

Web Solution Submission

for

SENIOR

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COMP2030 HUMAN FACTORS AND WEB BASED DESIGN

October 14, 2022

1. Introduction:

The goal of the Web solution report is to detail and describe the created web solution for proper documentation and to demonstrate understanding of skills. SENIOR is a marketplace targeted at older folks (grey nomads), to allow for the selling and purchase of both second-hand and new outdoors item (ranging from fishing, tools to camping). The Web solution must be able to properly produce and allow for the “purchase” (this is a demonstration of skills and abilities and isn’t a proper website.) of goods on the marketplace DB, while recording the user’s information and purchase details in a safe and secure location. A cart should also be accessible to lead into the purchases. Further addons may be considered for more optimized prototype for the SENIOR application.

2. Planning:

Brainstorming the design:

The development of the SENIOR started with the Sitemap and finalization of the design that would be used to format the CSS.

2.1 SITEMAP:

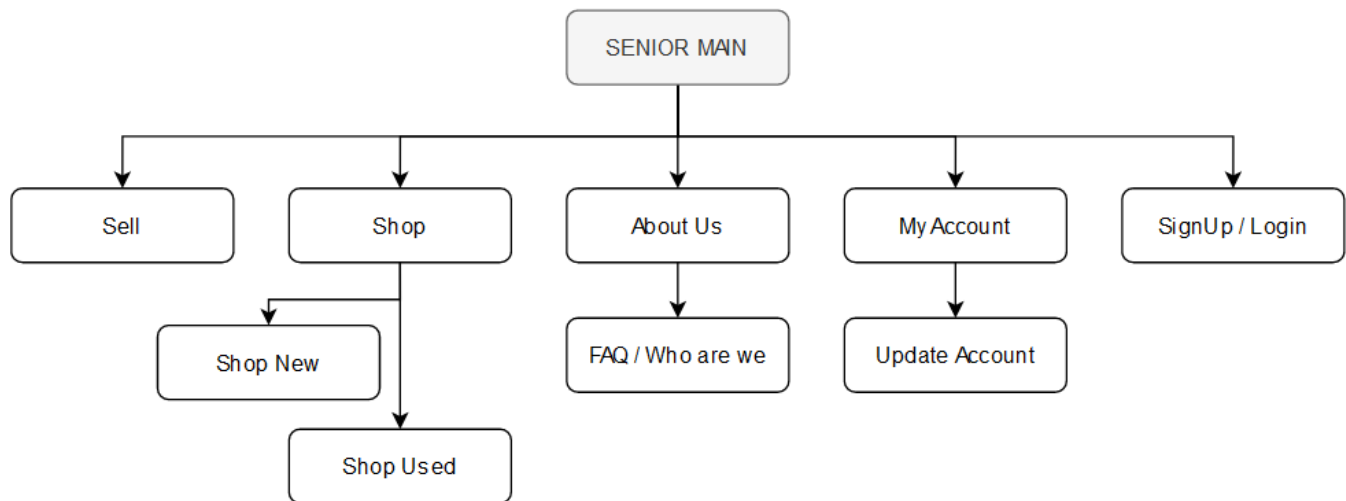
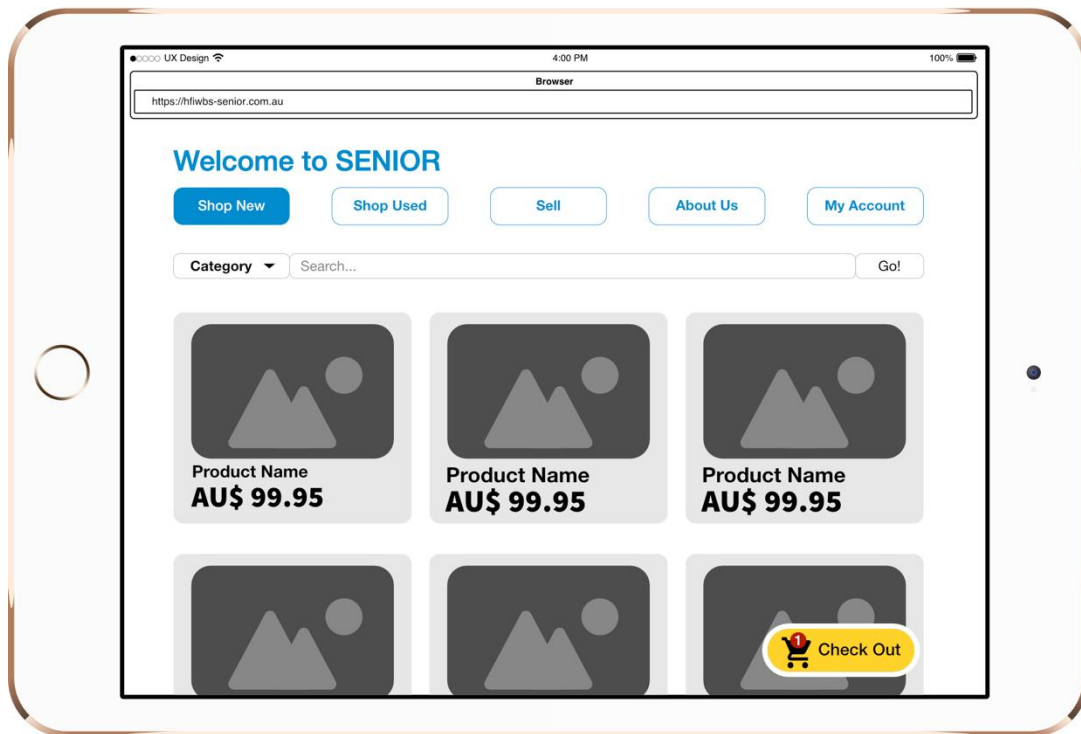


Figure 1: Site Map on Early Design

The early site map focuses on main connections and how the subpages would interact between the main pages. The goal of this design is to make sure that all major connections are easy to read and accessible both for those who understand and have IOT knowledge and those who lack these skills. A large format was also chosen due to this, allowing for the elders (who are the target audience) to easily perceive what is where and what page they are currently on.

- Shop would be split into 2 categories:
 - Sell New would be for companies to sell their own products allowing for the required connectivity of company wishing to sell their products on the site. This area will not contain second-hand goods and will exclusively sell direct from company profiles.
 - Sell Used will be for the userbase (the grey nomads) to sell their goods on the marketplace, ranging from all types of goods, and conditions. The Sell page will work in conjunction with this page to allow for products to be added to the DB in which will be seen when viewing the Shop Used page.
 - About Us would have contained the FAQ and what the companies’ motives and goals are, alongside potential partners.

- Signup as expected will allow for a user to create an account and allow for the selling of products and the communication of other users when instigating a purchase
- My account would allow for the customer to customize their account and change personal details. (Such as email, username, address)



2.2 CONCEPT ART:

Figure 2: Concept of the Shop New page design.

Following the design brief, a design was chosen for the project's web solution.

