

TASK-15 DESIGN THINKING BOARD

Product: Smart Backpack with Charging Ports and GPS Tracker.

Ambiguous Problem:

Users find the charging ports and GPS useful but they are finding problem in the shortage of battery of the backpack and are facing difficulty in accessing the GPS tracker.

Empathize

User Insights:

- 1.Users need long-lasting battery support for their devices during their travelling to places like deserts, mountains, forests or any other places where they cannot charge their devices.
- 2.Parents who have small children who goes to school daily by bus or children who travel far distance from their house to school, want real time tracking to ensure their children safety.
- 3.Tech savvy users ensures that the devices works smoothly without any problem.

Define (5 min)

Core Problem Statement:

How well we can improve the durability of the charging ports and GPS trackers to provide a consistent and sutable experience for the users?

Ideate

Brainstrom Solutions:

- 1. Install a solar-powered charging system to extend the battery life.
- 2. Develop a separate mobile aplication to easily access and manage the GPS tracker.
- 3. Add a smart alert system when the battery is low and GPS is disconnected.
- 4. Use a battery system that is designed in such a way that a separate interchangeable parts are installed so that we can easily taken out the used battery and can be replaced with a new onw.

Prototype

***Create a backpack prototype with the following features:**

- 1. Solar pannels should be installed on the surface for the supplemental charging.
- 2. A mobile app should be created for the user-friendly interface for GPS tracking and battery monitoring.
- 3. A replacable battery pack should be installled.

Test

***Test the backpack with different user groups:**

- 1.Travelers:We need to ensure that the solar charging is working effectively in outdoor conditions.
- 2.Parents:Check whether the GPS tracking sytem is working properly or not and wheher the notifications receiving to the app or not.
- Tech savvy:Gather the correct feedback on app design and performance of the charging.