**CEN 4010 Principle of Software Engineering, Spring 2018**

*Team Name: Grupo Fivo*

*Team 5*

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1. Executive Summary:

Perry’s Parts Pavillion Access Center will allow students to access lab equipment and electronic parts with an account created using their Z-number. There will be a database which contains a list of electronic parts available to students in the lab. The admin (Perry) and staff have control over this database. We will also provide a way for students to upload files for laser cutting and 3d printing jobs. This product would be suitable for electronics labs in other academic institutions.

1. Competitive Analysis:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Shipping | Rentals | Bidding | User Listings | Laser Cutting/3D Printing |
| PPPAC | ✔ | ✔ | ✘ | ✔ | ✔ |
| Amazon | ✔ | ∼ | ✘ | ✔ | ✘ |
| eBay | ✔ | ✘ | ✔ | ✔ | ✘ |
| Craig’s List | ∼ | ✘ | ✘ | ✔ | ✘ |

Amazon, eBay, and Craig’s List are extremely large online stores that appeal to a mainstream audience will leaving out specialized enthusiasts. Our small, lightweight platform allows us to take laser cutting and 3D printing jobs that other online stores do not. In addition, we have a physical location, allowing us to perform rentals, an impossible feat to perform with a solely online store. Although we are a small store, we still have many of the features of a big online store, such as shipping and allowing users to list their own items for sale. As you would expect, staff and students can list items for sale, with a small fee for using our infrastructure. Our small size will allow individual items to be easier to find, since they aren’t going to be buried in thousands of other listings.

1. Data Definition:

Perry’s Parts Pavillion Access Center – The name of our product.

Item – Products to be made available to customers.

Job items – Includes 3d printing , laser cutting, and printed circuit board requests.

Shopping list – A list of intended items to later purchase.

Check out – The collection of items about to be purchased.

Homepage – The introductory page of the website.

Kits – Several related items sold as a bundle for an overall reduced price.

Rental – Tools available for rent.

Z-number – The primary key used to identify student user accounts. Each student at FAU has previously had one assigned.

EE 96 Room 205 – The location of electronics parts, tools, 3d printer, laser cutter, and desk.

1. Overview, Scenarios, and Use Cases:

Customers can:

1. visit the website

2. search for an item by browsing through categories

3. read product information

4. add items to the shopping list

5. select quantity of the items to be ordered

6. check out

7. create an account or log in

8. receive a confirmation of the order

9. request for new items

10. request job items

11. request rentals

Staff can:

1. locate inventory in store,

2. add vendor information,

3. add item information,

4. create kits,

5. update inventory,

6. complete orders,

7. track rentals,

8. view customer accounts and transactions

Admin can:

1. approve items

2. edit customer accounts

3. add and edit staff accounts

1. Initial List of High-Level Functional requirements:

1. A GUI for the user to use Perry’s Parts Pavillion Access Center.

2. A database with user accounts (student, admin, staff), a catalog of all the electronic parts available to students, list of tools available for rental, and laser cutting/3d printing jobs.

3. Ability of students to request tickets for advice/troubleshooting (mentoring invoice) and orders.

4. Support for barcode scanner used by staff and admin for adding items to the catalog, checking out items, and distributing kits to students.

1. List of Non-Functional Requirements

1. Ability to go to any item page from the homepage within 1 minute

2. Ability to create a new user account under 5 minutes

3. Ability to add a new item for sale under 8 minutes

4. Ability to update the inventory of 10 items in under 5 minutes

5. Passwords are not stored in plaintext

6. Usability of website for customer on a mobile device should be within 1 minute of desktop experience

1. High Level System Architecture:

Software/Tools:

1. Brackets
2. Putty
3. Filezilla
4. Git Gui/Git bash
5. LAMP

Languages:

1. HTML/CSS
2. Javascript
3. PHP
4. MySQL

Supported browsers:

1. Firefox
2. Chrome
3. Safari
4. Microsoft Edge
5. Team

**Team Roles:**

Neil Maniquis – Team Leader

Noah Leach - Scrum master

Diego Segura - Team Organizer

George Bechtel - Product Owner

Franklin Carrillo - Web developer

1. Checklist

1. Team decided on basic means of communications…. Done

2. Team found a time slot to meet outside of the class… On Track

3. Front and back end team leads chosen… Done

4. Github master chosen… On Track

5. Team Ready and able to use back and front-end frameworks… On Track

6. Skills of each team member is defined and known to all… Done

7. Team Lead ensured that all members read the final M1 and agree/understand it before submission… Done