- Colour: the colour blue was chosen for its simplicity and calm look, while also keeping a contrast against the white.
- Interaction: 5 main buttons will be accessible from the top as stated in the site map allowing for easy access to all main areas of the website. My account will request a login or register when first viewing the page.
- Products will be pulled from the DB and will be added to from the sell page, new products will be added through a similar way from a different type of account.
- Large text and images will allow for those with poor eyesight to use the website easier and with less colours should be less distracting from the main content.

3. DEVELOPMENT:

3.1 CSS:

The Websites goal for the CSS is for the use of only one main style file, to create a consistent base for the project. Though some of the more complex files use exclusive files due to having a large amount of formatting exclusive to those pages. A second styling sheet is used in conjunction with the main CSS when a certain page requires unique elements that is not used by other pages. This is done to keep the main styling sheet relatively short and easy to use. Tables were also commonly used to create left to right inputs allowing for full use of space to fit the landscape design of the product. All Viewable Pages use the same UI.

3.2 DB:

The Database is a singular file containing all necessary files to store and call data to specific points throughout the entire web solution. The DB is easily accessible and usable when connected to the AMPPS's system and features a DB.SQL file which automatically adds all the necessity components to the sheet when considering the document. An Insert Section has also been added to replicate that of the company's own personal products in the Shop New section.

4. DEVELOPMENT PAGES HTML:

4.1 Register HTML

Within the HTML file for the register page, we have the same 'Welcome to SENIOR' header that are on majority of the pages to keep the consistency throughout the website, while slightly altering which class for the list we have active. Within the main body of the file, we used a table format to format the text boxes. The type of text-fields is relative to the input that is expected from the user, e.g., email, date, text etc. a class was used to for each text-field to style it accordingly in a CSS file. All text-fields have also been set to require as all fields of registry will need to be filled in, this is accompanied by a placeholder shown as 'Required' so the user is aware of the required field.

Outside of the table, there is a checkbox type input which will confirm the user has read and agreed to the terms and conditions. Below this is an anchored link to the login page within the text. Finally ending with the submit button to finish signing up.

4.2 Register Complete HTML

Indicates that the following inputted data within the HTML has been successfully added to the DB for storage. Which is similarly used as a location to be sent to once the DB has successfully imported the data into the table using location: header to make it easier to get back to the document without much hassle.

4.3 Shop New/Used HTML

Within this HTML file the top of the web page is the same about the welcome to SENIOR header. However, in the main body of this file the first component that is implemented is the search bar that is wrapped in a div. This begins with a 'select' which is labelled as category and will drop down and give 3 different options as shown, tents, cooking and tools. Next to this is a search bar that has the placeholder 'Search...' followed by a 'Go!' button next to it.

Regarding the content of the shop used page, the 'market' area which displays all the different items on the website, is wrapped in a div class for styling purposes. There is a 'href' that links to the separate page (Shown as a dummy link), with an image followed by text of product name and price. On the bottom of the HTML file there is a 'bottom Bar' div class which contains a link to the shopping cart with an icon to represent it.

4.4 Sell Used HTML

Like the register page, allows for the creation and applying of a product to the DB while also following the base core design. The Welcome to Senior remains alongside all other core CSS design choices. This page allows for the user to input all necessary data (other than the account information) such as the:

- Name of the product (String)
- Cost (int)
- Shipping Cost (int)
- Condition (from a dropdown list from new to poor),
- Category of item (dropdown list of varied types of items like fishing etc.)
- Amount available (int)
- Description (Large area for talking about what is possible and doing with the item).

4.5 Sell Complete HTML

Indicates that the following inputted data within the HTML has been successfully added to the DB for storage. Same Format as the Register Complete. Which is similarly used as a location to be sent to once the DB has successfully imported the data into the table using location: header to make it easier to get back to the document without much hassle.

5. DEVELOPMENT PAGES PHP:

5.1 AccDatabase PHP

Establishes a connection with the database by supplying log-in credentials and creating a \$conn method (\$conn = MySQL(info for connection). This was used for all DB connections within the Solution, being called with the require command.

5.2 AccMain PHP

Within this page users can change their account information including username, password, and email address. As this page would be frequently accessed, it could be reached through the "My Account" tab on the menu bar. As this page modifies the data of a user's account, and such is not possible when the user is not logged in, the page automatically redirects guest users to the log-in page.

5.3 AccUpdate PHP

This page receives the data sent from AccMain, and checks for invalid input. Invalid input checks for errors such as proper password length and adequate symbol and letter use to make sure the password is secure enough. Upon successful validation the updated data is sent to the database for storage. The password is also encrypted using password_hash, which while a simple type of encryption, still has some merit in the action to prevent cyberattacks.

5.4 Config PHP

This page receives the data sent from Register, and checks for invalid input. Invalid input checks for errors such as proper password length and adequate symbol and letter use to make sure the password is secure enough. Upon successful validation the updated data is sent to the database for storage within the user_form table. Encryption of password using password_hash is also during this step.(See AccUpdate Above)

5.5 Logon PHP

This page handles the log-in operation, and checks the entered username, email, and password against the database using the SEARCH function (checking the Name, Email and password decrypted against all other users in the database, if one is found to match calls that one forward). Upon successful validation the user would be logged into their account.

5.6 Order PHP

This page should handle the payment information and purchase history when an order is completed and write the data into the *paid* table. All data that is sent to the DB will have to be adequately encrypted due to the nature of the information classifications.

5.7 SellUsedConfig PHP

Similar to the User Config PHP but only checks for missing variables, this page should handle the information about a listing when the listing is created. The data would then be stored into the *itemU* table which stores the data that is called by the Shop Used.html.

5.8 View PHP

This page should become a template of listings, and detailed information about products can be seen through this page by calling.

6. CREATIVE INCLUSIONS:

The original design also includes a chat functionality, where potential buyers could message the seller for additional information about the products, this was however removed from the scope due to time limits.

