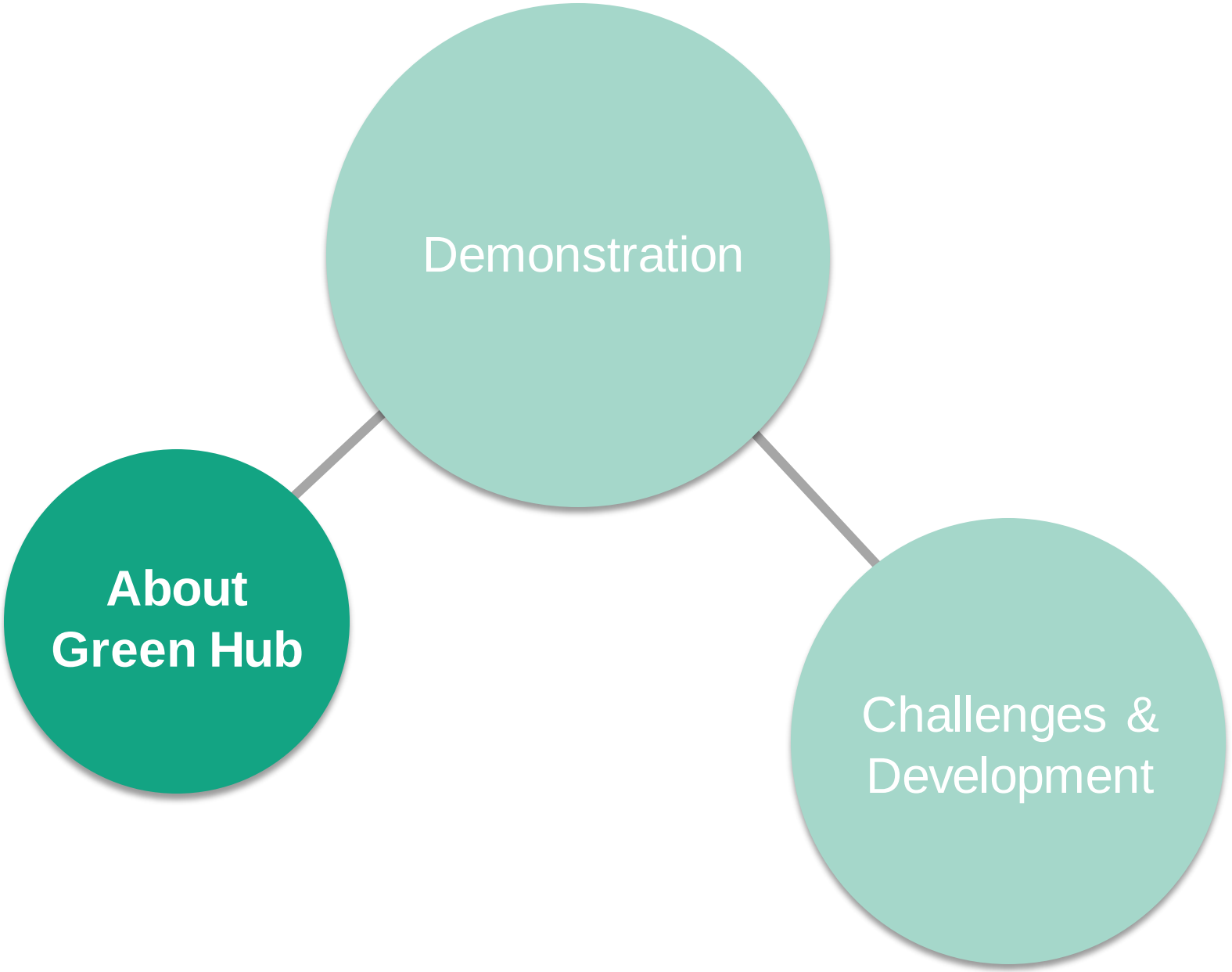
Green Hub

Team: Green Manager

Meng Chen, Weike Fang, Yunxiang Yan, Ziang Tong


Demonstration
About
Green Hub
Challenges &
Development

Project Overview

We aim to develop a **ride-sharing app** for Notre Dame students that allows users to understand how their everyday behaviors impact the environment through **reducing carbon footprint.**

