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CPSC430 Fall 2017
Usability Lab

Imaginary Users:

1. **The Business Owner:**
   a. **Name:** Ashley
   b. **Age:** 26
   c. **Story:** Ashley is a relatively young business owner and being so is very much in touch with today's technology. Considering that this is Ashley's first business she is very anxious and extra sensitive to the day to day processes of their company. Ashley is confident and has some management experience but wants to closely monitor her business especially while it is in it's infancy. She is interested in working with a flexible, simple and robust system which would allow her to eventually train up her staff and delegate the lower level responsibilities in phases. For this requirement Ashley will find the administrator function particularly useful, being able to gradually upgrade her staff's access and modification rights.
2. **The Manager:**
   a. **Name:** Marko
   b. **Age:** 44
   c. **Story:** Marko is a seasoned veteran of the logistics business, having worked for both UPS and an international sized book distributer. He's decided to join Ashley's start-up because it is local to his wife's employer, where she recently earned a very lucrative promotion. Marko decided he was tired of the corporate setting and wanted to work for a small more personal company. Unfortunately Marko is a bit computer illiterate, but this will not cause too much of an issue as the software system, utilizing bootstrap and many other 'standardizing' libraries as well as going through extensive usability tests, is a rather intuitive system.
3. **The Sales Associate:**
   a. **Name:** George
   b. **Age:** 21
   c. **Story:** George has joined the team making the cross from automotive technician to an automotive lubricant vendor. Initially George was very happy with his career but after an accident which kept george out of work for a few weeks, he decided he wanted to pursue a position which came with less risk. While George was recovering from his injury he made the most of his time by taking some online sales classes and found out he really enjoyed the material and decided instead of dealing with injuries and lousy insurance, he would make a career switch. While George has turned out to be a great salesman, he lacks the desire to learn the

nitty gritty administrative processes required to maintain the integrity of an inventory related business. For this issue the software will stream line much of the administrative accounting work George might complete incorrectly.

User Model:

1. Description of Overall Functions:

Warehouse Inventory Management is name of our project as well as its primary function. Quite simply this we application acts as wrapper to database. Whenever a manager or sale associate performs some action, whether that be making a sale, restocking their mobile warehouse, or creating sales reports, they appropriate back end actions are performed to keep the inventory update to date and sales information correct. The most important functions regarding the previously mentioned tasked are the following; *Import text file to update inventories* and *to make sales by creating invoices*. In addition to keeping track of sales and inventories there are also administrative functions built into the application. These administrative functions will allow for high level users to manage lower user profiles, set up mobile warehouses, and manage customer information.

2. Focus Group Feedback:

Primary Feature: Create Invoice

I. **Serge Troussard - Father - Technician:**
   a. **How will you interact with it?** "Since I assume this is going to be used only persons familiar with the industry you could dispense with the niceties and just focus on packing in all the necessary features. This should be interacted with using a normal laptop or desktop computer."
   b. **What should they be able to do?** "Mobile sales persons should be able to make sales by entering in the customer information and parts information. They should have the ability to add new customers without the approval of the manager because they will be on the road."
   c. **What should they not be able to do?** "They shouldn't really have anything to do with entering new parts."

II. **Hind Bellaachia - Friend - QC for Insurance company:**
   a. **How will you interact with it?** "Our adjusters who work in the field use iPads with little hand straps, to me that seems to make sense and would work for a mobile warehouse."
   b. **What should they be able to do?** "Well if all we are talking about is making an invoice, then that should be it. To make sure there aren't any mistakes they should use the camera on the iPad or phone to scan the barcodes and have that automatically update the invoice."

      c. **What should they not be able to do?** "They shouldn't be able to go back and change any information on an invoice after it has been created. This will be good for the accountants and prevent fraud, since they are mobile with no direct supervision."

III. **Adrianna Johnson - Sister - Dietician:**
      a. **How will you interact with it?** "If this is going to be a website, just using a normal desktop or laptop computer seems fine to me."
      b. **What should they be able to do?** "They should be able to make an invoice by putting in all the necessary information, but since printing in a van or whatever could be difficult they should be able to email the receipt."
      c. **What should they not be able to do?** "I guess they shouldn't be able to go in and manually change their onboard inventory?"

IV. **Savohn Gardner - Colleague - Soldier (US Army):**
      a. **How will you interact with it?** "Should be easy to easy so consider being able to work with it on any platform the user is most comfortable with."
      b. **What should they be able to do?** "Create invoices."
      c. **What should they not be able to do?** "They shouldn't be able to change their inventory inside the database outside of making invoices or the restocking function."

