

User Interface Assignment

1. Imaginary Users

Esperanza is a manager at BGVA who's primary responsibility is to manage inventory at the main warehouse. She needs to ensure that there is always enough of each product to meet the demand of the company's customers. It is important that she know the current state of inventory in the main warehouse as well as the state of inventory in all the mobile warehouses. She will also need to be able to search through invoices to see when and what customers purchase. The features Esperanza will use most will be product search, invoice search, and file importing. She needs the search features to be fast and powerful so that she can keep track of inventory data and possibly create supply chain models based on the invoice history. It is also imperative for her that all updates to inventory, whether they be via file uploads or via sales, be processed quickly and reliably so that she always has access to the most up to date information.

Enrique is also a manager at BGVA, but his primary role is to manage employees and handle payroll tasks. His duties include tracking employee information, hiring and firing, and calculating commissions that associates make on their sales. The most critical feature in regards to Enrique's job is the invoice search. He needs to be able to see which associates made which sales during a given time period, and he needs the information to be accurate and current so that he can fairly pay his employees.

Igor is a sales associate at BGVA who drives a mobile warehouse to various garages and auto shops selling parts. The two most key features for Igor are file uploading and invoice generation. He needs to be able to log when he moves parts from the main warehouse to his van so that inventory is accurate and he needs to log any items that he sells when out on his rounds so that he can earn commission on them.

2. System Description

The warehouse management system is designed as a computer based internal tool for a company that sells automotive parts to local garages and mechanics. This company's business model involves ordering products to a central warehouse and then distributing those products among vans (which can be thought of as mobile warehouses) so that sales associates can drive around to various shops peddling their wares. The system will be used as a means to keep track of inventory as it moves between warehouses. It will also store sales records and be able to generate invoices and commission reports based on those records. When an employee wants to move products between warehouses or order new

products into the central warehouse, they will do so by uploading a file to the system. The file contains all the necessary information for the system to process the transactions and update any information it needs to in the database. The system will examine the file, determine if everything described in it is reasonable (no references to non-existent products, transferring more than is in inventory, etc.) and then give the employee some kind of feedback indicating whether the transaction was successfully processed or not.

3. User Model

Feedback Notes:

- Should be minimalist
- Should not accept invalid files
- Should report what went wrong if file upload fails
- Should use standard file selector window or a drag and drop mechanism to pick the file

The file input page should be as simple as possible from the beginning, and should strictly limit how a user is able to interact with it. On the initial page there should be a button to select the file to upload, a button to cancel after a file has been chosen, and a button to submit after a file has been chosen. If there file upload is successfully processed by the system, there should be an indication saying so, possibly including a summary of the transaction that took place. If the file upload is not successful, there should be a report detailing what went wrong and how to fix the problems.

