Team Number: 203-7

Team Name: Breakout Room 7

Team Members:

- Matthew Teta
- Rebecca Coryell
- Lakshya Jaishankar
- Samuel Mast
- Sarah Zendle
- Charlie Koepke
- Brian Mayers

Application Name: envi

Application Description

Envi is a website designed to help individuals and businesses monitor their environmental impact. Users can track many actions, including using reusable water bottles and cups, avoiding disposable straws, and biking or walking rather than driving. As users continue to track their progress, they can earn in-game rewards to build a personal biome that grows as they use the website and save the planet. This biome adds a social aspect to the application: users can visit each other's biomes and create group goals, fostering a friendly and competitive social environment for environmentally conscious people to share their positive impacts with their community.

Envi's business side provides a similar ability to track environmental impact. Companies can show website users the actions they are taking to protect the environment by building their own profiles, providing a unique (and free) advertising opportunity that encourages sustainable business practices. Profile information may include sustainable supply chains, recycled manufacturing materials, and reduction of waste. In addition, companies and organizations have the opportunity to donate to Envi-approved environmental protection organizations, host competitions for users, and provide informational resources.

The website will contain both built-in and administrator-facilitated verification protocols. Envi will suspend user accounts that appear to be using the website fraudulently, and administrators will have the ability to chat individually with companies to verify their profiles. In addition, users will have the ability to report companies for unsustainable practices in order to keep businesses in check. These features will ensure that Envi is equipped to reward both businesses and users for their genuine efforts to protect the environment.

Track and post about things that impact the environment positively:

- Renewable energy upgrades
- Carbon neutral products
- Company wide impacts
- Reusable water bottles/cups

        - Reusable Straws
        - Donate clothes
        - Reusable shopping bag
        - Biking/walking rather than driving
- Allows users to share their positive impacts with friends
    - Earn rewards to create a “biome” - you can build it up as you do more
- Corporate carbon footprint tracker

Vision Statement:
For environmentally conscious people who would like to track and share the positive impacts they’re making, envi is a social platform where users can build a communal sense of environmental accountability that unites us during these troubling times.

Version Control: GitHub Repository https://github.com/CSCI-3308-CU-Boulder/203_7_F20.git
Meeting Logs: Keeping track of meetings
Milestones: For milestone submissions
Code: For project code

Development Method: Agile. Jira board:
https://envi-203-7-csci3308.atlassian.net/jira/software/projects/EC/boards/1

Communication Plan: We will have two meetings a week over Zoom and communicate as we work over a Slack channel. Standup meetings once a week with our TA will keep us up to date on how each individual team member’s work is going.

Meeting Plan: Tuesday at 7:15pm and Wednesday at 6:45pm(Zoom)

Proposed Architecture Plan:
Propose an architecture for your app. What technologies will you be using on the backend? What technologies on the front end? How will they communicate with each other? Which technologies will be responsible for which functionalities?

- Backend Database: PostgreSQL
- Integration Layer:
    - Node.js
        - Node-postgres
        - Express.js
            - Used to define endpoints for a REST api
        - Jsonwebtoken
            - For user authentication similar to this tutorial
- Frontend UI:

- The frontend will communicate with the backend through HTTPS calls to the REST api
- HTML
- CSS
- JS
- Bootstrap
- React
  - create-react-app boilerplate
- SVG,js
  - Used for graphics and rendering “islands” on user profiles

Use Case Diagram: 3 actors and 15 use cases.
Actor: the user, companies/organizations, admin
Use Cases:

<u>Use Cases for the user:</u>
1. Tracking your environmental impact - Reusing disposable items, biking, bussing, etc.
2. Seeing other friends’ progress - visit friend’s biomes
3. Sharing your progress
4. Compete with your friends (show scoreboard)
5. Build your biome by reaching milestones

<u>Use Cases for the company/organization:</u>
1. Companies can donate for ads or to show support
2. Organizations can provide info on resources/the environment
3. Host/Sponsor competitions
4. Build their own biome
5. Promote eco-friendly products

<u>Use Cases for admin:</u>
1. Report a company
2. Manage cheaters after being reported by user
3. Ban users
4. Organize events
5. Send general notifications/updates

6. Chat with businesses to verify their impacts

<u>More use cases:</u>

1.Add an entry (clothes donated, reusable shopping bags, etc.)
2.Look at progress (a graph of past impacts)
3.Add a new friend (through a code or username)
4.View list of friends
5.Report a friend cheating
6.Report a company
7.Set a goal
8.Set up user profile
9.View feed of friend's good deeds
10.At milestones, can add clean energy resources
11.Can create group goals for friends
12.Can select environmentally conscious organizations to donate to