

Final Project Report

Modern Application Development-1 | May 2022 Term | 21f1005570

Author

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B.Tech student with an interest in Data Science and Programming

Description

As per the problem statement, the following have been implemented:

- Creation of an activity tracking application with CRUD functionality
- Which are add, delete and modify trackers and their respective records

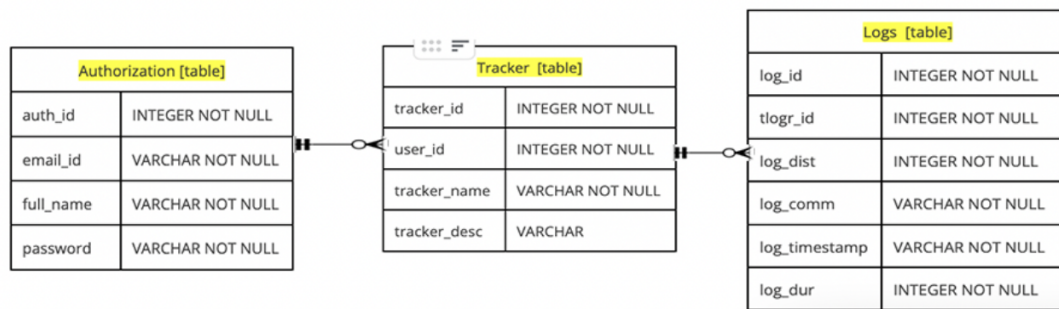
Technologies used

- Python: as core programming language
- Flask: as main framework for WebApp
- HTML/CSS: for WebApp layout
- Bootstrap/JS: for beautification of WebApp
- SQLite: for Database creation and data storage functionality
- Flask-SQLAlchemy: toolkit used to connect the database file with the WebApp

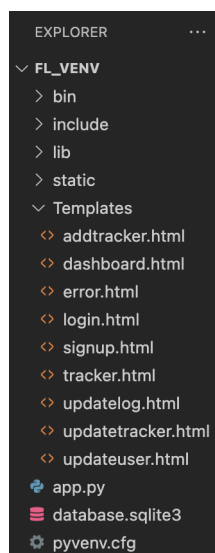
DB Schema Design

Tables (3)		
Authorization		
auth_id	INTEGER	"auth_id" INTEGER NOT NULL
email_id	VARCHAR	"email_id" VARCHAR NOT NULL
full_name	VARCHAR	"full_name" VARCHAR NOT NULL
password	VARCHAR(128)	"password" VARCHAR(128) NOT NULL
Logs		
log_id	INTEGER	"log_id" INTEGER NOT NULL
tlog_id	INTEGER	"tlog_id" INTEGER NOT NULL
log_dist	INTEGER	"log_dist" INTEGER NOT NULL
log_comm	VARCHAR	"log_comm" VARCHAR
log_timestamp	DATE	"log_timestamp" DATE NOT NULL
log_dur	INTEGER	"log_dur" INTEGER NOT NULL
Tracker		
tracker_id	INTEGER	"tracker_id" INTEGER NOT NULL
user_id	INTEGER	"user_id" INTEGER NOT NULL
tracker_name	VARCHAR	"tracker_name" VARCHAR NOT NULL
tracker_desc	VARCHAR	"tracker_desc" VARCHAR NOT NULL

ER Diagram



Architecture



- app.py file contain the main codes and modules created to drive the WebApp
- Static folder contains all the CSS, JS, Images, etc to beautify the project
- Templates folder contains all the .html pages for purposes as their names suggest
- database.sqlite3 stores all the data entered in the WebApp.

Features

- CRUD operations on trackers and their records
- Real Time updating; Date vs Distance graphs for each tracker

Additional Features:

- Dedicated logout button
- Integrated login & registration pages

Video

<https://drive.google.com/file/d/1XnDeAuEs9OJrAcO8hqsXtrLgbraX3ToL/view?usp=sharing>