for cards

#### Additional Feature

- Import of decks from csv files

### Video

Project Presentation Video https://drive.google.com/file/d/1wQCzQovLUIOKwoye1srOPO3Qhnn9TOFC/view?usp=sharing