4. Images

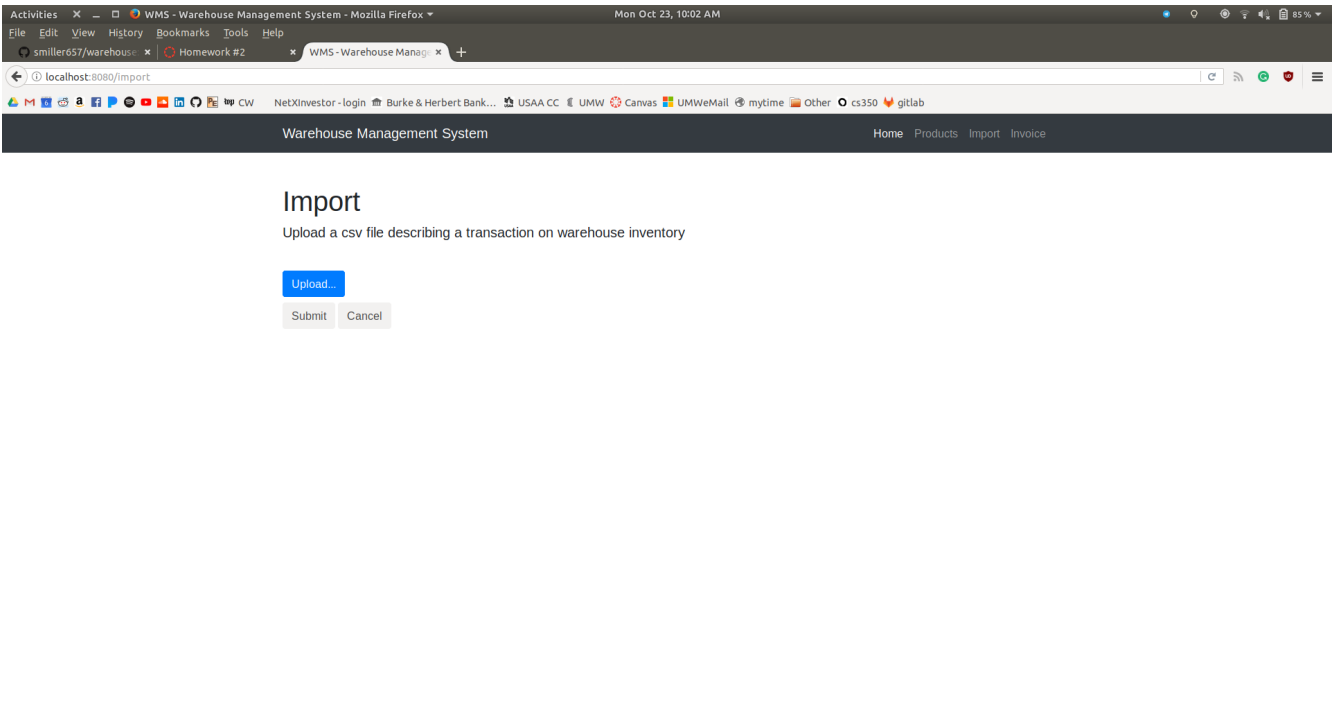


Illustration 1: Initial Page

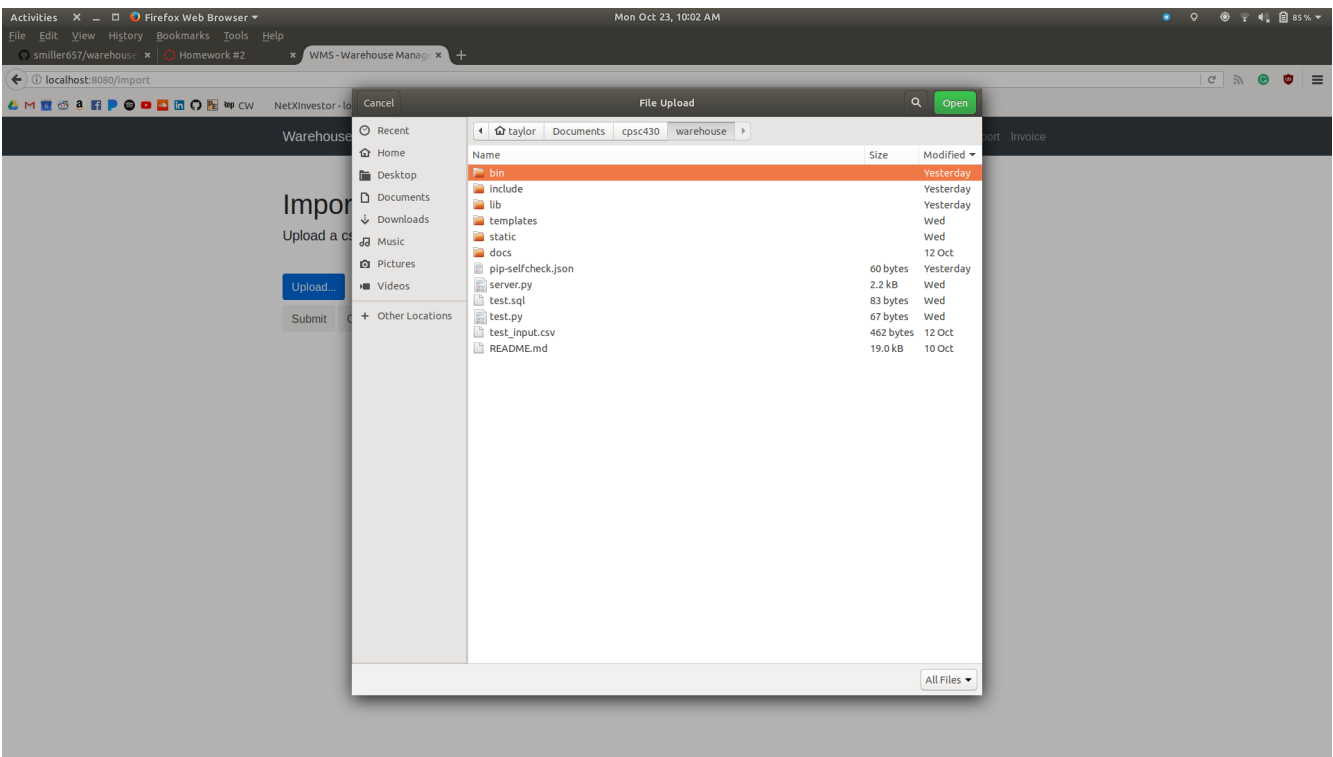


Illustration 2: File Picker

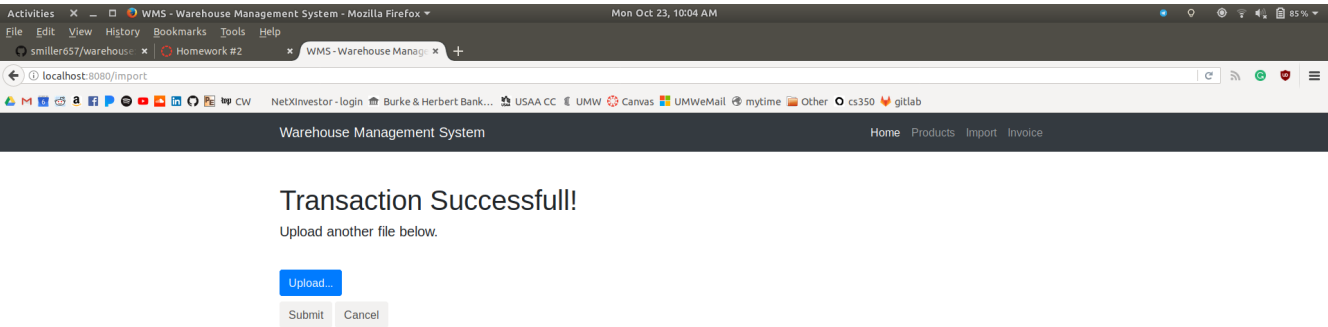


Illustration 3: Success

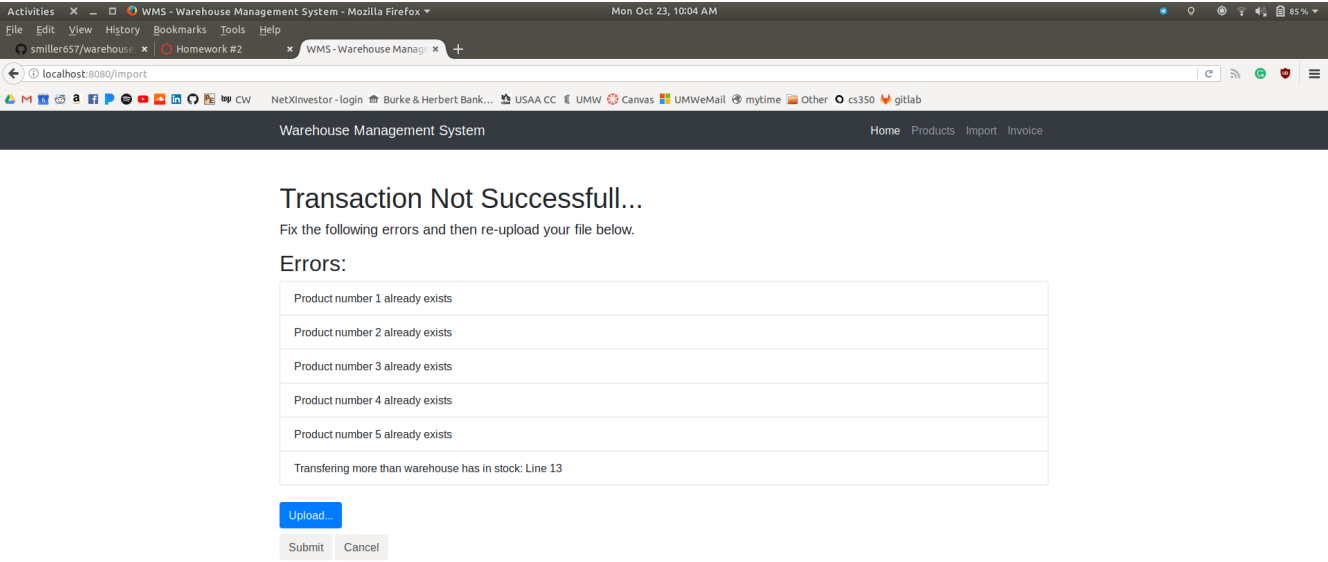


Illustration 4: Failure

5. Focus Group Feedback

Comments After Seeing Images:

- Select button should be disabled until a file is selected
- Upon failure, errors should be listed after the option to re-upload
- Examples of formatting would be nice to have
- A checklist of what a file needs to include would be helpful

After viewing images of the file upload page prototype, my focus group generally felt that the images matched closely with their mental models. The page and the feedback were simple and intuitive to understand. Some people thought that various aspects of the pages should have been positioned differently relative to each other, but everyone agreed that the page contained exactly the components that they would expect it to. However, almost every person in the group thought it would be helpful to include examples of how a file should be formatted. Some people thought that it would be good to include this from the very beginning while others thought that it was only really necessary if the initial file upload was not successful.

6. Changes

After receiving that feedback I have decided to include an example of each possible operation that can be described in a file as a constant aspect of the work flow. It doesn't hurt to always have a short example to look at, and it could be very helpful to users especially if they are not familiar with the system. I may even include it in a drop down panel so that users can toggle it on and off. That way if a user knows what they're doing they can ignore the example and save space on the screen, but for users who need it, it would be just one click away.