

# Project Plan

## EcoTrack

Industry Partner	N/A
Primary Instructor	Anjana Shah
Team Member	Munira Bahmani
Team Member	Zoe Detlefsen
Team Member	Elnaz Heidari
Team Member	Prakash Kumar
Team Member	

### Document Revision History

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## 1. Executive Summary

The following describes the project to be executed.

Objective	EcoTrack is a pioneering web application developed by T32, designed with the core objective of inspiring individuals to lead more sustainable lives and reduce their carbon footprints. At its heart, EcoTrack seeks to drive awareness and action on environmental issues by providing users with a user-friendly and impactful tool to track, manage, and improve their environmental impact.
Corporate Goals Addressed	<p>1. Environmental Stewardship: EcoTrack serves as a powerful embodiment of our dedication to environmental stewardship. By empowering individuals to make eco-conscious choices, it fosters a culture of sustainability among our user base.</p> <p>2. Innovation and Technology: As a cutting-edge web application, EcoTrack showcases our commitment to innovation and leveraging technology for the betterment of society. It exemplifies our drive to provide modern, impactful solutions to contemporary challenges.</p> <p>3. Customer Engagement and Impact: The EcoTrack app actively engages users, providing them with the tools and information needed to reduce their carbon footprint. This aligns with our corporate goal of fostering meaningful engagement with our customers while simultaneously contributing to a more sustainable future.</p> <p>4. Partnerships for a Greener World: EcoTrack forges partnerships with local eco-friendly businesses, supporting their growth and connecting them with an environmentally conscious consumer base. This aligns with our corporate strategy of establishing mutually beneficial relationships with like-minded organizations.</p>
Planned Start Date	Monday, September 18, 2023;
Planned End Date	Friday, March 29, 2024.

## 2. Project Approvers, Reviews and Distribution List

Approvers, reviewers and distribution list

Project Role	Name	E-mail	Date
Product Owner	Zoe Detlefsen	zoe.detlefsen@georgebrown.ca	2024-01-16
Product Owner	Munira Bahmani	munira.bahmani@georgebrown.ca	2024-01-16
Product Owner	Elnaz Heidari	elnaz.heidarighezeljeh@georgebrown.ca	2024-01-16
Product Owner	Prakash Kumar	prakash.kumar@georgebrown.ca	2024-01-16

### 3. Scope

Define the sum total of all of its products and their requirements or features.

In Scope	Out of Scope
System Enhancement: This project encompasses the development and implementation of enhancements to the existing software system, including feature additions, functionality improvements, and performance optimizations as outlined in the project requirements.	Third-Party Integrations: This project does not encompass the integration of third-party systems or services. Any integrations with external systems will be considered out of scope and will require a separate project or assessment.
Database Integration: The project includes the integration of a new database module into the existing system architecture to facilitate efficient data storage and retrieval.	Hardware Procurement: The project does not involve the procurement or installation of new hardware components. Existing hardware resources are assumed to be sufficient for the system's requirements.
User Interface (UI) Revamp: It involves redesigning and enhancing the user interface of the application to improve user experience, usability, and visual aesthetics in line with the project's design specifications.	Business Process Reengineering: This project does not include a comprehensive reengineering of existing business processes. Any modifications to business processes will be limited to those directly related to the software system changes.
Security Upgrades: The project includes security enhancements to protect against vulnerabilities, with a focus on data encryption,	Regulatory Compliance Changes: Any changes required to ensure regulatory compliance beyond the scope of the system's current

access controls, and compliance with industry best practices.	regulations are considered out of scope and will be addressed separately
User Training: In-scope activities encompass the development and delivery of user training programs to ensure that end-users can effectively utilize the updated system features.	
Quality Assurance and Testing: Quality assurance and testing activities, including unit testing, integration testing, and user acceptance testing, are within the project scope to ensure the reliability and functionality of the system.	

