Project Title: Lost & Found Hub

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GitHub repo link

- https://github.com/Asfawh/lost-and-found/tree/main

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1. Introduction

Losing personal belongings, such as keys, wallets, or electronic devices, is a common and stressful experience. The inconvenience and time lost in locating, recovering, or replacing lost items can be overwhelming. This proposal outlines a solution: a publicly hosted web application designed to streamline the lost and found process, connecting people who have lost items with those who have found them, within a specific geographic area.

Inspired by a personal experience of losing both car and house keys at southcenter mall and the subsequent challenges of recovering them, the **Lost & Found Hub** aims to mitigate the frustration and time wastage associated with lost items.

2. Project Objectives

- **Provide a Platform for Reporting and Searching Lost Items**: Users can quickly report lost items and search for found items based on category, location, and date.
- **Facilitate Communication**: Enable direct and secure communication between users who have lost and found items.
- **Enhance Security**: Protect users' privacy and ensure secure handling of personal information.
- **Location-Based Search**: Implement a location-based search feature to help users find items near where they were lost.

3. Project Scope

3.1 Components:

- **Item Reporting Form**:
  - Form to report lost and found items with details like item name, category, description, location, date, and contact information.
- **Main Page**:
  - Display all lost and found items list.
  - Surveys can be filtered, searched, or sorted based on criteria (e.g., most recent, most liked).

- ○ **Detail Page**:
  - ■ Display individual lost and found item.
  - ■ Show existing comments and likes.
- ○ **Edit Page**:
  - ■ Admins can edit lost and found items with
  - ■ Admins can update or delete existing lost and found items with.

3.2 Features

- ● **User Registration and Authentication**:
  - ○ Secure login with email and password.
- ● **Item Search and Filtering (Bonsu Optional)**:
  - ○ Search bar with filtering options (location, category, date).
  - ○ Google Map view- API for location-based item search.
- ● **Communication Tools (Bonsu Optional, EZ Texting or Twilo: API)**:
  - ○ Secure messaging system for users to contact each other regarding lost and found items.
- ● **Admin Dashboard**:
  - ○ Admin panel for managing users, reported items, and monitoring suspicious activity.

3.2 Technology Stack

- ● **Frontend**: React.js with Bootstrap for user interface design.
- ● **Backend**: Node.js with Express.js for server-side logic and API development.
- ● **Database**: MongoDB for storing user data, item reports, and other relevant information.
- ● **Authentication**: JWT (JSON Web Token) for secure user authentication and session management.
- ● **Cloud Hosting**: Deploy the application using cloud services like AWS or Heroku.