

The Documentation we can use and put onto our wiki or github are the following
Community Research & understanding → copy from 405
Business Case
Stakeholder Analysis
Project Scope Statement

Team Member Introductions

Anupras Burokas

Role: Quality Assurance (QA) Tester

Responsibility: Responsible for investigating documentation, app testing and research of development tools for the team's use.

Mohamed Bashir

Role: Scrum master / Developer

Responsibility: Responsible for leading daily scrum meetings, assisting in product backlogs and also be part of the development team doing front end as well as back end development

Timothy Pasion

Role: Full Stack Developer

Responsibility: Front end design and development and back end design and development.

Project Background

Climate change is one of the many important environmental issues that needs to be addressed today. Climate change is caused by the increase of greenhouse gases (GHG) in the atmosphere. The increase of GHG in the atmosphere is due to various human activities that emit the major GHG such as carbon dioxide, methane, nitrous oxide, fluorinated gases, and water vapour.

We want to help educate the community about the climate issues we face by developing a knowledge-based content application that provides users with a supportive community, informative resources, and tools to help lower their carbon footprint.

This application is built to support the United Nations Sustainability Goal 13: Climate Action.

Focusing on Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

DO MAKE CHANGES WHERE YOU SEE FIT

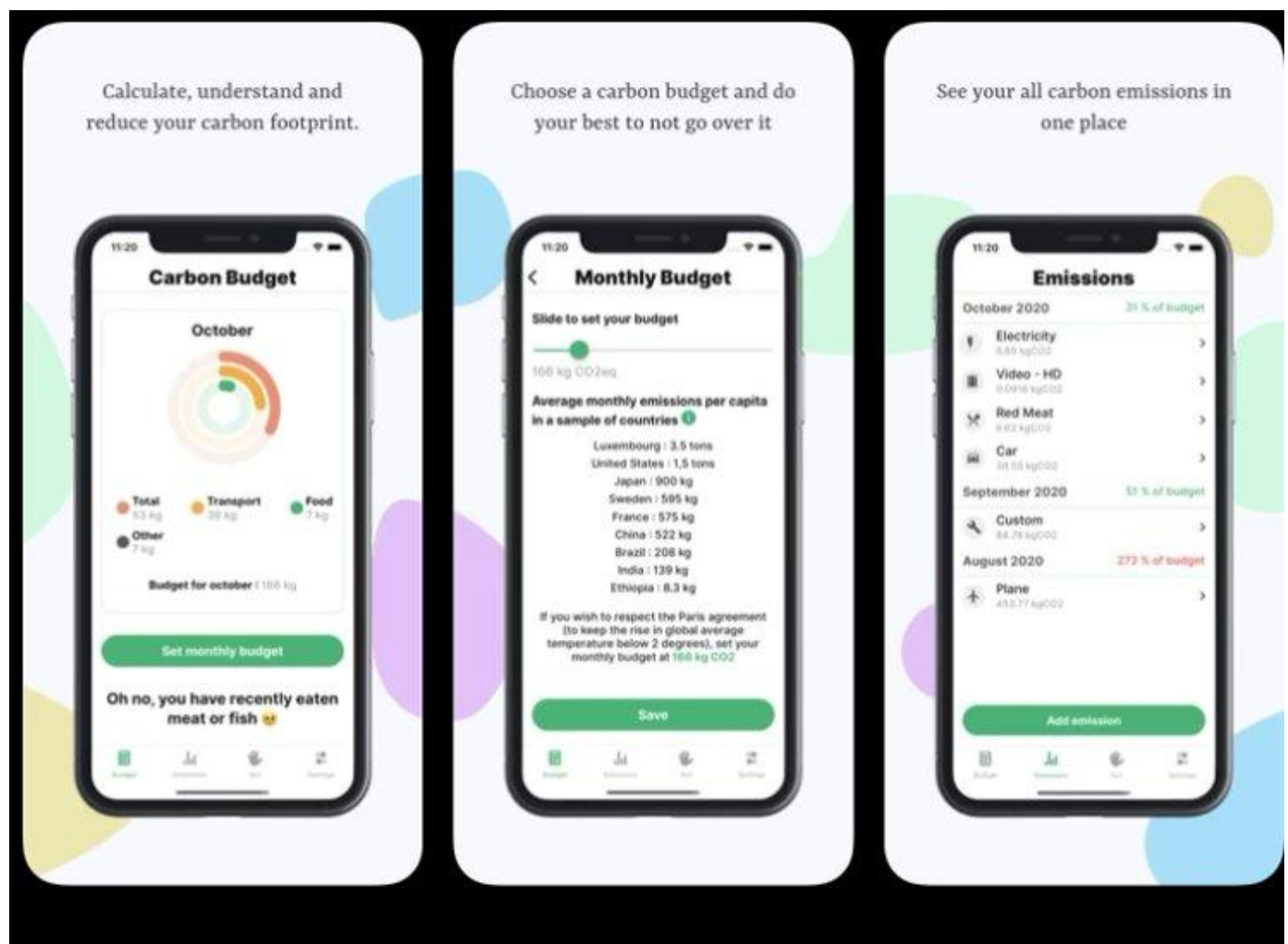
Maybe when mentioning the united nations we can show the United nations website

Maybe when talking about the greenhouse gases we can show this site

<https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html>

Business need/opportunity

What exists



There are many existing tools and resources out in industry presently that provide ways to reduce their carbon footprint.