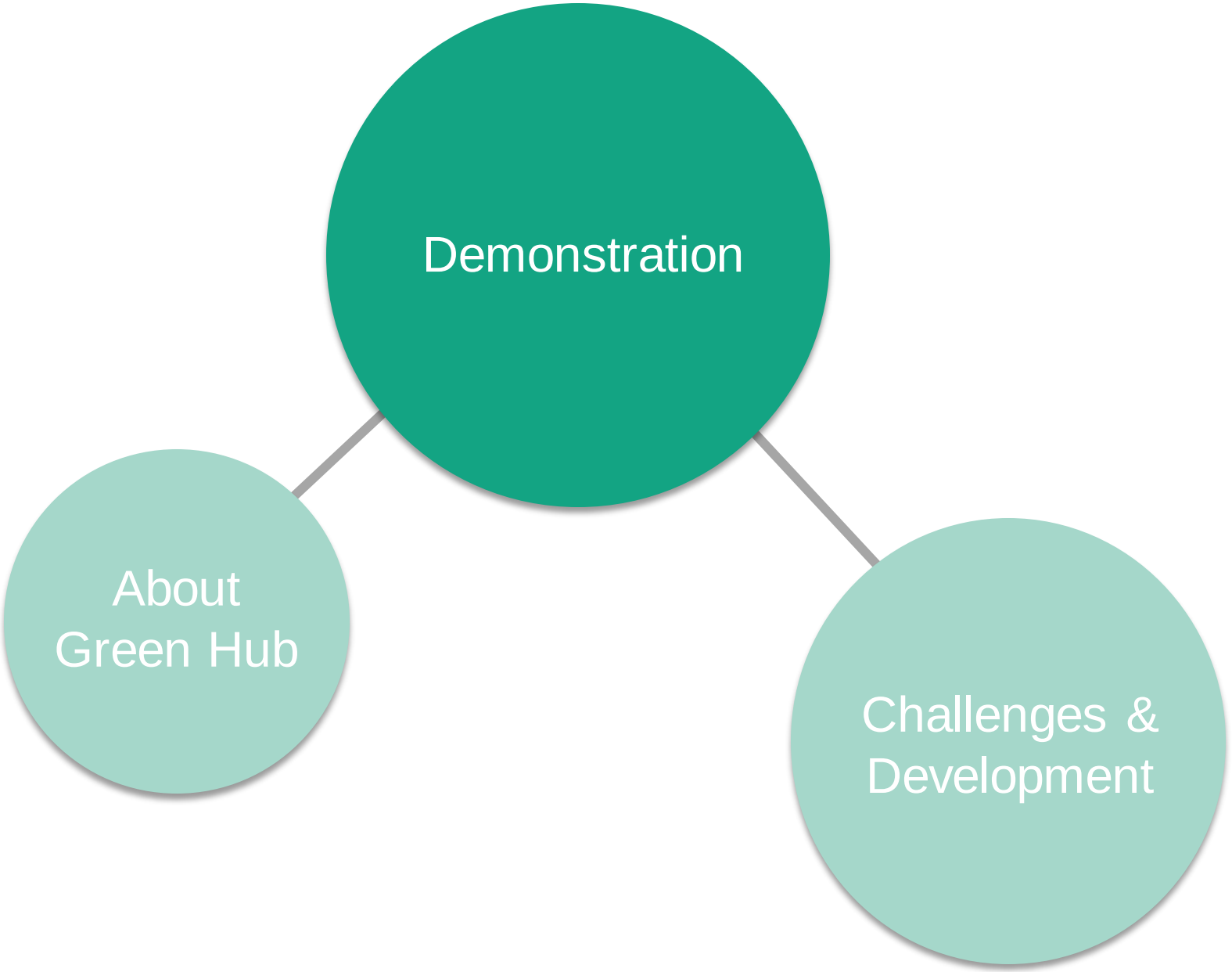
Campus-wide platform

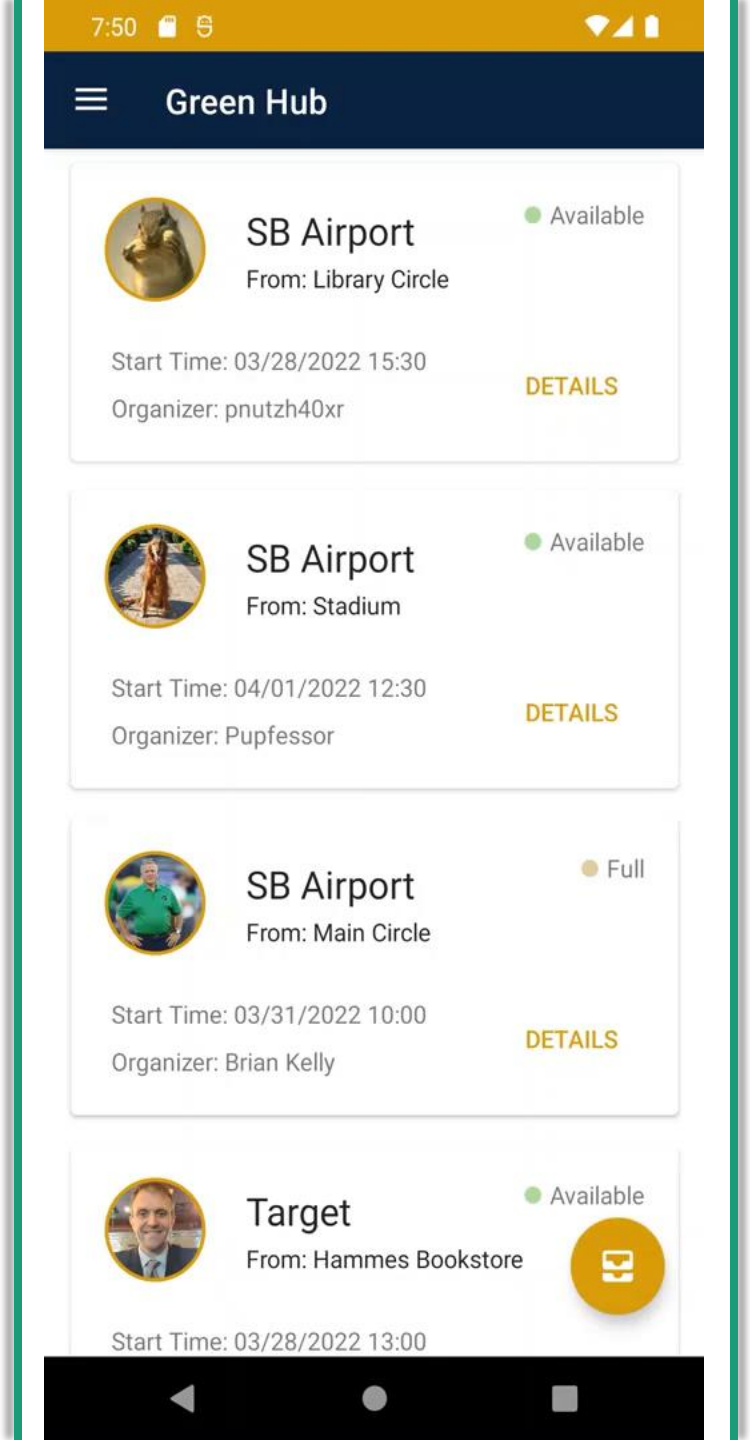
