# Phase 1: Conception

## Overview

### Aim of the Project

It focuses on helping users to establish and maintain positive habits by using technology.

### Target Users

Individuals who are searching for a streamlined habit tracking experience.

## Main Features

### Habit Class

- **User:** Attributes – id, email, and password. Methods – create_user, login_user
- **Habit:** Attributes – id, task, periodicity, user_id, and check_dates. Methods – create_habit, update_habit, delete_habit, get_habit

### Analytics Class

- Habit: Methods – get_all_tracked_habits, get_habit_by_periodicity, get_longest_streak, get_streak_for_habit

## User Interactions

### Flow

1. Create User first then login
2. Create habits with specific task and respective periodicity.
3. Tasks are checked off by users based on completion.
4. Analytics module allows users to retrieve habit-related insights

### User Experience

- Command Line Interface (CLI) for habit creation, deletion, and analysis.
- Intuitive interaction for habit management.

## Data Storage

Using sqlite3.

## Tools and Technologies

Python 3.12.1 and built-in-python libraries as per the need during development phase.

# Justify Design Decisions

## Explanation

- Class-based approach chosen for clear structure and organization.
- Using SQLite for the scalability and simplicity to use.

## Expectations Analysis

Focus on user-friendly design, emphasizing simplicity and effectiveness.

# Time Management

## Planning:

Allocating sufficient time for each phase, understanding the critical role of the conceptualization phase.

## Fig-1:

ERD Diagram – Python Habit Tracker App