Recycle Smart

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United Nations Sustainability Goal

- Goal 12: Responsible Consumption and Production
  - 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
  - 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

Community of Practice/ Digital Habitat

- Domain Dimension
- Practice Dimension
- Community Dimension
- Community Orientation

Technology Out There

- My application as of right now is similar to other technology out on the market.
  - iRecycle, Recycle Nation,Recycle Right
- Learning through games → Gamification
  - Grow recycling , TerraCycle
- The differences between my application and technology out there.

The Golden Circle - Why

- Created for personal reasons
  - Gain knowledge on recyclables through research and implementation of knowledge
- People may be unaware of materials they consume may or may not be recyclable
  - Neglecting recycling causes an increase of pollution, overflow of landfills, and destruction of natural habitats.
- Forming a good recycling habit
  - Becoming more conscious of what materials can and cannot be recycled.

The Golden Circle - How

- This application will support the sustainable development goal 12
  - Supports 12.5 by helping people form and or strengthen their recycling habit
  - Support 12.8 by ensuring that users have relevant information about recycling materials through a search, and general information about recycling.

The Golden Circle - What

- Through a mobile application
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- Implemented Functions
  - Search function: Based on the user's location, the user can get information of how to recycle a item and where locally they can dispose of the item.
  - Recyclable Symbols : More information based where the user can consume knowledge on what the Recyclable symbols mean, what common items have that kind of material, how to recycle if possible, and what they are recycled into.
  - General Information: Information on common items and what the application supports.

Technology

- Postman to create API calls. Creating URIs to get JSON data.
- Ionic SDK for cross platform app development.
- Frontend:Angular
- Backend: Node.js
- Database: MySQL → Serves as a cache for user's searches. This helps efficiency in terms of time to gather the data.

Compare and Contrast

- My application is very similar to the one on the market right now.
  - Provides access to tools
    - Locating recycling centers for a specific material
    - Access to recycling information
- The difference
  - Information provided to the users

Pros and cons of my experience

- Pros
  - The implementation of the API works.
    - Able to gather information I needed and was able to display the information.
  - Able to implement a caching mechanism to help with efficiency to gather data.
    - Rather that making an API call every time for previous searches, it is retrieved through the database instead.
- Cons
  - Unable to implement scanning functionality
  - Cross-origin Resource sharing error with Angular and the API calls.

Reflection

- How did you/your team feel about this project? Do you think you/your team was successful, or? What did you/your team like about the project? What did you/your team dislike about the project?
- What did you/your team feel most proud of throughout the entire project experience?
- What did you/your team learn about yourself(ves) as you/your team worked on this project?
- How will you/your team use (or not use) what you have learned/experienced in this project going forward?
- Future work and assorted ideas for evolution

Questions