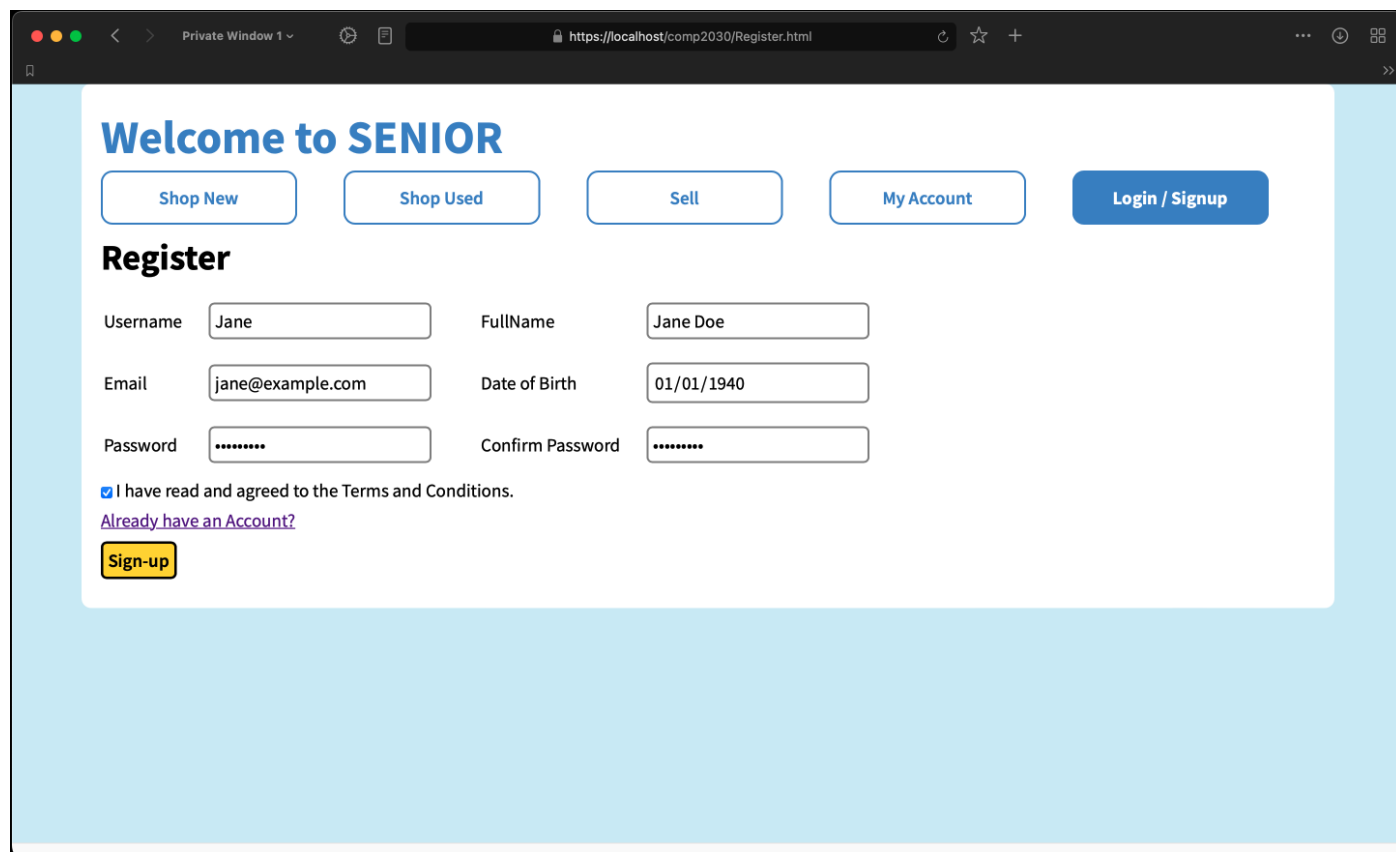
Image Uploading was also a project that while complete, was unable to be fully implemented into the project due to development issues due to over ambitions and scope of the project.

7. PRIVACY

Privacy is an important tool that is used and planned to be used for some aspects of the design. These mostly include parts of the database which include sensitive information such as account details and Purchase details. While passwords were simply encrypted with the password hash PHP command (assuming that it is base64 in which decryption programs are easily accessible), credit cards should have potentially been in their own personal DB with a completely different type of encryption like secret key type encryption though also slightly flawed as well. (though for a short run password_hash is better than non-encrypted data.)

Appendix:

Register Page:



The screenshot shows a web browser window with the address bar displaying `https://localhost/comp2030/Register.html`. The page has a light blue background. At the top, there is a header with the text "Welcome to SENIOR" in blue. Below the header, there are five buttons: "Shop New", "Shop Used", "Sell", "My Account", and "Login / Signup". The "Login / Signup" button is highlighted in dark blue. Below these buttons, there is a section titled "Register" in bold. This section contains a registration form with the following fields: "Username" (filled with "Jane"), "FullName" (filled with "Jane Doe"), "Email" (filled with "jane@example.com"), "Date of Birth" (filled with "01/01/1940"), "Password" (filled with "*****"), and "Confirm Password" (filled with "*****"). Below the form, there is a checkbox labeled "I have read and agreed to the Terms and Conditions." which is checked. Below the checkbox, there is a link "Already have an Account?". At the bottom of the form, there is a yellow "Sign-up" button.

Welcome to SENIOR

Shop New Shop Used Sell My Account Login / Signup

Register

Username Jane FullName Jane Doe

Email jane@example.com Date of Birth 01/01/1940

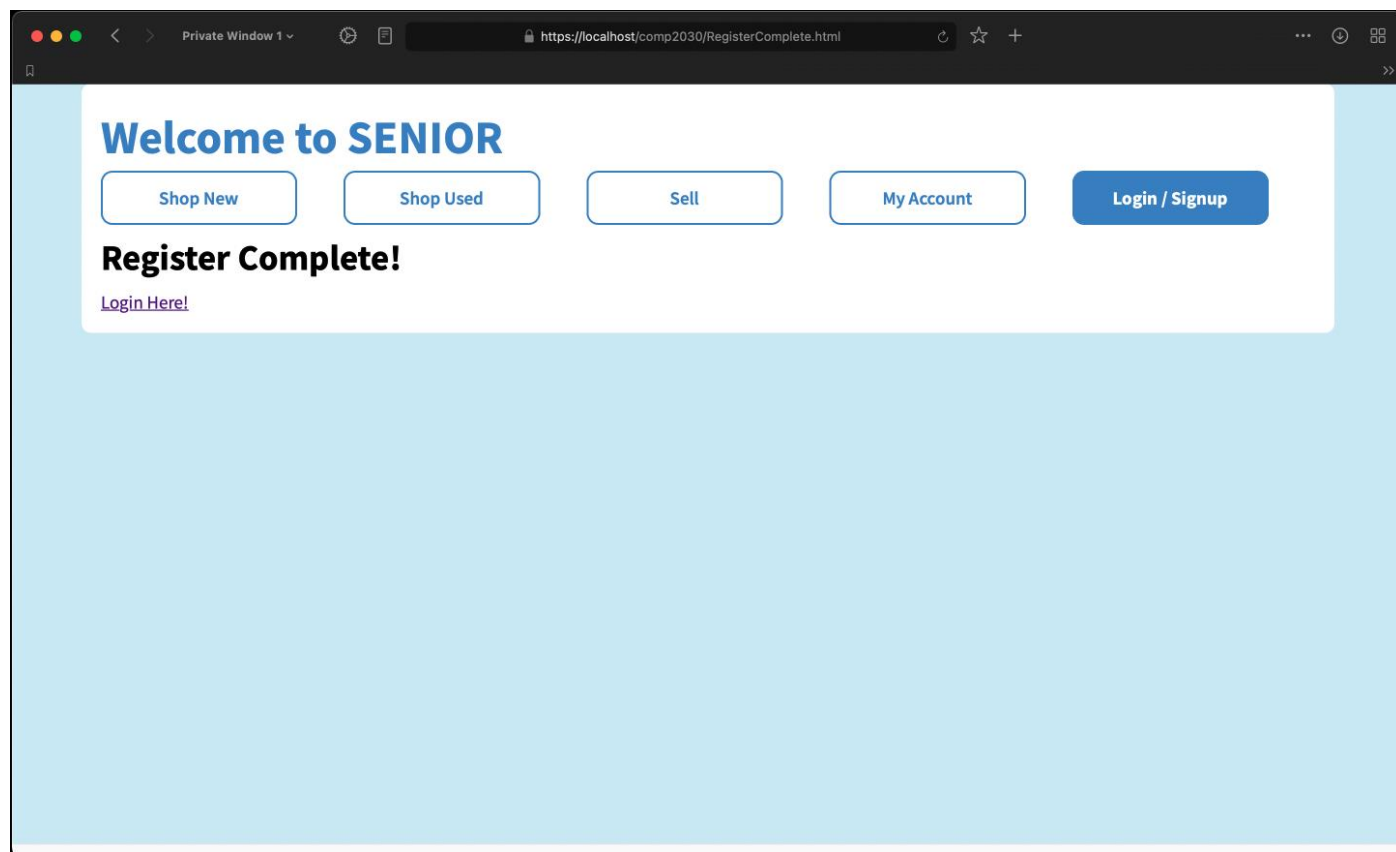
Password ***** Confirm Password *****

☒ I have read and agreed to the Terms and Conditions.