In Scope Features	External Resources
<p><b>Carbon Footprint Calculator:</b> Our focus will be in the Canada and the USA. Our users will have several inputs such as location, household size, home energy usage (type and amount), transportation details (vehicle type, usage, public transport frequency), air travel (number and type of flights), diet preferences, and waste production. The Carbon Footprint Calculator’s calculation involves applying emission factors to these inputs to estimate carbon emissions for each category—home energy, transportation, air travel, diet, and waste. The total carbon footprint is then calculated by summing up emissions from all these categories. Furthermore once calculated we will suggest to users how they can reduce their carbon footprint which will not only benefit the environment but their wallets as well.</p>	<p>It's important to use region-specific data for accuracy in Eco Track’s calculator and regularly update emission factors from reliable sources such as governmental environmental agencies or research studies. We will be getting and updating our calculations through updates from research studies from the agencies.</p>
<p><b>Environmental News Feed:</b> a dynamic feature on our website that brings the latest in green news right to your fingertips. Leveraging a sophisticated API, we curate a diverse range of</p>	<p>API -&gt;  <a href="#">Canada Environment news API - Live news headlines from Canada (newsdata.io)</a></p>

<p>environmental articles from around the globe, ensuring that you have access to the most current and impactful stories. On our dedicated news page, you will discover a visually engaging and user-friendly layout, showcasing a variety of articles that you can browse and select at your leisure. Whether it's groundbreaking innovations in sustainability, updates on climate change policies, or inspiring stories of communities making a difference, our news feed is a treasure trove of information to keep you at the forefront of environmental awareness.</p> <p>We understand the power of knowledge in driving change. That's why we've designed this feature not just as a news source, but as a platform for inspiration and learning. It's more than just reading articles; it's about becoming part of a larger conversation and community committed to protecting our planet. Dive into our Environmental News Feed and join us in staying informed, engaged, and motivated in our collective journey towards a greener future.</p>	
<p><b>Green Lifestyle Challenges:</b> As part of our commitment to sustainability and environmental responsibility, we invite our users to participate in a series of engaging challenges that promote a greener lifestyle.</p> <p>These challenges range from reducing household energy usage and opting for public transportation to adopting a plant-based diet for a week or minimizing plastic waste.</p> <p>Each challenge completed earns users points, which can be accumulated and redeemed for various rewards, such as discounts on eco-friendly products, digital badges, or even contributions to environmental causes in the users name.</p> <p>To make this interactive and user-friendly,</p>	

<p>our website includes a dedicated challenge section where users can track their progress, and see upcoming challenges. Implementation of this feature involves integrating a user-friendly dashboard on our website, where participants can sign up for challenges, log their activities, and view their points and rewards. We'll also incorporate social sharing options, allowing users to share their accomplishments and challenge friends, thereby spreading awareness and fostering a community of environmentally conscious individuals.</p>	
<p><b>Local Sustainability Map:</b> an innovative feature designed to connect our users with eco-friendly businesses in their area. Utilizing a powerful API, this interactive map displays a comprehensive listing of businesses that are committed to sustainability and environmental responsibility. Whether our users are searching for a local organic grocery store, an eco-conscious fashion retailer, or a sustainable service provider, our map makes it easy to find. With just a few clicks, they can explore a variety of green businesses in their vicinity, each marked for easy identification and accompanied by detailed information such as business hours, services offered, and user reviews. We understand the importance of supporting local, sustainable businesses in our journey towards a greener planet. That's why our Local Sustainability Map is more than just a tool; it's a gateway to a community of like-minded individuals and businesses striving for a better future. By highlighting these eco-friendly options, we aim to encourage sustainable choices, foster local economies, and build a stronger, more environmentally conscious community.</p>	<p>API -&gt; displaying eco friendly business on the map allowing users to have an easier way of choosing business that follow a more eco lifestyle</p>

