## **Integration Documentation: Tree Vibe SDG Project**

This document outlines the steps for integrating and setting up the Trees Database SDG project, including setting up the database, connecting it to Excel for data analysis, and creating a dashboard.

#### 1. SQL Database Setup

Follow these steps to set up the MySQL database:

**Step 1**: Create the database and tables.

Use the script:

CREATE DATABASE treesdgdatabase;

USE treesdgdatabase;

Step 2: Insert the sample data.

## 2. Excel Data Integration and Dashboard Setup

Step 1: Download the Excel workbook.

- Download the Excel file Dashboard.xlsx in this repository.

Step 2: Enable Power Pivot.

- In Excel, go to File > Options > Add-ins, and make sure Power Pivot is enabled.

Step 3: Import data from the MySQL database.

- Use the Data > Get Data > From MySQL Database option in Excel to import the tables from the MySQL database.

**Step 4**: Add relationships between the tables.

- In Power Pivot, go to Manage > Design > Create Relationship and link the tables based on their primary and foreign keys:
  - Tree (TreeID) ↔ PlantingGuide (TreeID)
  - Tree (TreeID)  $\leftrightarrow$  Climate (TreeID)
  - Tree (TreeID) ↔ TreeSpecies (TreeID)
  - User (UserID) ↔ UserTree (UserID)

# **Step 5**: View the dashboard.

- Navigate to the dashboard sheet in the Excel workbook to explore the visual insights on tree planting, species, climate suitability, and user activities.

## 3. Pitch Deck Presentation

- View the pitch deck on Gamma: Gamma presentation