[Already have an Account?](#)

Sign-up

Register Complete Page:



The screenshot shows a web browser window with the address bar displaying `https://localhost/comp2030/RegisterComplete.html`. The page has a light blue background. At the top, there is a header with the text "Welcome to SENIOR" in blue. Below the header, there are five buttons: "Shop New", "Shop Used", "Sell", "My Account", and "Login / Signup". The "Login / Signup" button is highlighted in dark blue. Below these buttons, there is a section titled "Register Complete!" in bold. Below this section, there is a link "Login Here!" in blue.

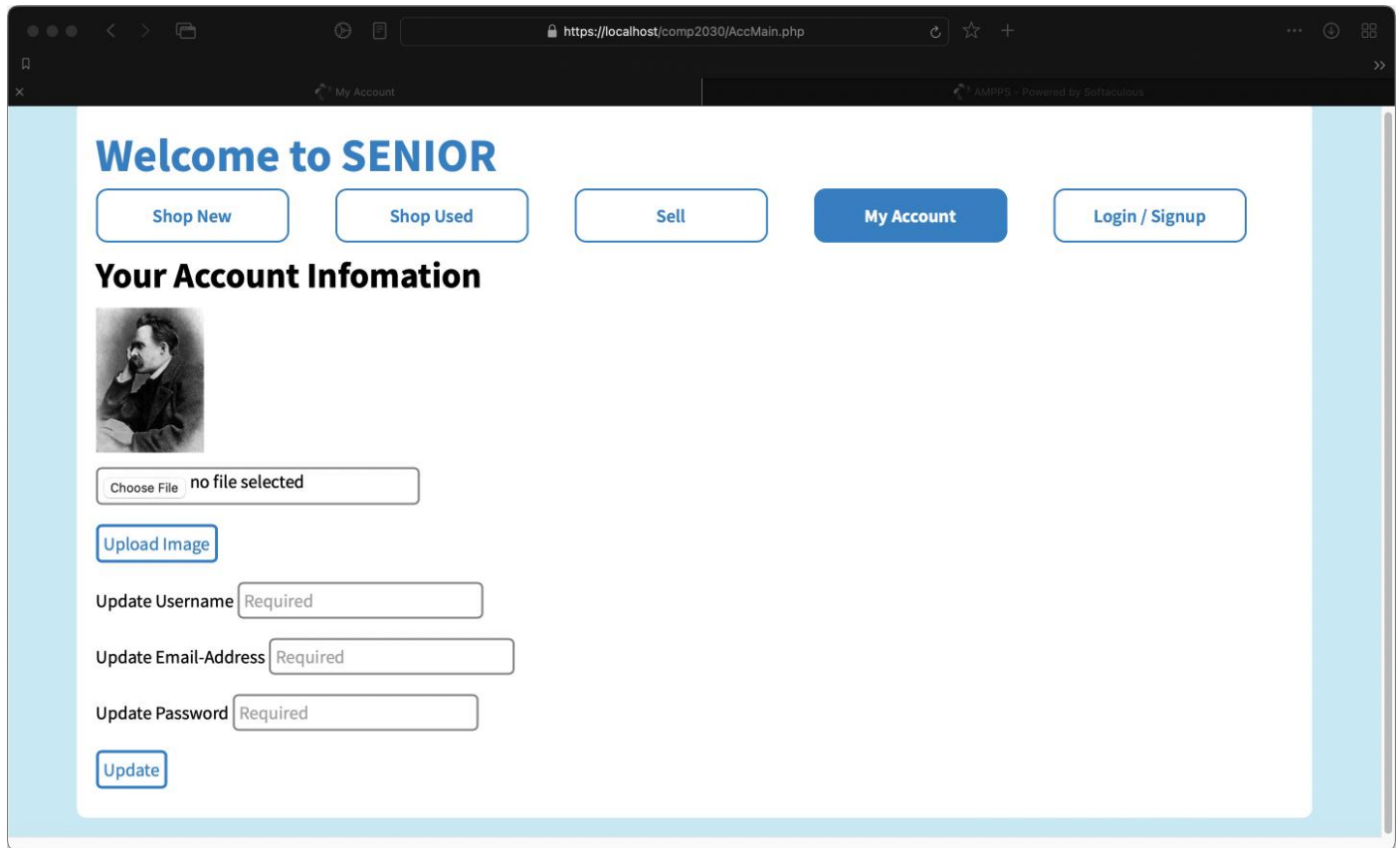
Welcome to SENIOR

Shop New Shop Used Sell My Account Login / Signup

Register Complete!