Money-saving and Safe

Free and Open Source

Green - Sustainable

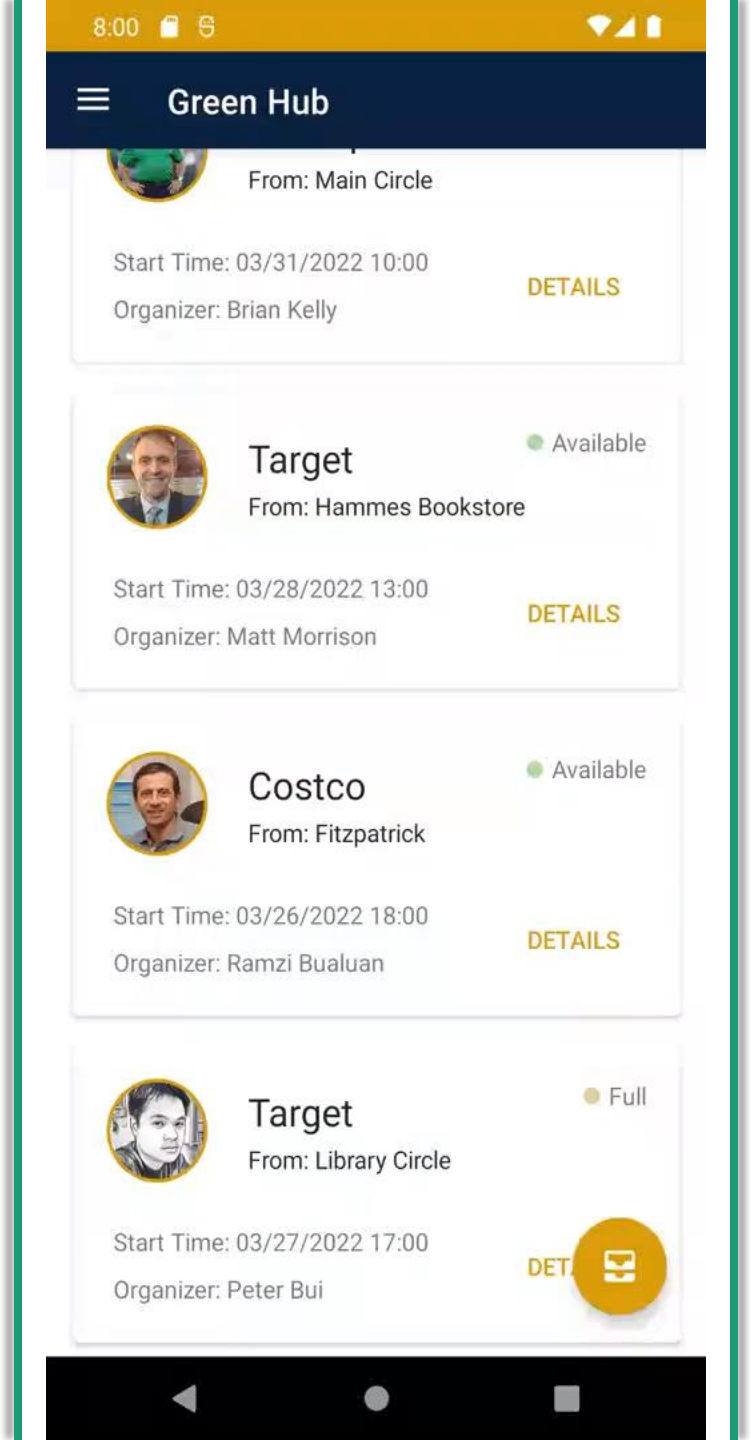
