Swapr

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Vision

Millions of people have miscellaneous items such as board games, dvds, and books which are no longer wanted or needed. Currently, there are two main options for getting rid of unwanted items. The first option is to attempt to sell the item. There are many websites, such as craigslist and ebay, designed for this purpose, however, this can be a time consuming process which is not very profitable, and ultimately is not fun or exciting. The second option for unwanted items is donation. While this option has benefits, there is very little incentive to donate unwanted items. Our proposed project is targeted towards creating a new and exciting option for unwanted items. Swapr allows users to register unwanted items. It will then give the user an address of another person to mail the item to. Now, as more people register items, it will attempt to match an item in a similar price range to the person who already mailed an item. On a high level, Swapr allows anyone to quickly get rid of an unwanted item and receive some new and exciting item within a short period of time. Our service combines the satisfaction of clearing unused items from your house with the thrill of receiving a package of unknown contents in the mail. It's sort of like year-round secret santa with strangers.

Workflow

This is the general workflow for using our service:
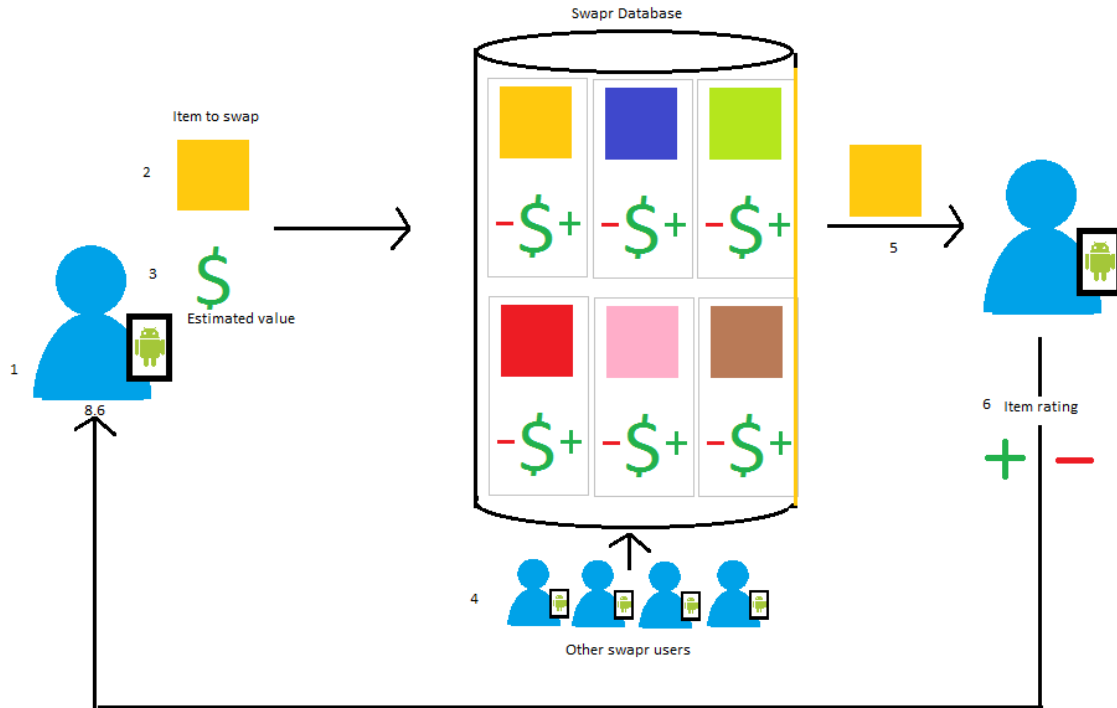
1. The user will set preference for the type of items they would and would not like to receive. These will be high level topics, such as movies, music, electronics, home decor, etc.
2. The user takes pictures of the item he/she wishes to swap.
3. The user provides an assessed value of the item, choosing from a list of predefined values, ranging from $5 - $100. We will discourage users from swapping items worth a significant amount of money.
4. The item is listed on the server. At this point other users can look at the post (which includes pictures) and vote the item up or down in value. This is a way of crowd sourcing the value estimation, so that users can't set the value of their item much higher than its actual worth.
5. Our server will continuously try to match items with users, and will provide a mailing address to both parties when a match has been found (these do not necessarily need to be two-way matches). To receive an item, users will have to have uploaded an item for swap worth equal value, and have the item category on their wanted item category list.
6. After the item has been received, the user will rate the item. This rating will affect the senders "swapper score" positively or negatively. User with high "swapper scores" are the users who frequently swap high quality items. Users with low "swapper scores" frequently send bad items, or frequently overestimate the value of their items. When selecting matches, the system will also consider the users' scores. This score incentivizes swapping high quality items. If you only send junk, you are only going to receive junk.

Other features

- **Intelligent swapping:** Though we highlight the randomness of the items users receive, the system could attempt to make more intelligent matches. Users could have their accounts linked to facebook or other social media services, and information would be drawn from there when making a match. This would be especially useful for items like DVD's, music CD's and video games.
- **Bonuses for good swappers:** as another way to incentivize good behavior, swappers who reach a certain "swapper score" could unlock special features, such being shown the category of two possible items, and choosing which one to receive.
- **New-in-box items**: users may wish to only receive items that have never been used. They will be able to request only new items in their preferences.

Technical Details

This service could be developed on many possible platforms. At this moment, we are considering an android application because of a few features that android would provide:

1. **Force actual photos:** We could force users to take actual, timely pictures to upload. This would prevent users from uploading stock "images" of their items in hopes of achieving a higher item value.
2. **Location services:** The service would allow for users to select "local only" swaps. Though this would also be possible in a web app, it is much easier to not have the user enter this information manually.
3. **Real time notifications:** Users who commonly vote on the value of a certain kind of item could be classified as "experts" on a certain type of item, and could notified when a similar item is uploaded.
4. **Access user phone number:** To prevent people from making a large number of accounts, then voting up the value of an item that they uploaded, the application could request the users phone number.

The server side architecture has not been determined yet.

Challenges and risks

The most serious challenge is implementing all of the planned features beyond the simple swapping system and ensuring all the components work together within the time frame. To minimize this risk, we will finish the minimum working produce and add proposed features on top of it. This way, we can ensure we do not spend time planning and developing features which may ultimately be infeasible.