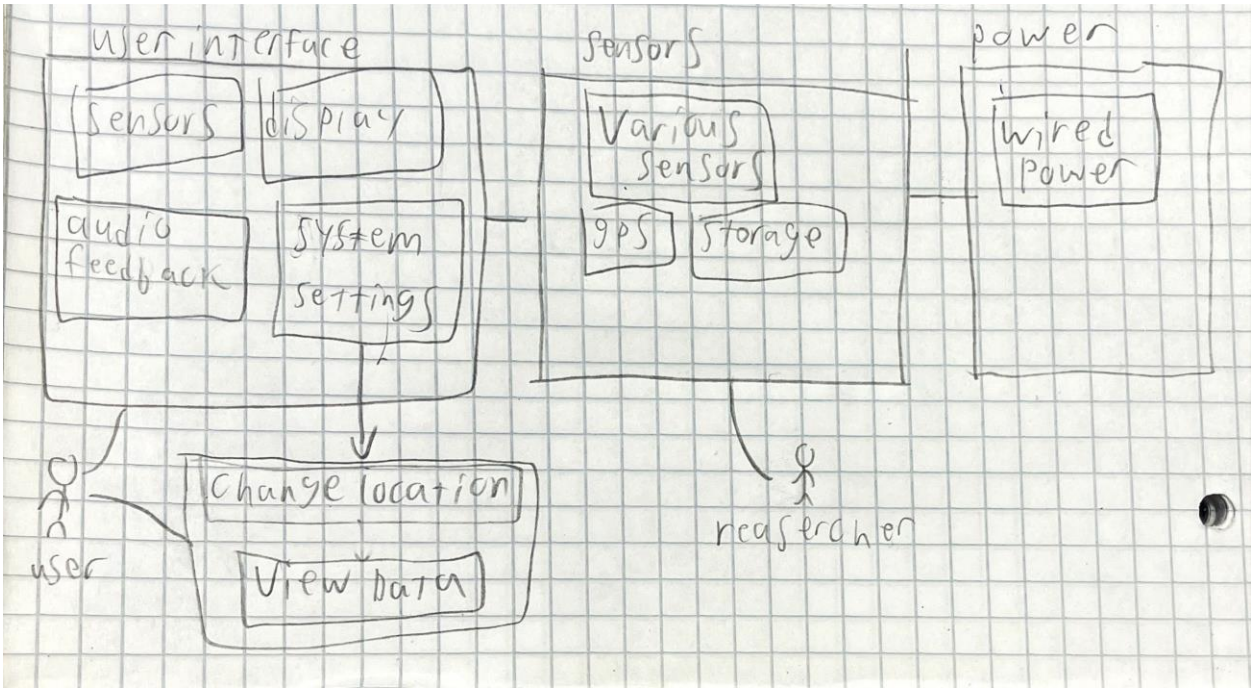
user interface
sensors
display
audio feedback
system settings
change location
view data
user
sensors
various sensors
gps
storage
researcher
power
wired power

System Requirements

- User Interface
    - This is how the user will interact with the product. It must be easy to understand and use. Our design supports this functionality by having a screen with different layers of pages. Also, audio feedback will be implemented to give the user more confidence when navigating the interface.
- Power
    - The product needs a stable enough power source to function properly without interfering with data collection. A wired connection is the best for a constant stable connection. This design will ensure that the sensors always collect data no matter the weather conditions.
- Sensors
    - The sensors need to collect enough information required by the researchers but not so much they don't need. In the diagram, the sensors will be connected to a local storage device to save short-term data and a GPS.

Design Alternatives

- For the power source instead of a wired connection, solar panels could be used instead as a renewable power source. This would kame the system self-sufficient and not use power from the user. But this makes the system more complex and adds more points of failure.
- The GPS could be added or removed depending on how the design is carried out. If the GPS is included, the researcher has a more precise location on the data being taken. Alternatively, not including the GPS module will make the device cheaper. The server could work with a map service to find the location of the device through their address.