Team Name: FireTrucks

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**Summary**

Currently, the best way to sell used items is through a discord or facebook group. The problem is that not everyone has these platforms. Our mission is to unite them together in a centralized website called RPI Marketplace. It is a platform for RPI students to buy, sell, trade, and auction goods and services, as well as request or offer odd jobs such as cleaning, delivery, pet services, and driving. The website includes features like trades, giveaways, and email synchronization with RPI accounts. Students must log in to access anything beyond browsing, allowing them to use filters, access/post listings, save favorites, and view bookmarked objects and categories. The platform may also include a rating system for accounts to mark trustworthiness.

RPI Marketplace will have several pages, including the homepage, profiles, goods, services, login, listing page, and add listing. On their profile, sellers can mark their items as sold, and students will be able to view current bids, listings, and past purchases from their profiles. The homepage will show the most recent listings for goods, services, and if the user is logged in, their favorite listings and categories. The profile page will contain the users listings and past bids/purchases. The goods page will display all goods listed, which users can search and filter through to find their desired product. The services page will be the same but for services requested. Listing page will show the image and information of the good/service, the price, who the seller is, and their contact info. Add listing page will allow users to upload their product using the same input fields as the listing page.

**Stakeholders**

A student’s situation is always changing: new classes every semester, new dorms / apartments and an always changing climate. Instead of throwing out their items or textbooks they will now be able to use our app to sell them to someone else, preventing waste and earning some money. In addition, many students do not have cars. Since this marketplace is centered around RPI, the meeting locations will be within walking distance.

Similarly, parents are invested in the welfare of their children who attend RPI. As such, they are often looking for them to have great clothes, furniture and other accessories from a safe environment. In their spare time they will be able to browse online and send their child interesting postings, knowing that it is coming from another member of RPI.

Faculty and staff are also a major part of the RPI community. They will see benefits from listing their own items or finding items from users. They will also be able to host giveaways to draw attention to what they are working on.

Finally, alumni when they are coming back to visit or if they live around the area will have a chance to interact with students through various services that they are selling. Some of these could be a private tour of the updated campus or offer their own services such as tutoring.

**Technologies**

* HTML, CSS, JavaScript, PHP, Database - SQL (MariaDB)

We are going to use HTML / CSS for the main design of our application and javascript to make it more interactive. PHP will serve as our backend bridge between the javascript and our MariaDB SQL database.

**Functional Requirements:**

Our website must enable users to browse through postings, or search for a specific item if needed. The user will be able to click on a posting to learn more about it, and get into contact with the seller if interested in buying. The user can choose between goods or services depending on their needs. If the user is a seller, a posting can be created describing the good/service being sold. If desired, a user can auction off an item, and other users can place bids on this item. Until the user logs in, they will be limited to browsing postings.

**Non-Functional**

A user will browse through postings through the homepage which will feature filters based on the posting type. A search bar will allow the user to search for an item, matching keywords to tags the seller can place on their items being sold. There will be a button for sellers to create a new posting where they can fill in information about their goods/services. A sign-in button will allow the user to log in and access all the features of the website. To navigate between types of postings, the homepage will feature buttons to go to a goods page, services page, their profile, or to sign out. When a user is interested in a posting, the contact information of the seller will be featured to further discuss the sale.

**Project Timeline**

09/07/2024 - Milestone 0

The project idea and schedule will be finalized and ensure all members agree with the work being carried forward.

10/01/2024 - Milestone 1

We will fully set up the database with PHP connecting the frontend and backend. The Home page, Goods page, Services page, Login page, and Listing page are set up with basic frontend display and beginning connections to the databases. The navigation bar will be implemented to move between the pages.

10/25/2024 - Milestone 2

We will complete the integration of the database with the frontend, allowing new items to show up once a seller posts them. We will also have user testing underway to receive feedback on implemented features.

11/30/2024 - Milestone 3

Create a system for user ratings and implement system display. User testing will be complete and use given feedback to make adjustments. The project will be finished after said adjustments with a complete frontend and backend.

**Project Sitemap**

Homepage

Goods

Services

Posting Info

Login

Profile

Create Posting

**Project Wireframes**