<p><b>User Profile:</b> In our commitment to providing a seamless and secure user experience, we're implementing a robust user profile system on our website, complete with login and signup functionalities. Once registered, users can effortlessly save and track their data from both the carbon footprint calculator and the Green Lifestyle Challenges. This integration ensures a personalized and engaging experience, allowing users to monitor their progress over time and adjust their actions accordingly. For enhanced security, we're incorporating multi-factor authentication (MFA) and requiring strong, complex passwords for all accounts. Additionally, sensitive user data is protected using advanced encryption techniques, ensuring that personal information remains confidential and secure. These measures are in place to provide users with peace of mind, knowing their data is safe while they contribute to a more sustainable future.</p>	
<p><b>Educational Video:</b> "Understanding Carbon Footprint: A Comprehensive Educational Guide for Stakeholders" aims to inform viewers about the concept of carbon footprint and its significance. It covers the definition of carbon footprint as the total greenhouse gas emissions an individual, organization, or product is responsible for. The video emphasizes the diverse sources of carbon footprint, including transportation, energy use, and food production. It highlights the impact of carbon emissions on climate change, showcasing effects such as melting ice caps and extreme weather events.</p>	
<p><b>Feedback/Survey:</b> Feedback/Survey Page, It will help to improve the website and find any possible bugs.</p>	



## 4. Deliverables

This project will deliver the following.

Deliverable	Description
Software Application	The primary deliverable would be the EcoTrack application itself. This includes the frontend user interface, backend functionality, and any other components necessary for the application to function.
Documentation	Comprehensive documentation outlining how to use the EcoTrack application. This may include user manuals, installation guides, and technical documentation for developers.
Testing Artifacts	This includes test plans, test cases, and testing reports. It demonstrates that the application has been thoroughly tested and meets the required quality standards
Design Files	If applicable, design files for the user interface and user experience (UI/UX) elements. These files are essential for any future design updates or modifications to the application.

## 5. Assumptions

Here are some assumptions made about the content provided in this document, which are applicable to various aspects of the "EcoTrack" project:

### Scope:

1. The project scope assumes that the existing infrastructure and technology stack can accommodate the development and deployment of EcoTrack without major architectural overhauls.
2. The scope assumes that user data collected for carbon footprint calculations will be handled securely and in compliance with applicable data privacy regulations.

### Desired Solution:

3. It is assumed that the desired solution, including the user interface and feature set, aligns with the preferences and expectations of the target user base interested in sustainability.

4. The desired solution assumes that the app's features, such as carbon footprint calculations and local resource mapping, can be developed and integrated successfully without significant technical limitations.

**Requirements:**

5. The requirements outlined in the document assume that users are willing to actively engage with the app, complete sustainability challenges, and adopt eco-friendly behaviors.

6. Requirements related to data sources for carbon footprint calculations and environmental news assume the availability and reliability of these data sources.

**Business Process:**

7. The document assumes that partnerships with eco-friendly businesses and advertisers are feasible and can be established to generate revenue and support the app's sustainability.

**Stakeholders:**

8. It is assumed that stakeholders, including sponsors, developers, and marketing teams, are aligned with the project's goals and are committed to its success.

9. Stakeholders, particularly end-users, are assumed to value the educational and community-building aspects of the app and are motivated to participate actively.

These assumptions are made based on the information available at the time of document creation and may need to be revisited and validated as the project progresses and new information becomes available. Clear communication and ongoing monitoring will help address and adjust for any discrepancies between assumptions and reality during the project lifecycle.

## **6. Dependencies**

1. API Integration: Dependencies on external APIs (e.g., weather data, environmental databases) for certain app features, such as carbon footprint calculations and local resource mapping, can affect app functionality.

2. User Feedback: Dependencies on user feedback and testing results are critical for refining the app's features and usability.

3. Data Providers: EcoTrack may depend on external data providers for real-time environmental data and news updates. The reliability of these providers can affect app accuracy and timeliness.

4. Marketing Partnerships: Partnerships with eco-friendly businesses and organizations for marketing and advertising can be dependencies for expanding the app's user base and monetization.