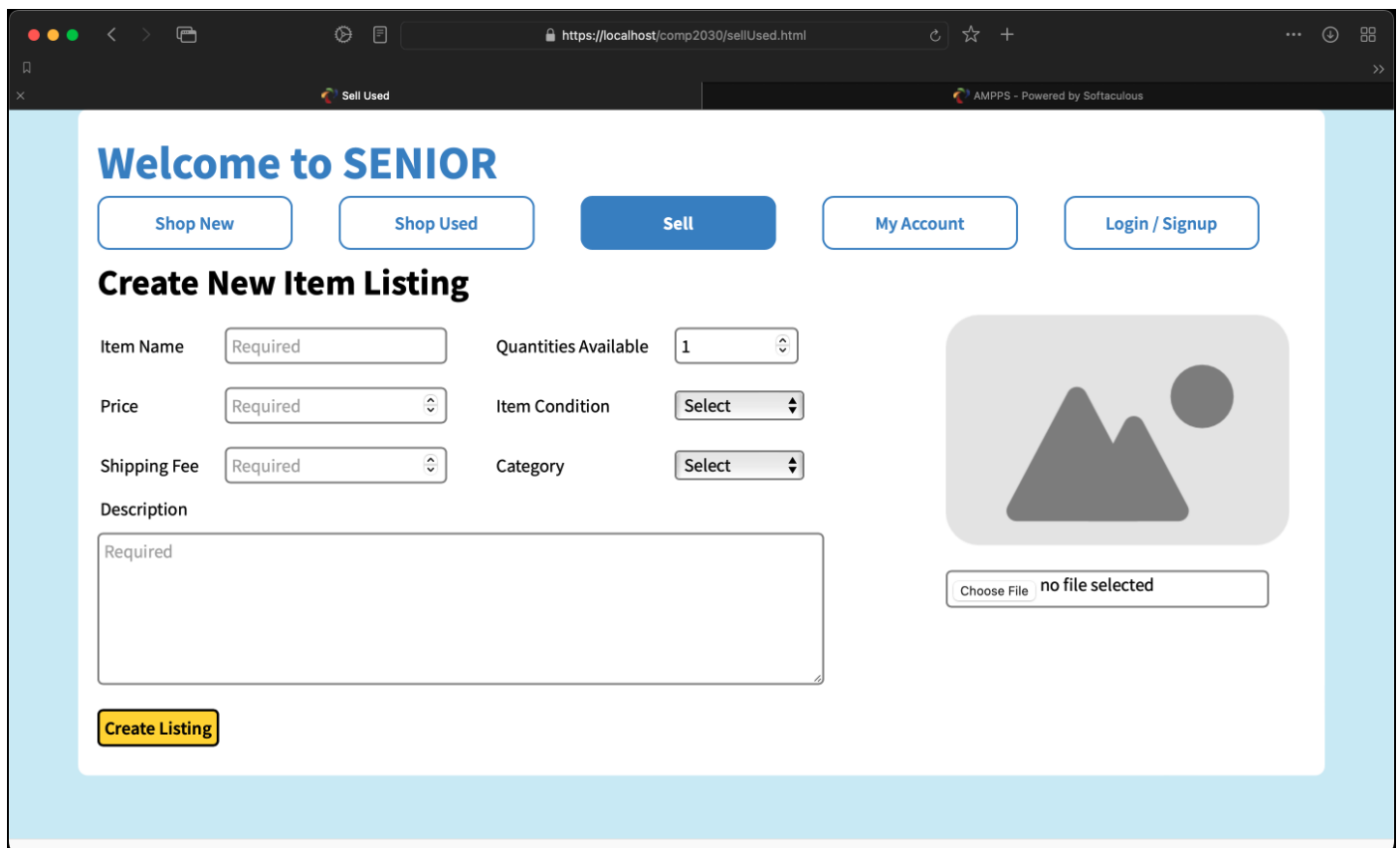
[Login Here!](#)

Account Main Page: (photo selected)



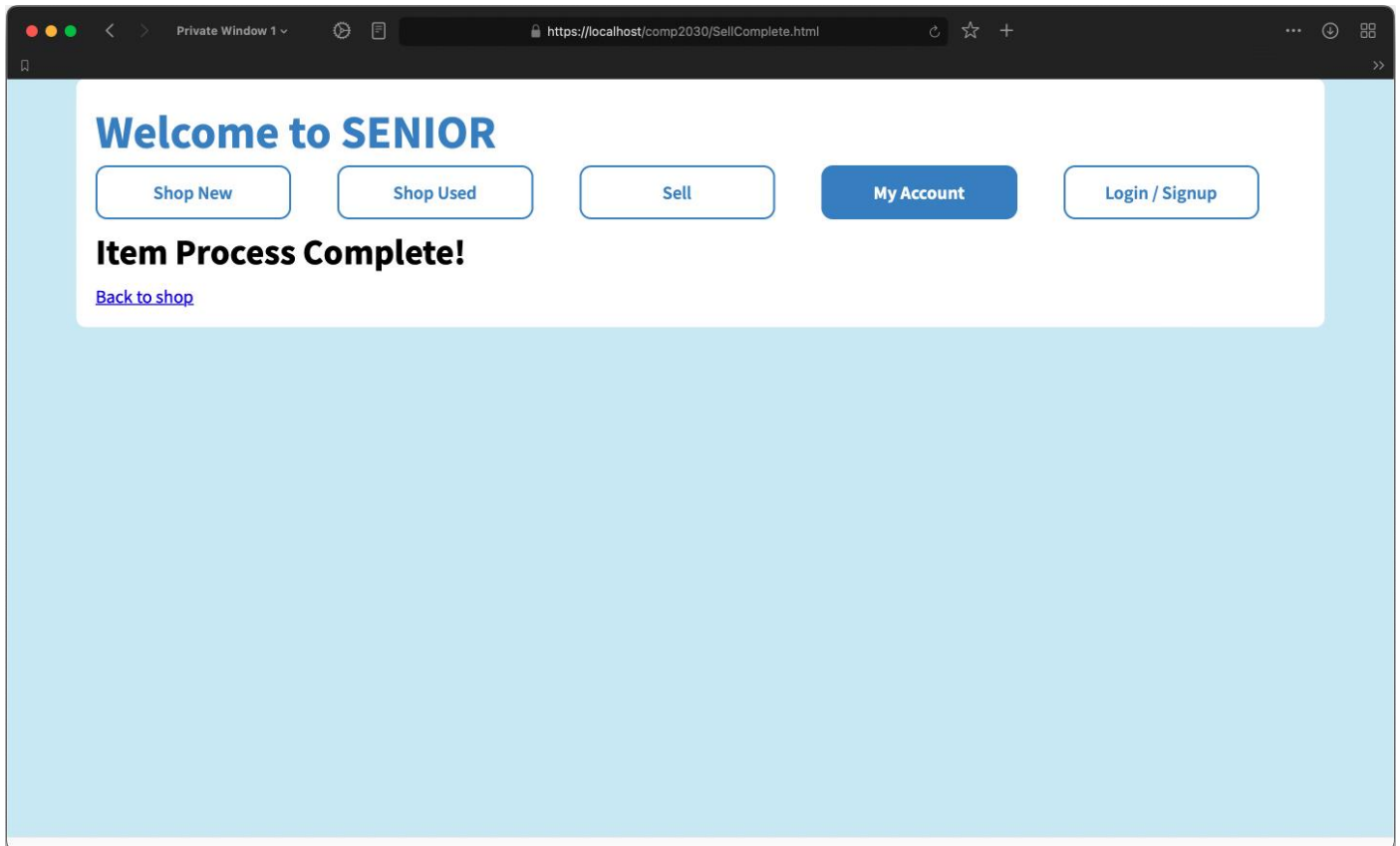
The screenshot shows a web browser window with the URL `https://localhost/comp2030/AccMain.php`. The page has a dark header with "My Account" and "AMPPS - Powered by Softaculous". The main content area has a light blue background and features a "Welcome to SENIOR" heading. Below the heading are five buttons: "Shop New", "Shop Used", "Sell", "My Account" (highlighted in blue), and "Login / Signup". Underneath is a section titled "Your Account Infomation" (sic). It includes a profile picture placeholder with a "Choose File" button and "no file selected" text. Below this is an "Upload Image" button. Further down are three input fields labeled "Update Username", "Update Email-Address", and "Update Password", each with a "Required" label. At the bottom of this section is an "Update" button.

