

Idea Proposal

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1. Subject application

The name of the system is Smart Tracker. It is a product that can prevent users from losing their important properties. The tracker device is in a form of card or tag which can be placed in the user's bag or wallet. Whenever the distance between smart tracker and user gets out of a certain threshold, the user will receive an alarm about it and they can be given information about where the tracker is. Smart tracker can be utilized on various objects such as traveling bags, smart phones, wallets, etc.

2. Application summary

A. Target domain: LIFESTYLE

B. Expected users

- People who lose their things easily.
- People who are forgetful.
- People who possess important properties

C. Description:

We all have experience of losing something important. Some of them are large such as bags, but others are small such as documents and wallets. Based on experiences of our own and people around us, we came up with the idea of a product that can prevent loss of something important in all of the cases. Our goal is to make a tracker that enables users to keep track of whatever they want to.

3. Functional issues

- Bluetooth connection between tracker and smart phone application.
- Communication signal power sensor for distance measurement.
- Efficient battery device - rechargeable or coin cell.
- GPS Location service for precise tracker positioning.
- Link between smartphone application and tracker device's functions and status.

4. Non-functional issues

- Accessibility: As the target users are everyone, throughout various means Smart Tracker should be accessible to everyone.
- Cost: Smart Tracker should not require too much as it aims to be popularized.
- Durability
- Efficiency
- Interoperability: Smart Tracker should be compatible with all devices.
- Network Topology & Security: Smart Tracker uses the topology of bluetooth. It should be connected to only the device paired the most recently to avoid theft.
- Privacy: We need to consider which state the GPS collecting would not invade privacy.
- Response Time: The response time should be very short as the users should immediately get the alarm whenever the product gets farther away.
- Usability
- Reliability: Smart Tracker should not cause false alarm.