Hub – Community


Demonstration
About Green Hub
Challenges & Development



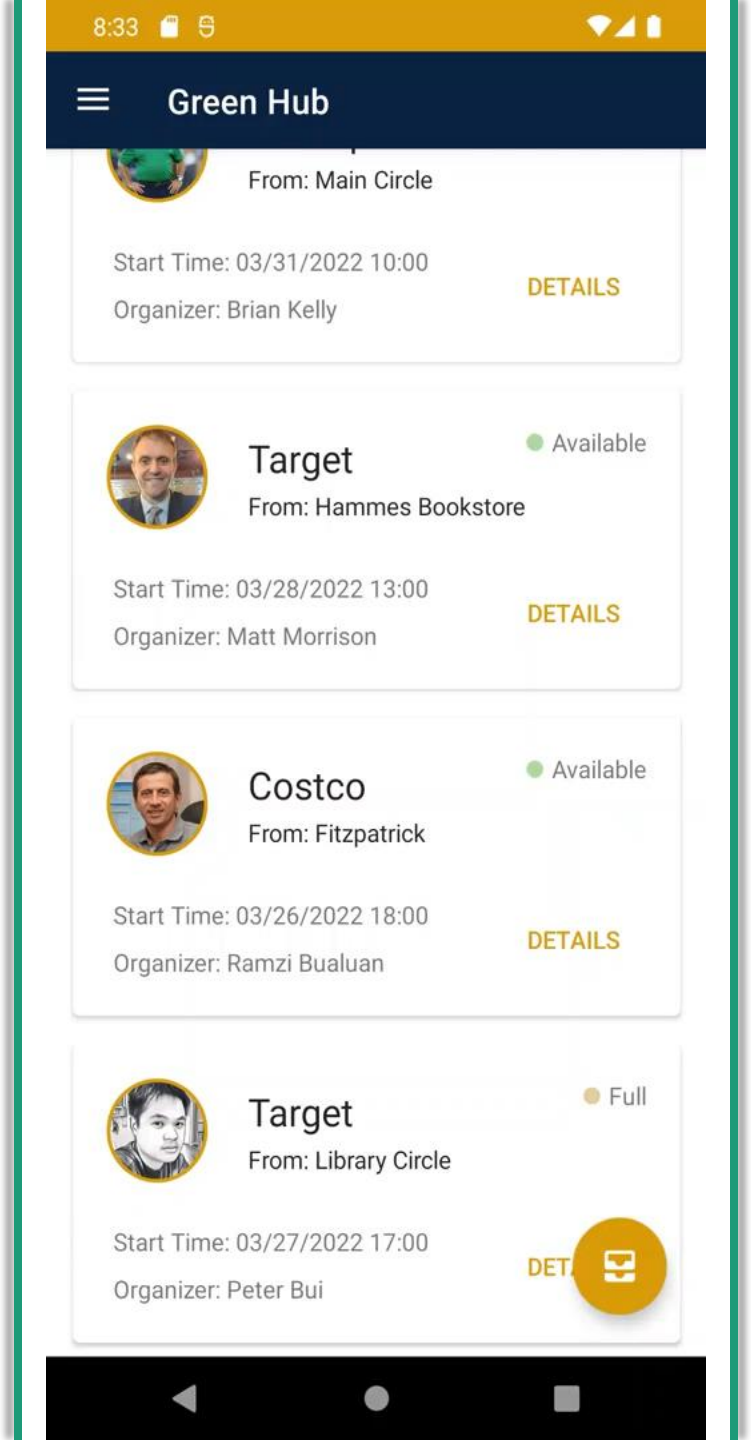
Demo I

Sunny is going to South Bend Airport to fly home for spring break.



