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ITWS 2110 Web Systems Development

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Project Plan

Shirleyslist

A common problem that many RPI students experience during move in is how disappointing their dorm rooms are. They discover that their room lacks many essentials, including a fridge, a microwave, and even lights. This may instill frustration, possibly anger, and panic in some of the underclassmen who have never lived on their own before. While some students may have transportation to local stores, even superstores such as Walmart may not have everything needed to survive a year at RPI. This is where our solution, Shirleyslist, comes into play. Named after the beloved 18th president of our Institution, Shirleyslist is a safe and quick way for these students to buy and sell items needed to dorm and study. It allows students to sell items that they used in their dorms in previous years to new students who are missing those items.

A simple definition to Shirleyslist would be a marketplace built exclusively for RPI students. It would allow any student to buy items from other students without worry. Since the site would only be available through CAS login, users have a guarantee that the items they need will be compatible with their dorm. In addition, they would easily be able to pick up the items in a quick walk across campus. This guarantees safe transactions from known users and no issues with deliveries. In all, Shirleyslist deliveries a reliable, safe, and speedy market system to the students of RPI.

Users would also benefit from using Shirleyslist by making more connections. While buying and selling items, users can make more friends and find upperclassmen/lowerclassmen in their majors or classes. It allows the students of RPI another network to connect on, creating a more tightknit community on our campus. While picking up items, students may ask for advice for living or classes and develop meaningful professional or personal relationships that can guide them through their studies.

Stakeholders include RPI students, parents, and the institution itself. RPI students are considered stakeholders, as they are involved in both the selling and buying of items on the site. Parents of students would also be considered stakeholders because they will be able to save money through the site. RPI is also a stakeholder because the site will help ensure students stay safe while purchasing items. Stakeholders such as the school may choose to include ads that are dispersed throughout the site for revenue. They would also be able to charge processing fees in transactions. In addition, stakeholders may be able to connect and reach out to the intelligent and prospective students that attend RPI. They would gain value in being able to reach a network of young professionals in many different fields.

Shirleyslist will be designed to feature a simple yet interactive design, allowing users to log in to personalized accounts through RPI’s CAS system. It will be kept secure by ensuring that only RPI students will be able to buy and sell. The website will use an SQL database to store logins, items that are being sold, and purchased items. The site will be implemented using HTML5, CSS3, Bootstrap, JavaScript, SQL, and PHP. Bootstrap will be used to aid in the formatting, responsiveness, icons, and UI elements. Sellers will be able to upload any item they want with the name, description, picture, cost, etc. Buyers will be able to browse this inventory of items with a search queue and find all the information they need. An additional page on the site will allow users to finalize sales an arrange meetings.

Shirleyslist will also feature admin accounts that will be accessed only by school faculty and whoever runs the page. The admin accounts will be able to keep track of transactions that are happening and flag scams and obviously fake listings. They will also have the ability to take down accounts that are known for scamming or other bad behaviors and practices. The accounts will also be able to moderate sales of illegal items or items that do not belong in dorms.

**Project Schedule**

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| Sprint | Date | Group Members | Goals |
| 1 | 9/24－10/10 | 1. Group 2. Aaryaman 3. Sam 4. Cian | 1. Rough HTML, CSS, and Bootstrap. 2. Research on CAS implementation 3. Research on data structure 4. Start on SQL and PHP |
| 2 | 10/10－10/24 | 1. Cian 2. Aaryaman 3. Sam 4. Group | 1. Basic Implementation of showing items 2. Basic Implementation of user sign in 3. Designing the SQL database 4. JavaScript functionality and interactivity |
| 3 | 10/24－11/08 | 1. Cian 2. Sam 3. Aaryaman 4. Group | 1. Basic Implementation of buying and selling 2. Refine database 3. Integration of CAS system |
| 4 | 11/10－11/24 | 1. Aaryaman 2. Sam 3. Cian Howell 4. Group | 1. Interim Release 2. Unit Testing, System Testing 3. Refine User Interface 4. Combine finished components |
| 5 | 11/24－12/8 | 1. Cian 2. Sam 3. Aaryaman | 1. Prepare for the Final Release and Presentation 2. System Testing 3. Debugging |

**Site Structure:**