## 7. Risk Management

Potential Risk	Severity (H/M/L)	Likelihood (H/M/L)	Management Strategy
Technical Complexity	High	Medium	Conduct a thorough technical feasibility study at the project outset. Allocate experienced developers. Regular code reviews and knowledge sharing sessions.
Scope Creep	High	High	Clearly define project scope. Implement a change request system. Regularly communicate with stakeholders to manage expectations.
Resource Constraints	High	Low	Cross-train team members to mitigate skill dependencies. Have backup plans in place for key roles.
User Adoption - Low user engagement with the EcoTrack app	High	Medium	Develop a comprehensive marketing and user engagement plan. Gather user feedback and iterate on app features.
Budget Overrun - Exceeding the allocated project budget	High	Low	Monitor project expenditures closely. Have contingency plans for budget adjustments if needed.
Third-party Dependencies -	Medium	Medium	Establish clear communication channels with third-party

Delays from external providers			providers. Monitor their progress and have backup options.
Data Security Breach - Unauthorized access to user data	High	Low	Implement robust data security measures, including encryption and access controls. Regularly audit and test security measures.
Environmental Regulations - Changes in eco-friendly regulations	High	Medium	Stay informed about regulatory changes. Have legal counsel to ensure compliance and adjust the project accordingly.

## 8. Communication

### Reporting

The following reports will be produced;

Report	Audience	Frequency
Project Status Report	Project Team, Stakeholders	Bi-Weekly
Milestone Reports	Project Team, Stakeholders	At each milestone completion
Resource Allocation Reports	Project Manager, Resource Managers	Monthly
Budget Reports	Finance Team, Project Manager, Stakeholders	Monthly
Risk Assessment Reports	Project Team, Risk Management Team	Quarterly
User Feedback Reports	Product Development Team, User Experience Team	Bi-weekly
Partnership Progress Report	Business Development Team, Stakeholders	Quarterly
Quality Assurance Report	Quality Assurance Team, Development Team	Bi-weekly
Sustainability Impact Reports	Environmental Experts, Stakeholders	Semi-annually

Executive Summary Reports	Senior Management, Board of Directors	Monthly
Ad Hoc Reports	Varies based on specific report	As needed

### Meetings

The following meetings/communication will be established;

Meeting	Purpose	Attendees	Frequency
Project Kick-off Meeting	This initial meeting will mark the start of the project. It will involve the project team, stakeholders, and possibly external partners. The purpose is to introduce the project, define roles and responsibilities, and set initial expectations.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	Once
Regular Team Meetings	Regular team meetings will be held at predefined intervals (weekly) to discuss project progress, challenges, and upcoming tasks. These meetings ensure that the project team is aligned and can address any issues promptly.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	Weekly
Stakeholder Updates	Periodic updates will be shared with project stakeholders to keep them informed about project progress. These updates may take the form of emails, reports, or presentations, depending on stakeholder preferences.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	Weekly
Milestone Review Meetings	When significant project milestones are reached, milestone review meetings will be conducted. These meetings assess the completion of milestones, their impact on the project, and any adjustments needed for the next phase.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	At each milestone completion
Change Control Board Meetings	If changes to project scope, requirements, or resources are proposed, change control board meetings will be convened to evaluate these changes and make	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	As needed when change requests arise

	informed decisions about their approval or rejection.		
User Feedback and Testing Meetings:	User feedback and testing meetings will involve the project team and user representatives. They will review user feedback, test results, and proposed improvements for the EcoTrack app.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	Bi-weekly during testing phases
Community Engagement Meetings:	Meetings with the EcoTrack user community may be conducted to foster engagement, gather insights, and address user concerns or suggestions. These meetings can take place through online forums, webinars, or other platforms.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	Monthly
Business Partnership Meetings	Meetings with local eco-friendly businesses will be scheduled to discuss partnership progress, evaluate the impact on user engagement, and explore new collaboration opportunities.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	Quarterly
Quality Assurance and Testing Meetings	Quality assurance and testing meetings will occur during the testing phases of the project. The purpose is to review testing results, identify issues, and prioritize bug fixes and improvements.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	Bi-weekly during testing phases
Sustainability Impact Assessment Meetings	Meetings to assess the sustainability impact of the EcoTrack app will be held periodically. These meetings will involve environmental experts and stakeholders to analyze data and make recommendations.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	Semi-annually
Executive Briefings	Executive briefings will provide senior management with high-level project updates, major achievements, and key decisions. These briefings are designed to keep executives informed without delving into technical details.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	Monthly
Ad Hoc Meetings	In addition to planned meetings, ad hoc meetings may be convened as needed to address urgent issues, resolve conflicts, or respond to unforeseen challenges.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	As needed