We want to rebuild and redesign the way these applications are used by integrating it in the local community and adding more functionality.

The envisioned application features we want to add are the following:

- Content sharing amongst users
 - Forum or feedlike structure and attributes: Like, dislike, comment
 - Posting useful articles/ youtube videos
 - Sharing achievements/rewards with other users to challenge them to achieve same rewards
- Messaging System
- Determine users' Carbon Footprint based on a questionnaire and use that data to gather recommendations that provide information on alternatives or other ways to lower greenhouse gas emissions.
 - Comparing with others who have a similar lifestyle as the user after the questionnaire or at the end of each month or year reports.
- Monitor users carbon footprint - Allow users to track their activities monthly or yearly, and give a report at the end of each month or year.
- Carpooling
 - Maybe utilize uber API or building a verification layer for in-app carpool requests

Reason

People's activities contribute greatly to the cause of climate change. Creating an application that allows the user to learn about their carbon footprint and participate in various activities that can help to reduce their carbon footprint. This app has the following functionalities:

- Monitor user's carbon footprint (e.g., including carbon footprint calculator, questionnaires to determine user's carbon footprint usage, giving user's incentive to earn badges as long as their carbon footprint is low, share their carbon footprint score with others to challenge them and inspire others to keep their carbon footprint low)
- Ability to carpool with other that are nearby
- Providing educational resources to educate users.

Golden Circle

Why: this project is intended to spread awareness through educating the community so that they can improve their lifestyles and come together to change the world.

How: Take in user data in questionnaires to determine their carbon footprint, assessing their score and allowing the user to gain access to a multitude of resources and tools to help them lower their score.

What: Develop a knowledge-based content application that allows users to monitor their carbon footprint and gain access to a supportive community, valuable resources, and tools.

Impact

When we are done, the aim of this project is to educate the Community about climate change and how their carbon footprint contributes to the effects of climate change. This is done through various activities such as reducing carbon dioxide emissions (CO₂), calculating their carbon footprint, and providing educational resources. This is done by interacting with the Community, asking them to participate in questionnaires, calculating each household's carbon footprint, and allowing users within a neighbouring distance to carpool. Via these actions, we hope to encourage the users to take action to reduce their carbon footprint and challenge others to do the same.

Who

Who is the audience ?

North star: high-school and college/University students and everyone else (teachers, parents, etc.) although my target audience are teenagers and young-adults. This allows me to target these groups and educate them through various activities provided by this application.

Whose opinion matters?

- Experts in the environmental field
- Users (via feedback)

Where is the audience ?

- The audience is a local Community within the Regina area although the goal is to aim for a global audience in the future.

Where does the audience get their information (paper,digital , opinion , peer-reviewed , etc)

- Information will be made available on the internet via paper or digital so we will be using expert's opinions and educational sites to educate our users about the impact of climate change and community inputs.

What are Constraints

1: Questionnaires:

- Cost – time required to design and develop
- Benefits – determines a user's and unique carbon score to understand how much CO2 they are producing. This allows me to accurately show a list of things that users can work on.

2: Map:

- Cost – if this app were to be released on the App/Play Store then Google Maps will have additional costs. Also, implementation of these features will take time.
- Benefits – provides functionalities such as showing users on the map, a user can request another user to share a ride. This will display a navigation route from the current location to the requested user's location.

3: Chat:

- Benefits – real time chat system, increase communication, faster response
- Cost – firebase real time database cost money

4: Security Constraints:

- Secure storage of user's personal information.
- Secure Location Services
- Filter out misinformation/disinformation from being posted
- Block any illicit content from being posted

Project Background SLIDE 3

You can show this briefly:

<https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html>

Climate change is one of the many important environmental issues that needs to be addressed today. Climate change is caused by the increase of greenhouse gases (GHG) in the atmosphere. This increase of GHG in the atmosphere is due to various human activities that emit the major GHG such as carbon dioxide, methane, nitrous oxide, fluorinated gases, and water vapour.

We want to help educate the community about the climate issues we face by developing a knowledge-based content application that provides users with a supportive community, informative resources, and tools to help lower their carbon footprint.

At this point you can show: <https://sdgs.un.org/goals/goal13>

This application is built to support the United Nations Sustainability Goal 13: Climate Action.

Focusing on Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

What Exists Slide 4

Envisioned Application Features

There are many existing tools and resources out in industry presently that provide ways to reduce their carbon footprint.

We want to rebuild and redesign the way these applications are used by integrating it in the local community and adding more functionality.

The envisioned application features we want to add are the following:

- Content sharing amongst users
 - Forum or feedlike structure and attributes: Like, dislike, comment
 - Posting useful articles/ youtube videos
 - Sharing achievements/rewards with other users to challenge them to achieve same rewards
- Messaging System
- Determine users' Carbon Footprint based on a questionnaire and use that data to gather recommendations that provide information on alternatives or other ways to lower greenhouse gas emissions.
 - Comparing with others who have a similar lifestyle as the user after the questionnaire or at the end of each month or year reports.
- Monitor users carbon footprint - Allow users to track their activities monthly or yearly, and give a report at the end of each month or year.
- Carpooling
 - Maybe utilize uber API or building a verification layer for in-app carpool requests