Sell Used Item Page:

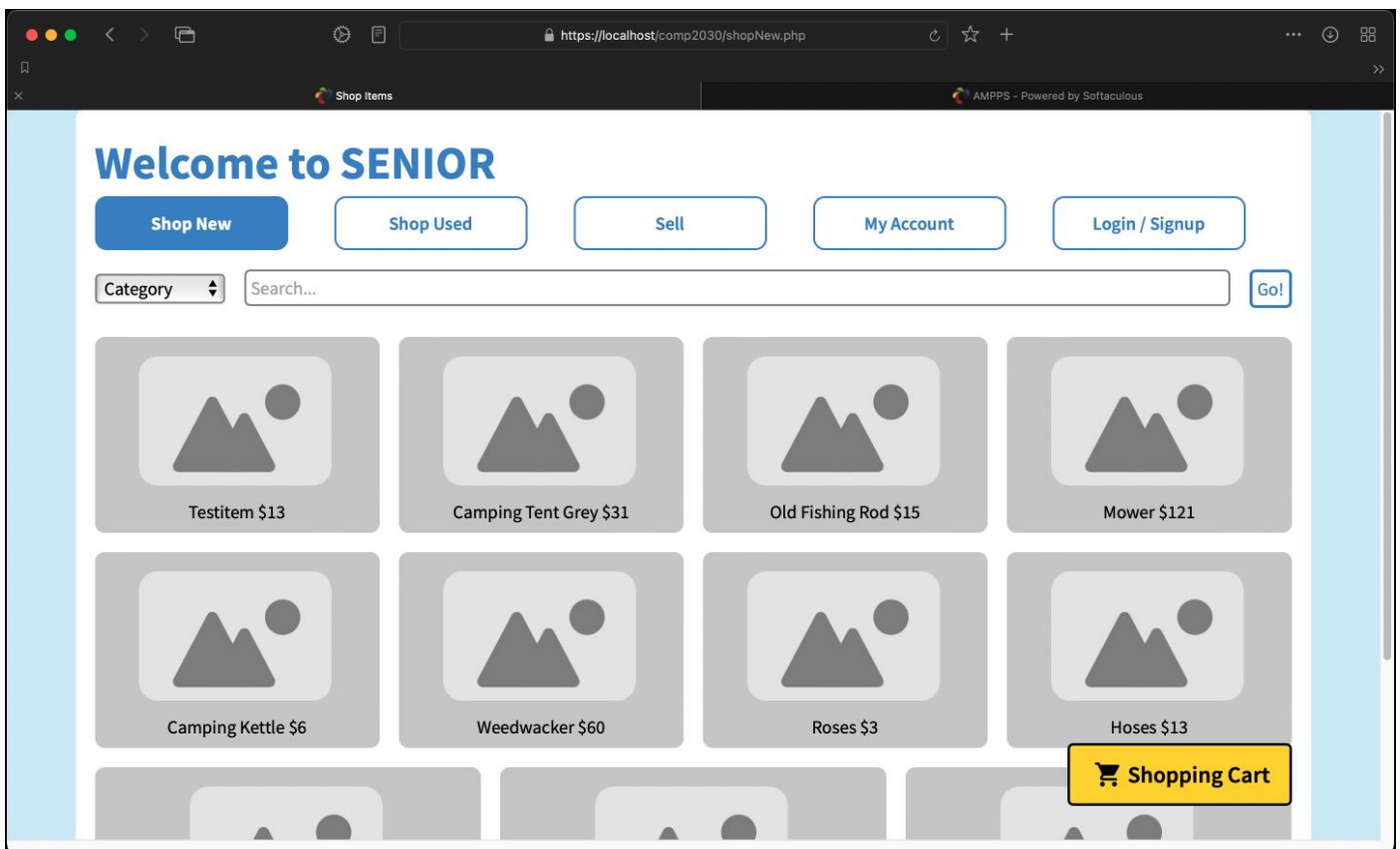


The screenshot shows a web browser window with the URL `https://localhost/comp2030/sellUsed.html`. The page has a dark header with "Sell Used" and "AMPPS - Powered by Softaculous". The main content area has a light blue background and features a "Welcome to SENIOR" heading. Below the heading are five buttons: "Shop New", "Shop Used", "Sell" (highlighted in blue), "My Account", and "Login / Signup". Underneath is a section titled "Create New Item Listing". It contains several input fields: "Item Name" (Required), "Price" (Required), "Shipping Fee" (Required), and "Description" (Required). There are also dropdown menus for "Quantities Available" (set to 1), "Item Condition" (Select), and "Category" (Select). To the right of these fields is a large image placeholder with a "Choose File" button and "no file selected" text. At the bottom left of the form is a yellow "Create Listing" button.

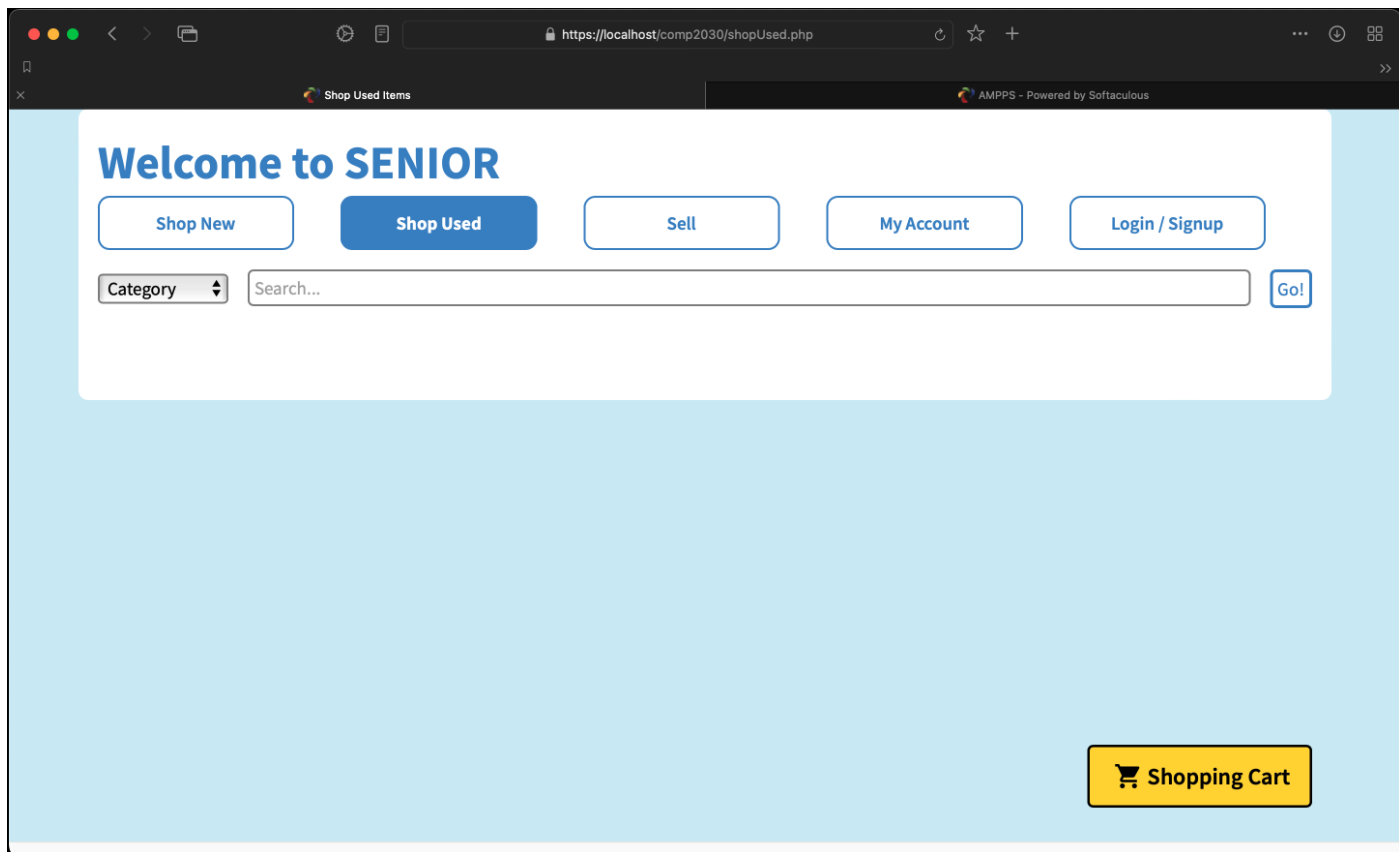
Sell Complete Page:



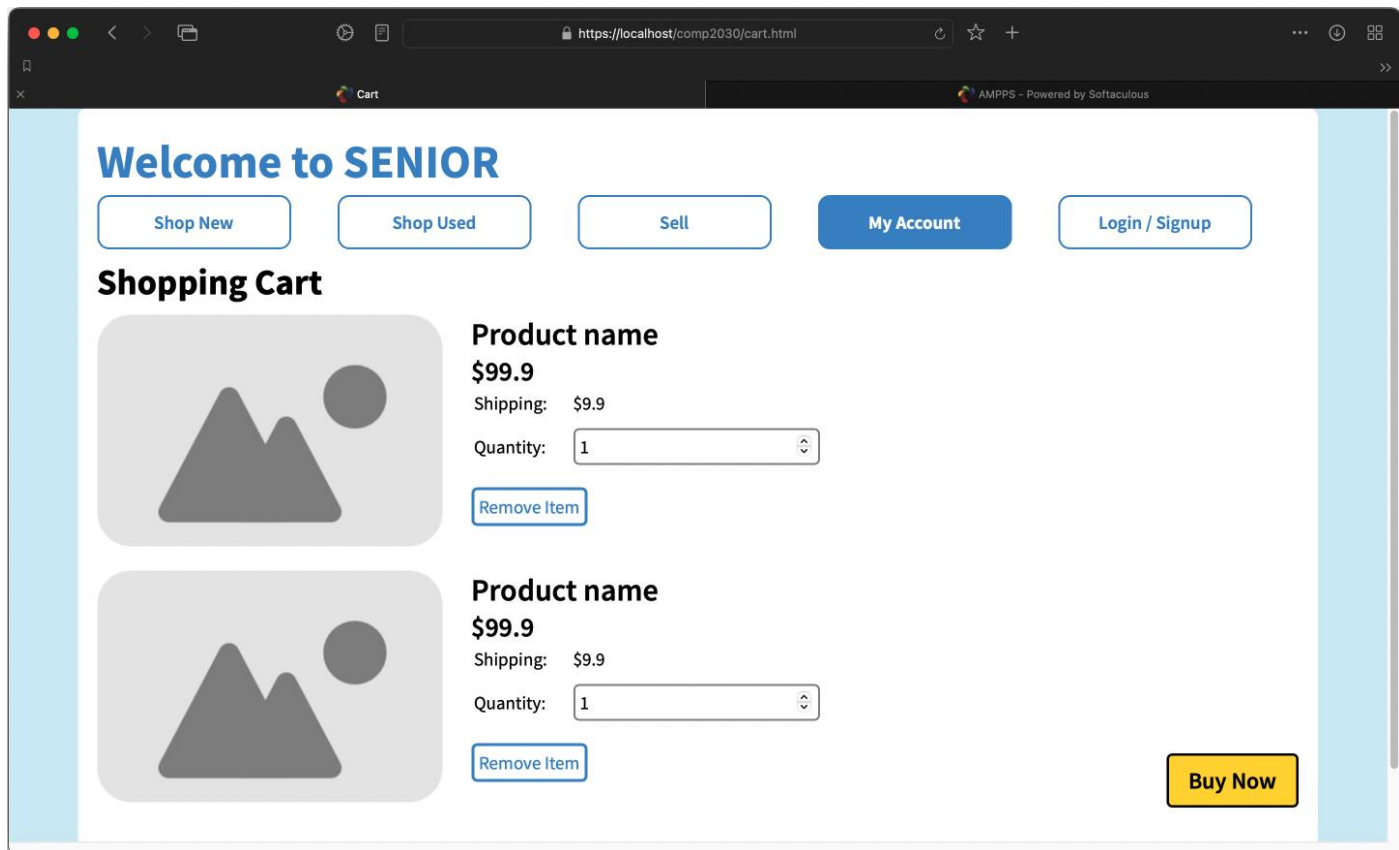
Sell New Item Page:



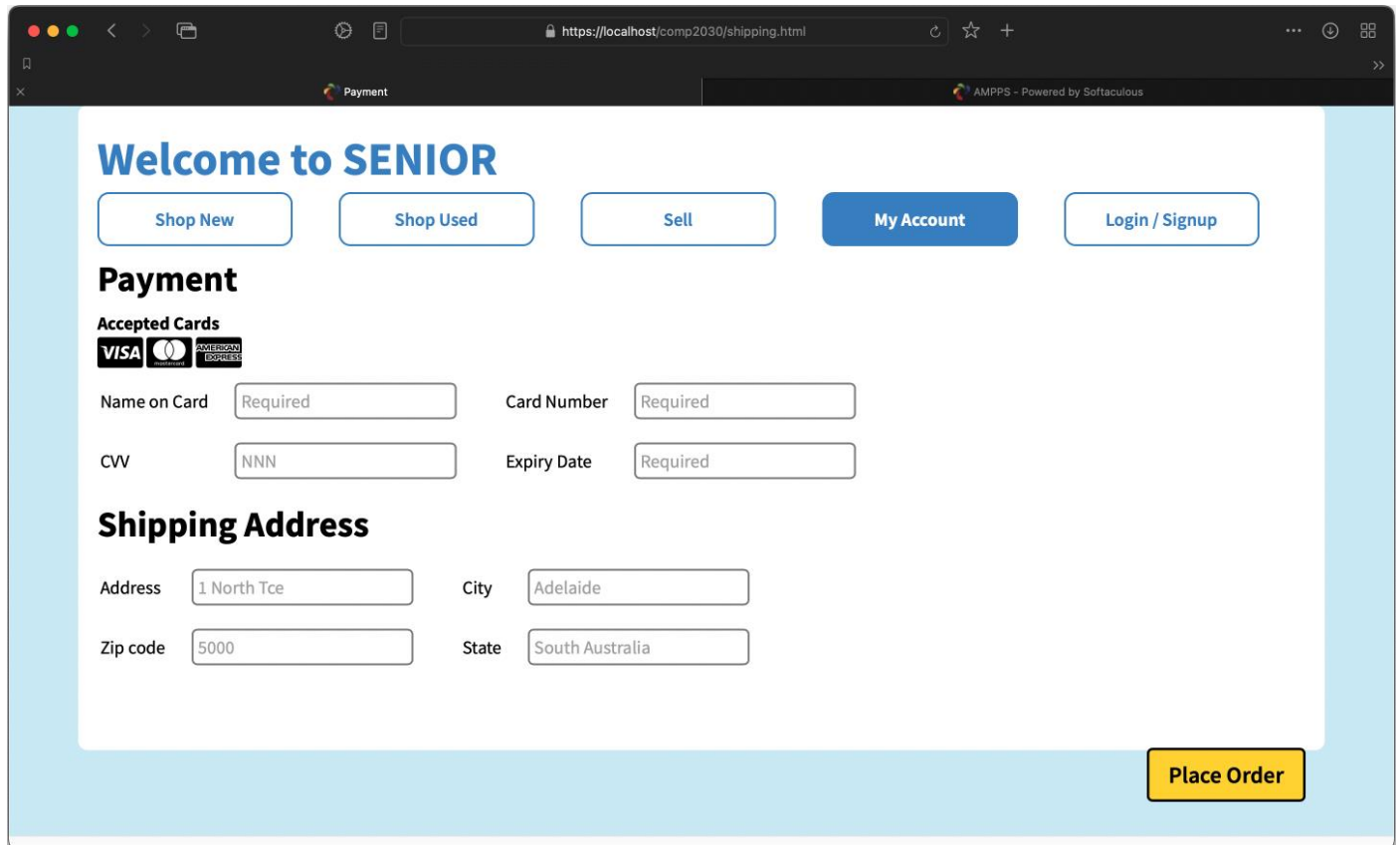
Shop Used Page: (No variables as it is empty, DB gains slots through sell Used Item)



