



Climate Awareness

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Team Introduction

- Anupras Burokas
 - Quality Assurance: Documentation, Github Wiki, Quality Review
- Mohamed Bashir
 - Scrum Master/Developer
- Timothy Pasion
 - Full Stack Developer



Project Background

This project focuses on the United Nations Sustainable Development goal 13: Climate Action.

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

Designing Apps for learning and Collaboration

- Community of Practice
 - Domain
 - Domain of Interest
 - Practice
 - Practitioners
 - Community
 - Community Activities



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Figure 1. Communities of Practice have three distinct traits

Golden Circle

- Why
 - Why not?
- How
 - Spread awareness and giving opportunities
- What
 - Develop a application
- Who
 - North star

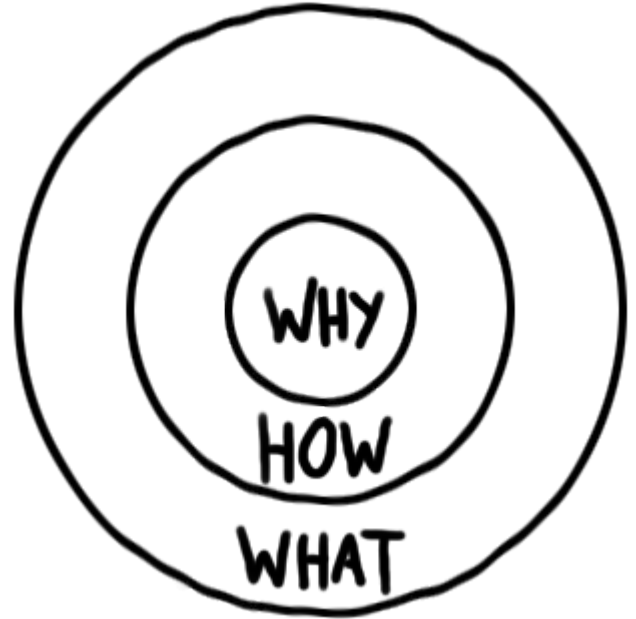


Figure 2. Golden Circle



What we envisioned

- Content sharing amongst users
 - Forum with likes and comments
 - Posting / viewing articles and videos
- Determine users Carbon Footprint based 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

What we accomplished

Community posts articles and videos

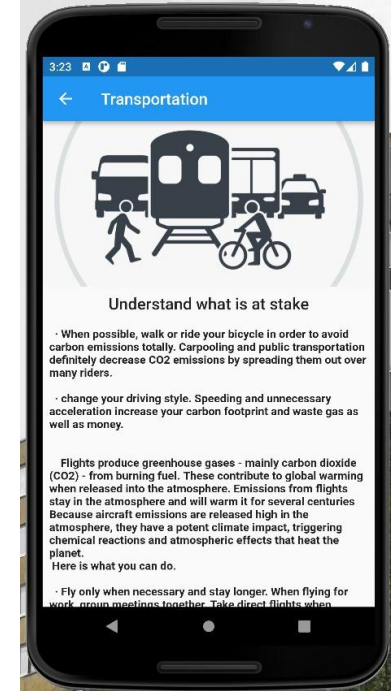
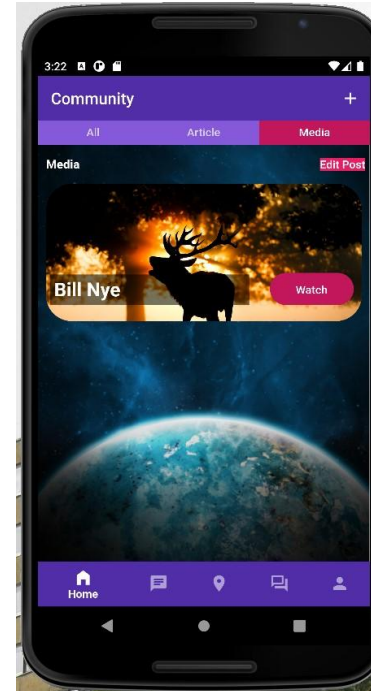
Chats

Forum posts

Carbon calculator

Achievements to motivate users

Tips to reduce carbon score.

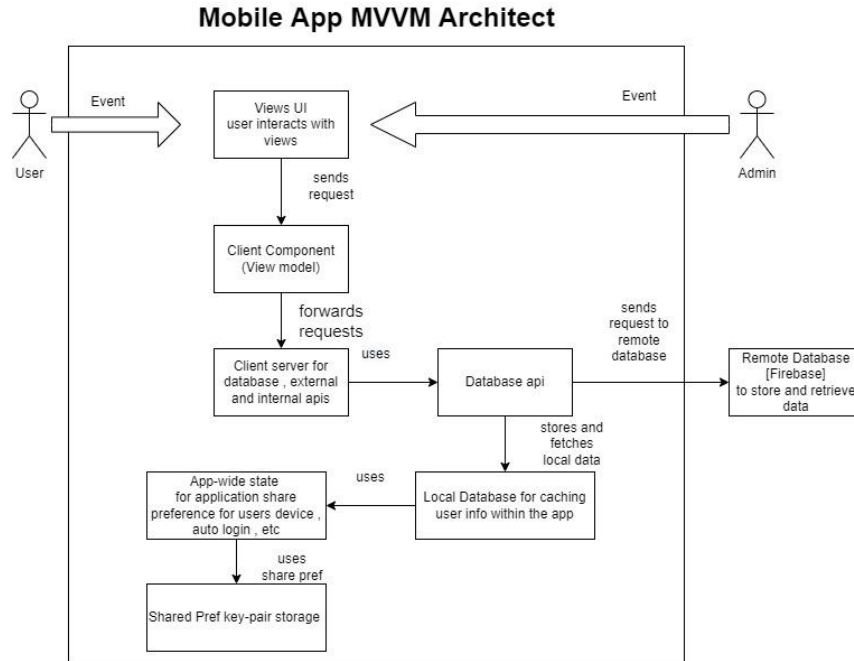




Technology Stack

- Flutter SDK
- Firebase as a backend service
- Model View Viewmodel (MVVM) architecture
- Openstreetmap API and UC Berkeley Carbon calculator API
- Provider for state management

MVVM architecture





Pitfalls

- Google cloud places API
- Opted to use Open Street Maps
- Difficulty in implementation phase.
- Could not get the car pooling feature up and running.



Future Work

Implement car pooling feature.

Improved filtering for misinformation/disinformation.

Improved UI and UX.

Testing.



Acknowledgement

- Professor Tim Maciag
- Professor/Mentor Craig Gelowitz
- UC Berkeley



Questions



References

Figure 1 Retrieved From <https://www.scaledagileframework.com/communities-of-practice/>

Figure 2 Retrieved From
<https://www.smartinsights.com/digital-marketing-strategy/online-value-proposition/start-with-why-creating-a-value-proposition-with-the-golden-circle-model/>