**Final Web Application Project Proposal**

**Overview**

The proposed web application, Eco Solutions, aims to solve world problemsby providing sustainable solutions. The motivation for developing this application stems from Personal interesttoin the digital worldand its goal is to create a seamless and user-friendly experience for **individuals and businesses looking to adopt eco-friendly practices**.

**Target Audience**

The primary audience for this application includes:

* Eco-conscious Consumers: Individuals seeking practical ways to reduce their carbon footprint through daily habits and product choices.
* Small Business Owners: Entrepreneurs looking for sustainable solutions to integrate into their operations, such as eco-friendly packaging and waste management.
* Environmental Organizations: NGOs and advocacy groups needing a platform to connect with volunteers, share resources, and promote sustainability initiatives.

**Major Functions**

1. **User Authentication** - Users can sign up, log in, and manage their accounts securely.
2. **Dashboard** - A personalized dashboard displaying relevant data and features.
3. **Search and Filter** - Users can search and filter data based on various parameters.
4. **Data Submission** - Users can submit forms, upload files, or add content.
5. **API Integration** - Fetching and displaying real-time data from external sources.
6. **Notifications System** - Alerts, updates, and reminders for users.
7. **User Interaction** - Comments, likes, and sharing features.
8. **Admin Panel** - A backend system to manage content and users.

**Wireframes**

* **Mobile View**: Sketches of the main screens for mobile responsiveness.
* **Desktop View**: Layouts illustrating the user interface on desktop screens.
* A **homepage:** displaying featured sustainability tips and recent updates.

**External Data**

* **Open Weather API:** To display local weather conditions that impact energy **consumption.**
* **Google Maps API:** For mapping and locating eco-friendly businesses andrecycling centers.
* **Carbon Footprint API:** To calculate and provide insights on users' carbon emissions.

**Module List**

1. **Authentication Module**: Handles user login, signup, and authentication.
2. **Database Module**: Manages data storage and retrieval.
3. **Frontend UI Module**: Ensures user interaction and experience.
4. **API Integration Module**: Fetches data from external APIs.
5. **Notification Module**: Provides real-time alerts.
6. **Search and Filter Module**: Allows users to query and refine data.
7. **Admin Module**: Manages application settings and users.
8. **User Interaction Module**: Enables engagement features like comments and likes.

**Graphic Identity**

* **Primary Font:** Poppins- A modern, clean, and highly readable sans-serif font for headings and key UI elements**.**
* **Secondary Font:** Roboto - A widely used, simple, and user-friendly font for body text and content sections**.**
* **Accent Font:** Merriweather – A serif font used sparingly for quotes or special highlights to add a touch of elegance**.**

**Timeline**

* **Week 5**: Complete wireframes, database setup, and authentication module.
* **Week 6**: Implement core functionalities (API integration, dashboard, search).
* **Week 7**: Final testing, bug fixes, and deployment.

**Project Planning**

* **Backlog** – Ideas and feature requests.
* **To-Do** – Tasks that need to be completed.

 In **Progress** – Currently active development tasks.

* **Testing** – Features and components undergoing testing.
* **Completed** – Successfully implemented and reviewed tasks.
* Task breakdown into specific cards for tracking progress.

**Challenges**

* **API Limitations**: Handling rate limits and data inconsistencies.
* **Responsive Design**: Ensuring smooth UI/UX across all devices.
* **User Authentication Security**: Implementing proper encryption and security measures.
* **Time Management**: Completing the project within the given timeframe.

This proposal provides a structured approach to developing the final web application project. Feedback and suggestions are welcome for improvement!