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### Proposal 1

#### 1. Problem Statement + Motivation

a. A lot of people have lost their stuff around campus and failed to find it. On the other hand, people also find a lot of stuffs that no one claimed. This may be caused by people not knowing where exactly they lost the item and which help desk found it. By creating a Lost and Found application, people could easily search for their lost stuffs and be notified by someone who found their items.

# 2. User Problems This App Solves

a. Creates a more efficient, streamlined process for finding lost items.

# 3. Basic App Interactions

- a. User and admin login and registration; user is a regular person who lost their stuff and admin is a person who works on, places like Grainger library help desk
- b. User can post a detailed description or image of the lost item, and this post will be visible to admins.
- c. Admins post images and descriptions of found items, but this post will not be visible to user. If the user's item description match something on the database, then the app will notify the admin to contact the user.

#### 4. Similar Apps

a. Facebook/Reddit posts

#### 5. What Differentiates This App

- a. Lost and found item matching will be automated.
- Dedicated application for lost and found as opposed to posting on social media and hoping for a response.

## Proposal 2

#### 1. Problem Statement + Motivation

a. Nowadays most people use some sort of online streaming service such as Netflix, Amazon Video, Hulu, and Google Play. Each of these services feature a recommendation system to help users find new content on their individual sites based on what they have watched and liked. The problem is that these recommendations don't take into account what you watch on your other services. We would like to make a way to give users complete control over their recommendations no matter where they may watch movies.

### 2. User Problems This App Solves

- a. Movie recommendations are limited by what is available on a certain streaming service and do not reach the scope of all movies.
- b. Movie recommendations currently use common categories such as comedy, action, adventure, or romance. These broad categories can be improved if a user can define their own such as "movies I watch with dad" or "movies from my childhood".

#### 3. Basic App Interactions

- a. Chrome extension tracks when a movie is being watched in the browser.
- b. Web application allows users to have a Netflix like interface to search through movies that are recommended for them.
  - i. Users can manually add movies that they watched on platforms not seen by the extension such as at a movie theater or with a friend in their account.
  - ii. Users can rate movies manually
  - iii. Users can login and out of multiple devices
  - iv. Users can sort their already seen movies into collections. These collections become custom categories that give recommendations.

### 4. Similar Apps

- a. Netflix, Hulu, Amazon Video
- b. Taste (https://www.taste.io/movies )
- c. https://movielens.org/

#### 5. What Differentiates This App

a. All streaming services can't recommend movies that they don't host

b.	Taste does not automatically track what you watch and the user interaction on their site is a little slow and only has 4 levels of rating

#### Proposal 3

#### 1. Problem Statement + Motivation

a. Everyone who has studied at libraries around campus knows that they can get really packed, making it very difficult to find a seat. Through the Library Availability Tracker it would be possible to see how many seats are free or taken in each library through crowdsourced user input. This would help to reduce the stress of trying to find a seat at busy times or having to go to multiple libraries/buildings to find a study spot.

## 2. User Problems This App Solves

a. This would solve the issue of not being able to find a seat at the library and not knowing how busy each library is at different times of the day and academic year.

## 3. Basic App Interactions

- a. Viewing the various libraries in either a floor plan view or numbers view to gauge availability
- b. User inputting seats that are available and unavailable
- c. User login and registration
- d. Library search functionality
- e. User profile, also associated with seat availability input to deter seat saving

## 4. Similar Apps

a. LibCal/Dibs

## 5. What Differentiates This App

a. LibCal/Dibs allows you to see availability and book private meeting rooms. While similar in terms of showing availability, this app will offer no ability to reserve seats and will reflect the current status of general library seating which doesn't appear to be something that is available at the moment.