Technical Design Document

1. Introduction

- **Overview**: This document describes the technical design and architecture of the **Climate Action Mobile App**, which includes the app's architecture, tech stack, and how it interacts with various systems.

2. System Architecture

- **Architecture Diagram**:
  - we can use tools like **chart** or **draw.io** to create a diagram that shows how the components of your app communicate (e.g., Mobile App <-> Backend API <-> Database).

3. Technology Stack

- **Frontend (Mobile App)**:
  - **Framework**: Java for Android.
  - **UI/UX**: Material Design for Android.
- **Backend**:
  - **Server**: Node.js or Java (Spring Boot).
  - **Database**: -
- **Cloud**:
  - **Platform**: AWS (Amazon Web Services).
  - **CI/CD**: GitHub Actions for Continuous Integration/Continuous Deployment.

4. Data Flow

- **Data Storage**: User data, including their carbon footprint calculations and activity logs, will be stored in the cloud database.
- **Authentication**: Firebase Authentication or JWT (JSON Web Tokens) for secure login.