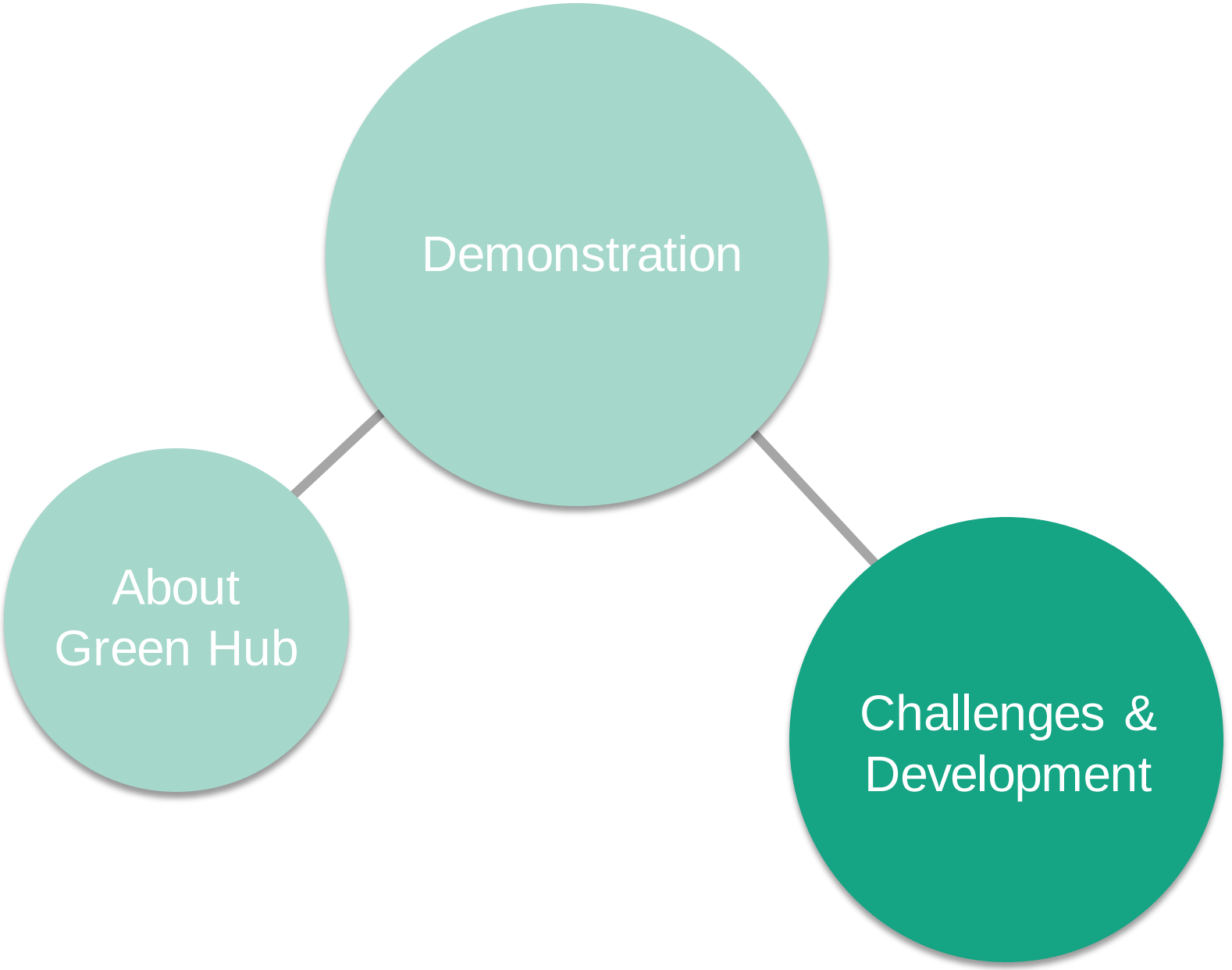
Demo II

After returning to campus from the break, Sunny seeks to get some snacks from Target.



Demo III

After taking Peter Bui's exam, Sunny wants to hang out with her friends at Howard Park for a nice Friday afterschool party.


Demonstration
About Green Hub
Challenges & Development

Technical Merit

Full stack development

Android Studio, SQL, Java, Kotlin, HTML & CSS

Embed external API (Google Map)

Customized Markers and Polylines catering to our design.

Carbon footprint estimation with EPA data[1]
1 mile shared ride = - 400g CO_2

Dynamically update carbon emission reduction.

Intelligent matching

Match people with close destination to maximize usability.

[1]EPA emission data: https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle

Challenges

API Versioning

Java Class Hierarchy

User Friendly

Comparative advantage

Future Ideas

Rides are rewarded with Green Energy, which can **redeem for gifts**

Develop more services such as **environmental protection education** and daily tips

Support **web counterpart** & connect with phone calendar apps

Thank you for listening!