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Hello, I am a BTech student form Indian Institute of Information Technology (IIIT), Sonepat. I love computers and want to learn more about how to make them do incredible things.

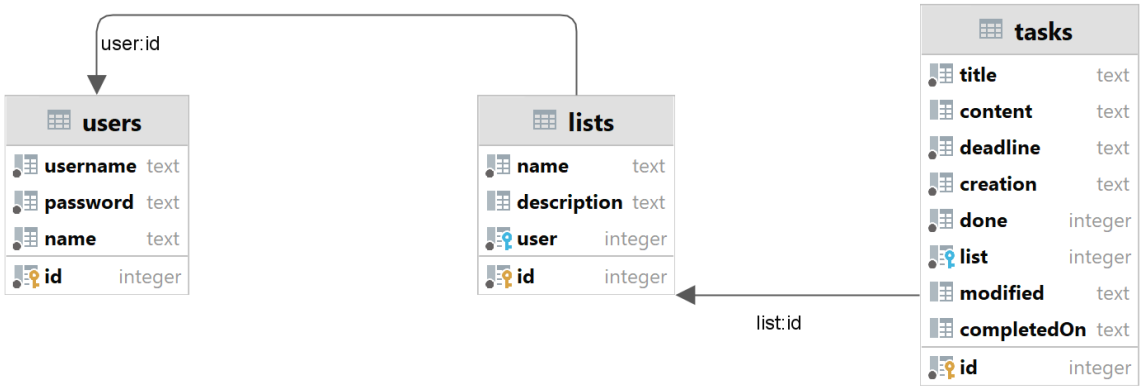
Description

This application (Kanban app) is made using flask and uses SQLite as backend. To make this application we need to create an application which can create lists based on the user's description and add tasks to those lists which contain some deadline within which the user needs to complete those tasks.

Technologies used

matplotlib – used for making graphs for summary page
jinja2 – used for generating the webpages
Flask-SQLAlchemy – used to make and use models
Flask – framework used for this project
Flask-RESTful – used to make RESTful APIs

DB Schema Design



I created three tables one for user another for lists and the last one for tasks. The lists table is connected to the users table to identify which list belongs to which user and the tasks table is connected to the lists table to identify the list the task belongs to.

API Design

The application contains two APIs one for lists and another for tasks. The APIs were created using the package Flask-RESTful and allow the user to perform CRUD operations on the aforementioned models.

Architecture and features

The project contains two directories one for static files called ‘static’ and another for template files called ‘templates’. All the code related to the Flask application is inside the file app.py present in the root directory. Along with the app.py file the root directory also contains the project database called ‘database.sqlite’ and a README.txt file. The app.py has the all the packages imported at the top followed by app configuration then output fields for APIs then the error classes for APIs followed by request parser then models then controllers and lastly API classes.

The app starts with user dashboard after successful user login or sign up. In the dashboard there are cards of lists belonging to the user which are fetched by the program form the database along with the tasks inside those cards. When the user clicks on the big plus button outside the card a new create list page opens where user can create new cards. If the user clicks the plus button inside the card the user can create the task for any of the list previously created. There is also a summary link on the top of the page which takes the user to the summary page where he or she can see the number of tasks completed and number of tasks which crossed the deadline. On clicking the logout button, the user will be redirected to the login page of the application.

Video

https://drive.google.com/file/d/19C_b6nH7boJT4FKW1VE4gYdOmu8POlnD/view?usp=sharing