Author

MELVIN MATHEW

22dp1000005

Vinumon2000@gmail.com

I am a diploma student in programming. My aim is to become a part of an organisation in IT sector and build a career and achieve my life goals

Description

Kanban board is a web-based application where the user can add lists, create cards and manage them. Here the user can monitor the summary and progress in their activities. It can be used as a project management tool. With the help of Kanban board the user will be able to submit their projects before the deadline and create report about their progress.

Technologies used

- SQLITE
- FLASK
- FLASK SQLALCHEMY
- FLASK RESTFUL
- JSON
- MATPLOTLIB
- PANDAS
- FLASK SECURITY
- VUE JS
- FLASK CACHING
- FLASK CORS
- REDIS
- CELERY
- JINJA2
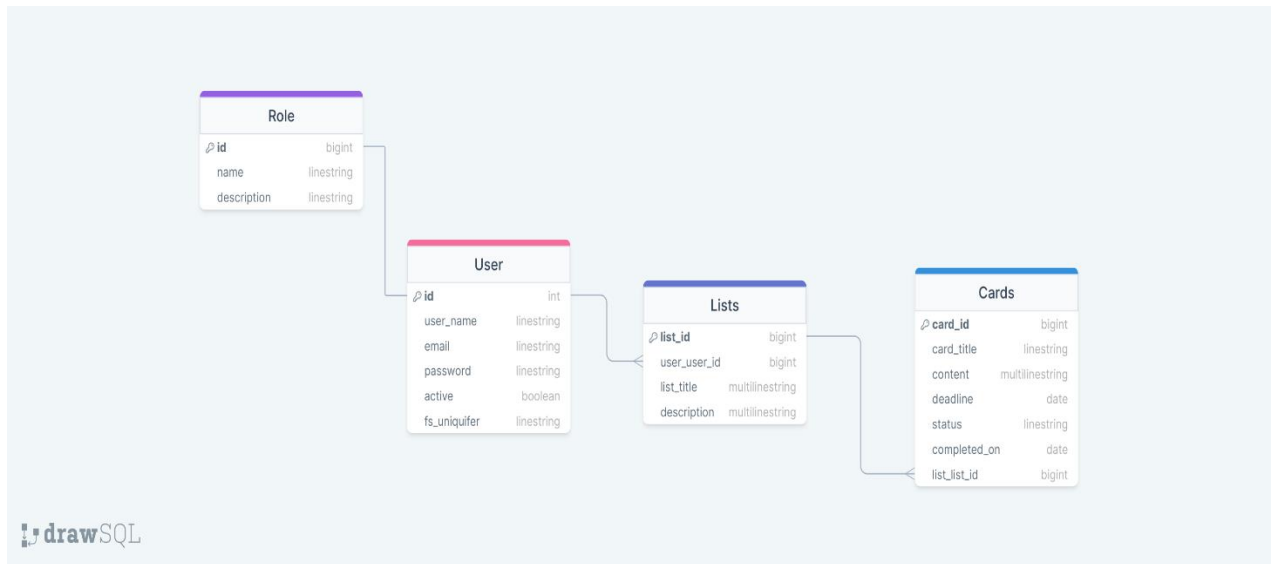- MAILHOG
- WEASYPRINT

DB Schema Design

USER TABLE SCHEMA

COLUMN NAME	COLUMN TYPE	CONSTRAINTS
User_name	string	unique
User_id	integer	Primary key
email	string	unique
password	string	

LISTS TABLE SCHEMA

COLUMN NAME	COLUMN TYPE	CONSTRAINTS
List_id	integer	Primary key
User_user_id	integer	Foreign key(user.user_id)
List_title	string	
description	string	

CARDS TABLE SCHEMA

COLUMN NAME	COLUMN TYPE	CONSTRAINTS
Card_id	integer	Primary key
Card_title	string	
content	string	
deadline	string	
status	string	
List_list_id	integer	Foreign key(lists.list_id)

API Design

The api is created to do the crud operations on the database, the user can update, create, read, delete the lists and cards from the database. The user can even view the cards in a list created by a user and even the lists created by the user. The api was created using flask restful. Separate yaml file is created as documentation for api

Architecture and Features

By entering the email and password, the user can login to the Kanban board. If there is no list in the database the user can create a list by clicking on add list and on clicking on submit the list will be created and added into database. The user can create a card in the database on clicking the add card icon inside the list. The cards whose deadlines passed without submitting will be in red colour and the submitted one will be in green colour, the cards which are yet to complete will be in light pink colour. On clicking on edit the user can edit a list or card and move the card to another list. On clicking the delete the user can delete a list, all the cards inside list will be deleted, clicking on delete inside a card will delete only that card from database. The user can logout from the application by clicking the logout button. On clicking the summary button, the user can analyse their work progress with a bar graph and a list with details of completed, yet to complete and cards with deadline passed. User can export List and Cards from the List by clicking on the export.

The html files are inside the template folder and the images and JavaScript files are inside the static folder.MVC design is used. All the packages used is mentioned in the "requirements.txt" file. The file for database is in the root folder "kanban_board_db.sqlite3"

Video

https://drive.google.com/file/d/1Dmhq4MeZqBkz52uajf.JINU31DWXRAnKK/view?usp=sharing