

Habit tracker

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The ultimate app to transform your habits and boost productivity. Let's explore its design implementation, features and its ability to revolutionize your daily routines.

Problems with developing habits

Building and committing to habits can sometimes be a difficult task due to many factors, like lack of motivation, lack of organization, motivation, tracking problems.. etc.

This is why a habit tracker application can be vital to help mitigate the barriers and support individuals in their habit-building journey. A habit tracker application serves as a tool that enables users to set goals, monitor progress, and stay motivated by providing visual representations of their habits and accomplishments. Here are some key features that make the habit tracker application we created valuable:

**Habit addition,
deletion and
checking off,**

The application allows the user to add, delete and check off existing habits, habits can be defined as either daily or weekly habits.

**5 predefined
habits
automatically
added**

Upon signup, 5 predefined habits are automatically added for each user to help them start their journey.

**Automatic habit
renewal**

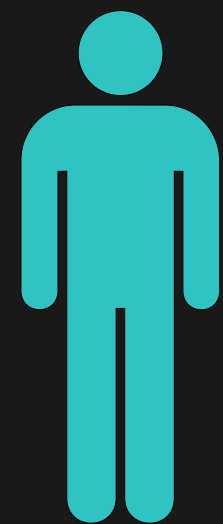
Habits are automatically renewed every day or week, once the due date is passed which massively helps with habit organization.



Every consecutive time a habit is checked off a new streak is established, which ensures that the user is motivated to complete a habit.



Users are able to analyze their habit information, where they can generate reports specific to a habit or for all habits like checking longest active streak for all habits and checking the longest streak ever for all active habits



Sign up



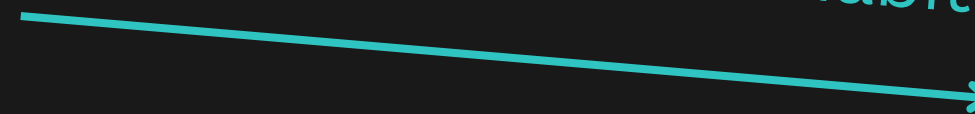
Predefined habits
added



Add new habit



Delete or check off habit



Generate habit reports



The habit tracker application was designed to be very simple yet effective, navigation is very straightforward, and extra unnecessary functionality was not needed which helped focus on the core functionality and ensure positive user experience

Design and implementation

Programming for the habit tracker application was done using object oriented programming using 3 classes to ensure better code organization, scalability and reusability.

Database class

To handle database connections

Users class

To handle user signup, login and authentication

Habits class

To handle habit addition, check off, deletion, and generating reports

Design

A MySQL database was created to store user and habit information, the database is also used to store habit history.

When a habit is added it is stored in the database which then automatically renews the entries when the habit is expired. if a habit is checked off, the habit is marked as complete and until it is renewed, streak entries are also updated. deleting the habit removes the habit and its entire tracking history from the database for security. Habit analysis was done in a seprate module using functional programming which allows reusing the same functions for different purposes.

Design

User information is also stored in a separate table in the database, which is vital for the user to be able to sign up or log in and interact with the application.

MySQL was chosen because a relational database was needed for the application and MySQL is the most reliable, secure, and easy to use.

No external tools were used apart from built in modules like the MySQL connector

Thank you