3. Summary

The create invoice function should try and limit the inputs to increase the productivity of the user while keeping errors low. Only the most necessary fields should be place on the page and as much that can be kept from the user or automated by the system should be done that way. When the page renders there should be some fields and a simple submit button. Interactively the web application should alert the user as to what happened in the back end of the system in layman terms, "Invoice created" or "Error, nothing done, fix and try again."
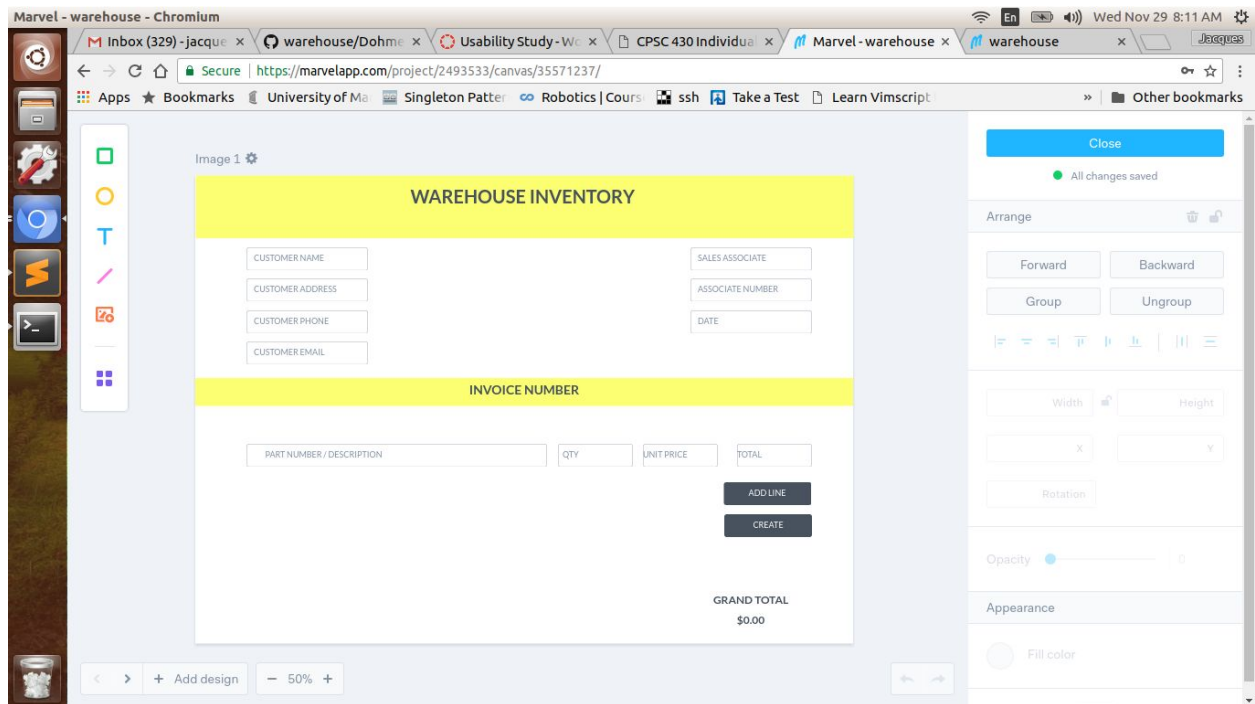
Prototype Images:

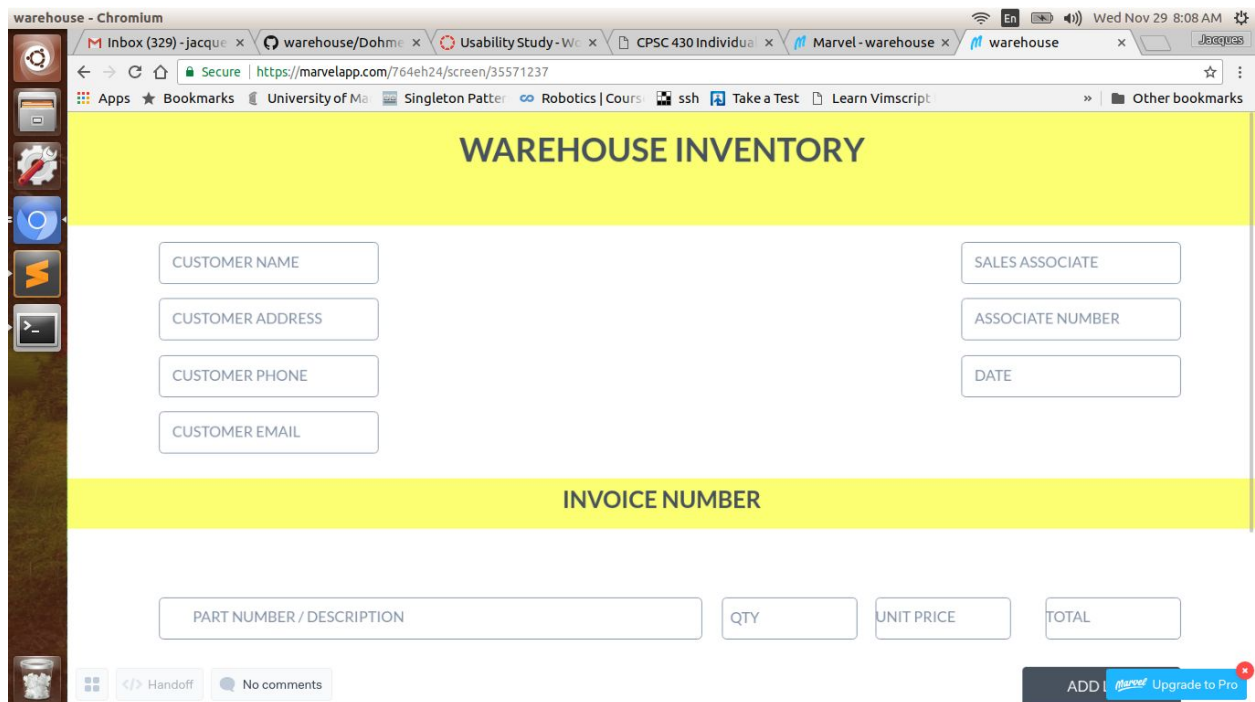Figure 1.1 Full Page as seen in prototype design software