Online Collaboration Platforms	Collaboration tools such as Slack, Microsoft Teams, or project management software will be used for ongoing communication and document sharing among team members and stakeholders.	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar	Ongoing Communication
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## 9. Task Listing (WBS- Work Breakdown Structure)

The following resource proposal template summarizes the resource hours committed to this project, upon final approval of this document.

Reference	Tasks	Duration	Dependency
A	Project Initiation	3 weeks	None
B	Requirements Gathering	1 week	A
C	Design and Prototyping	2week	B
D	App Development	3week	C
E	User Testing and Feedback	1week	D
F	Marketing and Promotion	n/a	D
G	Sustainability Initiatives	n/a	D
H	Business Partnerships	n/a	D
I	Quality Assurance and Testing	n/a	D
J	Launch and Deployment	n/a	D,E,F,G,H, I
K	Ongoing Maintenance and Support	n/a	J

## 10. Gantt Chart

Create a detailed Gantt Chart from your Task Listing(Use any software tool and paste the image or upload as a separate file that can be opened as pdf/doc/xls)

**PLEASE REFER TO ATTACHED PDF**

## 11. Milestones

Major Activity or Milestone	Estimated Milestone Target date	Owner/Reviewer Team Members
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Project Kick-off	September 18th, 2023	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari
Requirements Gathering	September 22nd, 2023	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari
Design and Prototyping	December 8th, 2023	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar
Web App Development	March 1, 2024	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar
User Testing and Feedback	March 2nd, 2024	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar
Marketing and Promotion	March 2nd, 2024	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar
Sustainability Initiatives	March 2nd, 2024	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar
Business Partnerships	March 31, 2024	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar
Quality Assurance and Testing	March, 15th , 2024	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar
Launch and Deployment	March, 15th , 2024	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar
Ongoing Maintenance and Support	continuous	Zoe Detlefsen, Munira Bahmani, Elnaz Heidari, Prakash Kumar

## 12. RAM – Responsibility Assignment Matrix



Create a RAM from your Task Listing. A sample is shown below:

## PROJECT TEAM RESPONSIBILITIES

Project Name: Eco Track

Project Manager: N/A

TASK	ZOE	MUNIRA	ELNAZ	PRAKASH	ANJANA
PROJECT INITIATION	P	P	P	P	S
REQUIREMENTS GATHERING	P	P	P	P	S
DESIGN AND PROTOTYPING	P	P	P	P	S
APP DEVELOPMENT	P	P	P	P	S
USER TESTING AND FEEDBACK	P	P	P	P	S
MARKETING AND PROMOTION	P	P	P	P	S
SUSTAINABILITY INITIATIVES	P	P	P	P	S
BUSINESS PARTNERSHIPS	P	P	P	P	S

QUALITY ASSURANCE AND TESTING	P	P	P	P	S
LAUNCH AND DEPLOYMENT	P	P	P	P	S
ONGOING MAINTENANCE AND SUPPORT	P	P	P	P	S

P = Primary S = Secondary

### 13. Approval

The signatures below indicate their approval of the contents of this document.

Project Role	Name	Signature	Date
Product Owner	Zoe Detlefsen	<u>Zoe Detlefsen</u>	2024-01-16
Product Owner	Munira Bahmani	<u>Munira Bahmani</u>	2024-01-16
Product Owner	Elnaz Heidari	<u>Elnaz Heidari</u>	2024-01-16
Product Owner	Prakash Kumar	<u>Prakash Kumar</u>	2024-01-16