

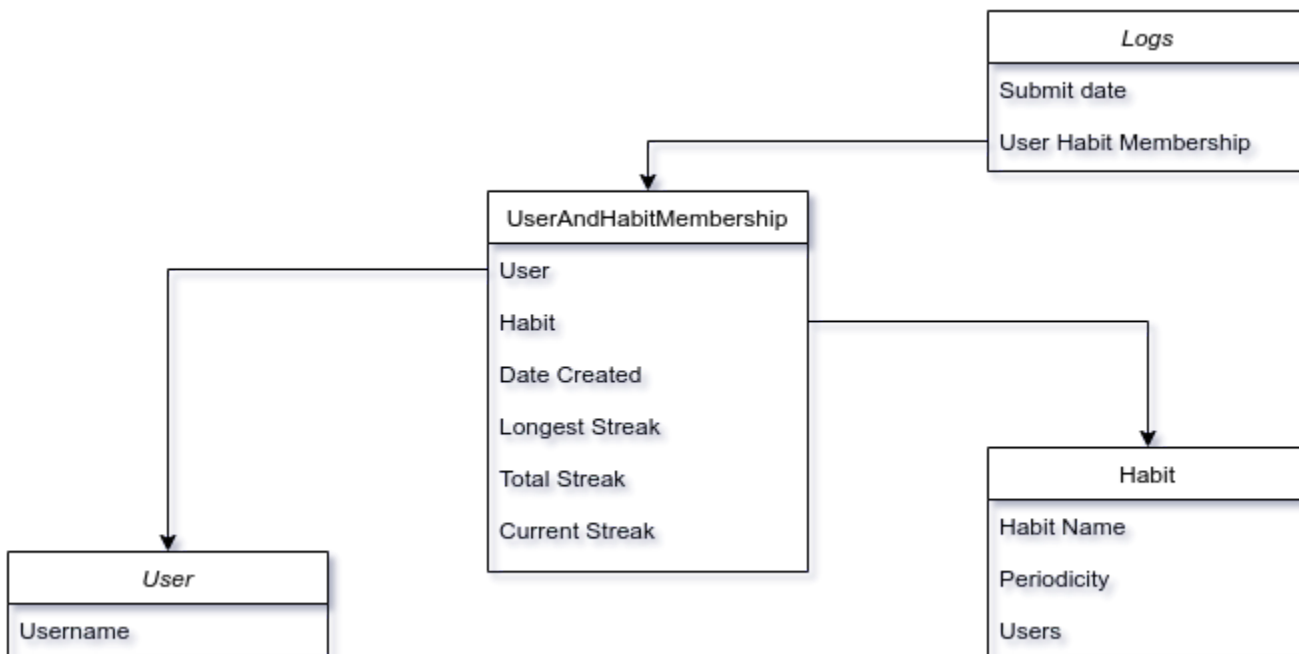
## Concept

We are going to create a REST API using Django Framework which can track the habits of the users. A sqlite3 database will be used to store the data.

## Business Logic

At first, users need to log in using a username. After user registration, they can create a new habit. Every habit will contain a name and periodicity. Periodicity means the ideal frequency of the habit. It can be either DAY or WEEK. Daily habits mean the habit needs to be performed daily while Weekly habits need to be performed at least once a week forever.

Users can link themselves to an habit. User and Habit Membership acts as a link between habit and user. It contains attributes regarding the current streak, total streak, and max streak. A Log is also generated which is updated after any user completes a habit. The log contains a user, habit membership link, and habit action completion date.



## API Endpoints

Here is a list of API endpoints and their request parameters

1. Create User – Create user in the database  
`/create_user {"username": "test1"}`
2. Create Habit – Create a new habit in the database  
`/create_habit {"habit_name": "running", "periodicity": "DAY"}`
3. Add user to habit – Link a habit to the user  
`/add_user_for_habit {"habit_id": 1, "user_id": 1}`
4. Perform the habit  
`/perform_habit {"user_id": 1, "habit_id": 1}`
5. Get User info – Returns list of all habits info associated to the user  
`/get_user_info {"user_id": 1}`
6. Get Habit Score – Returns Habit Score based on how many users are linked to it  
`/get_habit_score {"habit_id": 1}`