Topic 1: E-Waste Recycling Management:

Waste Management has been a pressing issue across the globe with an ever-rising population surge and the utilization of the daily needs including electronics. As we already are aware of the tenure of these goods and depending on the usage, have a specific lifespan. After these electronics reach the end of life, they are typically discarded to the waste disposal which gets accumulated and joins the regular pile of waste that gets shipped and accumulated in dump yards across the globe. We wanted to have the e-waste handled in a much more efficient sense with the urge to have a service that could significantly reduce and recycle the parts and remains of the electronic goods after their end of life.

The E-waste Recycling Management System encourages proper processes to collect e-waste, and "recover and recycle material by safe methods to reduce its adverse impacts on the environment" (Khatun). It also includes re-use and educating the public about E-Waste risks and good disposal practices.

Upon learning more about the proposed topic we found out that "many old electronic devices contain toxic substances that include lead, mercury, cadmium, beryllium, polyvinyl chloride, and chromium. When e-waste is tossed into landfills, these chemicals leach into the soil, polluting the ground water as well as the air" (E-Waste Disposal: Why You Should Recycle Old Electronics). These findings help emphasize the various issues surrounding this process at its current state.

Electronics are created with valuable raw materials. Recycling old devices helps saves energy. It also means that fewer limited raw materials are needed to create new devices. By reusing old devices (speicifcally their materials), it prevents e-waste by keeping it away from landfills. It also saves the resources used to recycle them. "Recycling also saves the raw materials that can be repurposed by producing new devices" (E-Waste Disposal: Why You Should Recycle Old Electronics). Due to these possible changes, energy can be saved with less pollution and greenhouse gas emissions released. These help emphasize the importance of making this change for all humans on Earth.

As this will be an information service that is based on people's independent actions and the ways that they choose to live more eco-friendly and sustainably, it would make the most sense to have this organized through both mobile and website-based applications. This will help ensure that not only technology companies can access/use this information, but also all consumers of technology (most people on Earth) can access and use this information to the Earth's benefit.

Functions and benefits of our information service:

With our application, users can create an account for themselves, log in, and lookout for the nearest collection lakes where they can dump their e-waste.
Having an account, they will be subscribing to our email listings which would educate them on safe, hygienic disposal practices and awareness about sustainable living.
Adding to the benefits of having an account, users would gain points or rewards with their action which can be redeemed later for buying any refurbished devices from our service.
From the collection lakes, the e-waste would go through our next steps of recycling and reusing as refurbished products.
The refurbished products will be up for sale for the users and the service itself will be having tie-ups with external vendors for further management of the system.

Topic 2: Data Management- Email Overloading Topic 2

Another project idea we had is we would like to create a data management system targeting Information Overload. The information service that we would like to recreate/target would specifically be for E-mail overload. This a prevalent issue that many workers deal with in both their leisure and in their worklife. As we have seen both in the interviews we conducted for our Team Assignment and within our lives as well.

Receiving an enormous number of emails on a daily basis and not being able to be on top of all of them can lead to chronic stress. More emails can lead to reduced productivity as a lot of time is spent on skimming through emails that might not necessarily be important. Email overloading can lead to lost conversations, tasks, and files. The pandemic has created remote working environments for employees leading to majority of its communication taking place over emails, hence there arises a need to manage this data and come up with a system to prevent email overloading. This system can be used as a potential solution to this idea of “information overload” to hopefully boost the user’s morale against unnecessary stress.

The setting specifically will target all users of Email services. This can include both for companies and for personal leisure as well. This will be done by integrating the email overloading system with a preexisting email platform such as Gmail, Outlook etc. making it easier for users to use without having to switch platforms.

For this email overload system, we have listed some of its main functions and utilities which will be prioritzed:

- Priority Filter based on the sender.
- Automatic Unsubscribing feature.
- Reminders for reverting or checking emails.
- Sectioning of E-mails to different characterizations
- Option to discuss and resolve the matter over call (calling function.)

Teamwork Plan (for both): Who is going to do what by when?

Team Roles: ● Manages the group by making sure everyone is on the same page. (Harshitha) ● Gather and submit all the materials and deliverables. (Asmita) ● Researcher - Research for needed materials and information. (Kamran) ● Researcher - Research for needed materials and information. (Sakshi) ● Researcher - Research for needed materials and information. (Srikanth) ● Writer - Takes notes and makes sure everything in the narrative is written correctly. (Nayab)	Deliverables: ● PowerPoint (Harshitha & Sakshi) ● Video Presentation (Everyone) ● DFD (Srikanth) ● ERD (Kamran) ● Data Visualization Table (Asmita) Due Dates: ● Proposal - October 7 ● Video Presentation and Supporting Materials - Last week of the semester ● Weekly Team Meeting (Every Thursday) ● Initial Research - By Week 8 ● Diagrams - By Week 11 ● All Materials and Deliverables - By Week 14