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Description

Kanabn board to manage day-to-day tasks where a user can add lists of tasks

Cards in lists to have some extra information about the task like deadline, content & status of the task.

Technologies used

flask: main framework

rander_template, redirect, url_for: to display the html content

request: to get the form data flash: to display the alert messages

sqlalchemy: to map user input data to the database

flask login: for user registration, validation

matplotlib.pyplot: for data visuals

DB Schema Design

1) User table with columns like id, name and email.

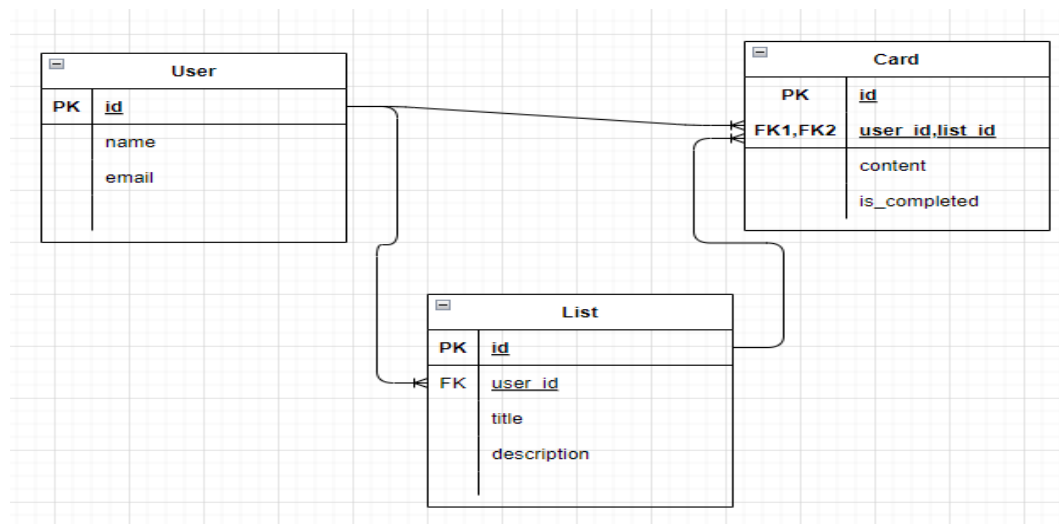
2) List table with columns id, description, title, user_id and cards. With one to many relationship between User and Lists.

3) Card table with columns id, list_id, deadline, content, is_competed, User_id .

List and card share a one to many relationship.

User and card also share one to many relationship.

From user to list and from list to card was my basic initial design but for the summary page I had to query through 2 tables to get the status of each card related to the user ,instead why not make one to many relation from user to card.



Architecture and Features

- Login system: A login system without password but with proper functionality with the help of flask login framework.
- Styling: mostly Bootstrap classes and a little bit of CSS.
- Functions:
 - 1) default route `"/`: first page of the website which will take you to the signup/sign in page.
 - 2) `/signup`, `/signin`, `/logout` : as the name suggestfor signing up and logging out.
 - 3) `/dashboard` :main page of the application where user can add edit delete the task list.
 - 4) `/list_id/delete_task` , `/list_id/edit_task` : to delete and edit a list respectively.
 - 5) `/list_id/add` : add a card to a specific list .
 - 6) `/list_id/card_id/edit` , `/list_id/card_id/delete`: to edit and delete a card with the given list id
 - 7) `/list_id/card_id/update` : updates the card status of a card from pending to complete.
 - 8) `/user_id/summary` :shows the statistics and graphical representation of the statistics.

Video link

<https://drive.google.com/file/d/1pD22TOl8ak3EzckWzfhRL7dVjhcJGbdK/view?usp=sharing>

API Design

CRUD on List: `get /api/lists/{user_id}` to get the list of tasks
`Put /api/lists/` to edit/update an existing task in list.
`Post /api/lists/` to create a new list for a user
`delete /api/lists/{user_id}/{list_id}` to delete a list

CRUD on Cards: `get /api/cards/{user_id}` to get the list of cards
`Put /api/cards` to edit/update an existing card
`Post /api/cards` to create a new card
`delete /api/cards/{user_id}/{list_id}/{card_id}` to delete a card