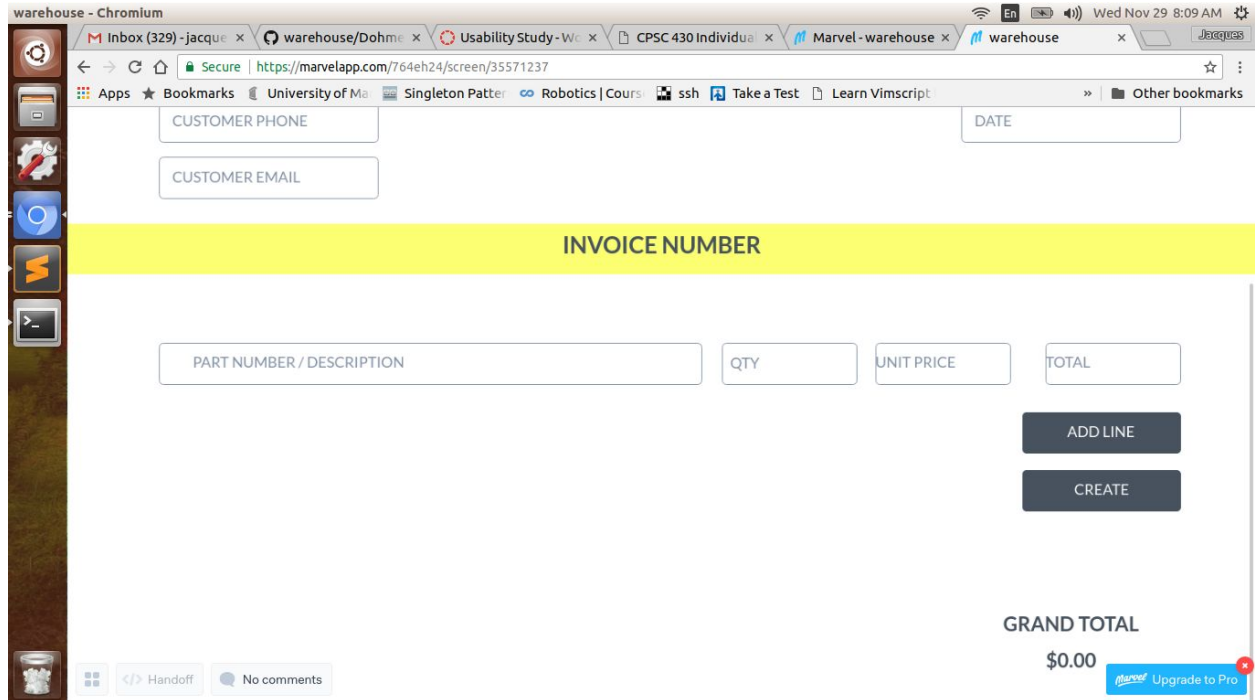Figure 1.2 Top half of invoice create page as seen through Chromium browser

Figure 1.3 Bottom half of invoice create page as seen through Chromium browser

Focus Group Feedback

I. **Serge Troussard - Father - Technician:** "I couldn't have built a better one myself, seriously, this looks simple enough that anyone could use and learn"

II. **Hind Bellaachia - Friend - QC for Insurance company:** "I would include a button to cancel the invoice creation or at least clear all the fields."

III. **Adrianna Johnson - Sister - Dietician:** "Seems like there is some dead space in the middle of the whole screen."

IV. **Savohn Gardner - Colleague - Soldier (US Army):** "Add some color to the buttons to help differentiate their function and prevent errors."

As far as meeting the requirements, for the most part the focus group felt that it accomplished that goal. However many of the group members were concerned with visual implementation. Mentions of too much whitespace and buttons being all the same color even though they do vastly different things came up. In addition to this one member suggested not allowing the entry of the date or customer information unless it was a new customer. The customer information should be canned if it is an existing customer, saving on errors/duplicate customer entries and the like. As far as moving forward I think that many of the functional concerns will be handled with additional tabs in the software (adding customer and so forth) but there is some

improvement that can be made with regards to visual apply and clarity. I believe that a proper color scheme and some added symbols would be necessary to address these issues.