

## Author

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I am Lakshya Ganeriwala. I am Currently in sophomore year in IITM Bsc Degree .

In this term I have 3 subjects MAD-1,PDSA,DBMS.

I am pursuing this degree full-time.

## Description

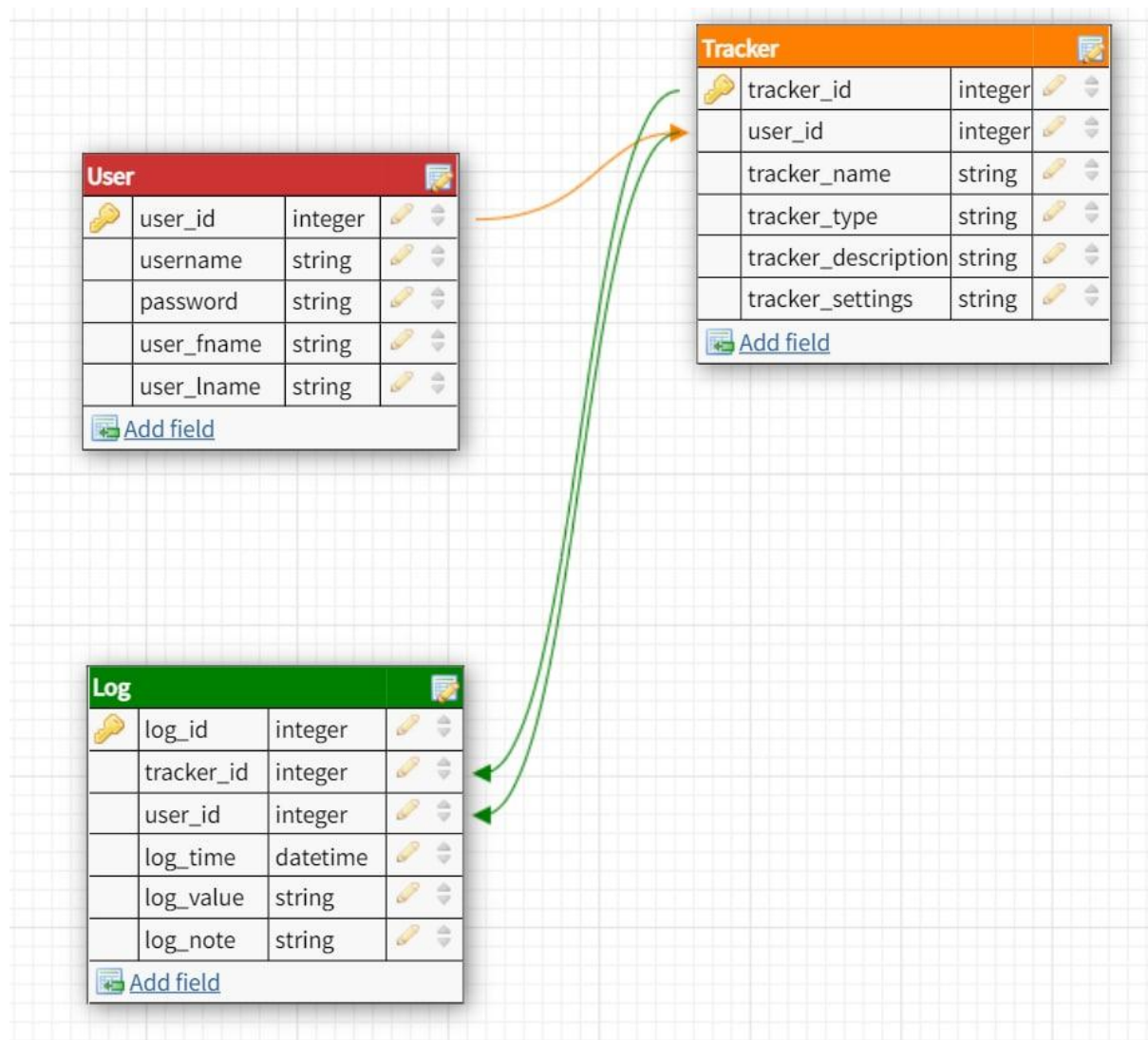
In this project i much i can understand we have to build basic python web application Using Flask and Flask-SQLAlchemy and users should be able to add tracker,update tracker, delete tracker , within tracker users should be able to add,update and delete logs.

### Technology used

Flake, Flask-SQLAlchemy, Flask-RESTful, Jinja2, Matplotlib, DateTime, requests, and Passlib.hash

- Flask is a Python framework for developing web applications, based on Toolkit and Jinja2. There are several advantages to using the Flask framework: It has a built-in development server and a fast debugger. Flask is a micro-framework. A micro-framework is usually a framework that does not depend on external libraries.
- SQLAlchemy: SQLAlchemy is a Python SQL toolkit and Object Relational Mapper that delivers all the power and flexibility of SQL in a simple, Pythonic domain language. It is developed for efficient, high-performance database access.
- Restful is an extension for Flask that provides support for quickly building REST APIs. It is a lightweight abstraction that works with your existing ORM/library. The Flask-RESTful library encourages best practices with minimal setup. Flask-RESTful should be easy to learn for anyone familiar with Flask.
- The Jinja2 templating engine is fast, expressive, and extensible. The template's special placeholders enable users to write code using a syntax similar to Python's. A final document is produced by passing the template data.
- Python's Matplotlib library allows you to create static, animated, and interactive visualizations. The majority of Matplotlib utilities are found in the pyplot submodule.

## DB Schema Design



In this table, the primary key is user\_id, and the other columns are username, password, user\_fname, and user\_lname.

There are four columns in the Tracker table: tracker\_id, user\_id, tracker\_type, tracker\_description, and tracker\_settings. Tracker\_id is the primary key, user\_id is the secondary key.

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## Architecture and Features

I have used block method for templates. I have also used API to render the pages to communicate with Database.