

# Progress Tracker Project



You're a Python Developer and your team is being tasked with creating an application that can track the **progress** for a user for different topics from a data repository. You'll be able to see if some task is **not completed, in-progress, or completed**.

For example, you may have a data repository (*data stored in some database*) of popular TV Shows. A user who accesses your application will be able to pick from a list of those shows and put them into 3 categories: plan to watch, currently watching, and finished watching. Users could have different shows in their trackers and may have made different levels of progress in completing a show.

## Topics

1. **TV Shows** - Track progress of a watchlist. What shows do users plan to watch, are currently watching, and have finished watching.
2. **Books** - Track progress of a reading list. What books are you planning to read, in progress of reading, and have finished reading.
3. **Music** - Track albums you're planning to listen to (especially if they haven't been released yet), are listening to, and have listened to. Can also just track individual songs.

## Functionality

In order to begin this prototype, make sure you have at least two data sources, Users and another for the topic you'll track. Make sure you have the following in your project:

- A **menu** where users can navigate to different options to update and view their trackers
- Users can **login** with a username and password

- Each user can view a tracker where they can see what is not yet **completed, in-progress, and completed**
- Users can only access the information tied to their account and **make changes to their trackers** (*as a developer try to think of what kinds of changes may be useful for a user to make*)

## Requirements

- Create project using Python
- Data will be stored in a database (SQLite or MySQL)
  - Create an **SQL script** that will initially create the tables and data that will be present in your database
- Use SQLAlchemy to work with database programmatically
- Users can access and alter their own information
- **A list of topics will be provided for you to show users** for their tracking. Example topics are listed above
- A user should be able to search the list by title or genre (*as well as any other querying method you choose to implement*)
- At least **2 Custom Exceptions**

## Extensions

- Anything in progress should have an indicator for how far along a user is in completing it (*Ex: a user has watched 12 out of the 50 episodes for a show*)
- Create an **admin** user that is able to **add, remove, and edit topic information**
- Allow users to see tracker reports for a topic as a whole
  - How many users have completed a show, still watching a show, etc.
- Have an option to **create an account** if a user doesn't have one
- Have a way for users to **rate a topic**, be able to calculate and show the average rating for that topic (*Ex: rate a show out of 5 stars*)