View Cart Page:



Payment Page:



The screenshot shows a web browser window with the URL `https://localhost/comp2030/shipping.html`. The page has a dark header with a "Payment" tab and a logo "AMPPS - Powered by Softaculous". The main content area is white with a light blue border. At the top, it says "Welcome to SENIOR" in blue. Below this are five buttons: "Shop New", "Shop Used", "Sell", "My Account", and "Login / Signup". The "My Account" button is highlighted in blue. Below the buttons is the "Payment" section, which includes "Accepted Cards" (VISA, MasterCard, American Express) and four input fields: "Name on Card" (Required), "Card Number" (Required), "CVV" (NNN), and "Expiry Date" (Required). Below the payment section is the "Shipping Address" section, which includes four input fields: "Address" (1 North Tce), "City" (Adelaide), "Zip code" (5000), and "State" (South Australia). At the bottom right of the white area is a yellow "Place Order" button.

Payment

Accepted Cards

VISA MasterCard AMERICAN EXPRESS

Name on Card

Card Number

CVV

Expiry Date

Shipping Address

Address

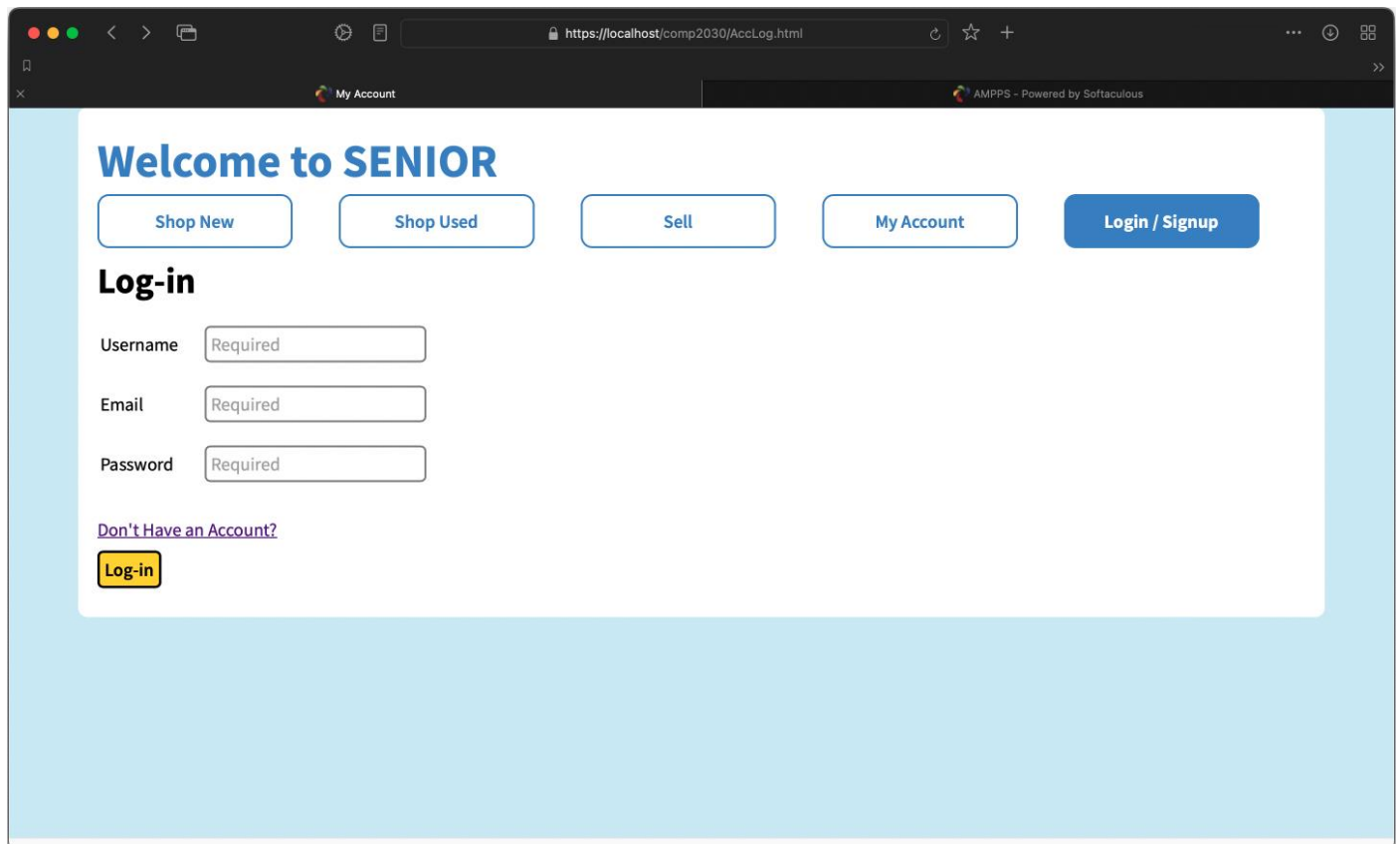
City

Zip code

State

Place Order

Log In Page:



The screenshot shows a web browser window with the URL `https://localhost/comp2030/AccLog.html`. The page has a dark header with a "My Account" tab and a logo "AMPPS - Powered by Softaculous". The main content area is white with a light blue border. At the top, it says "Welcome to SENIOR" in blue. Below this are five buttons: "Shop New", "Shop Used", "Sell", "My Account", and "Login / Signup". The "Login / Signup" button is highlighted in blue. Below the buttons is the "Log-in" section, which includes three input fields: "Username" (Required), "Email" (Required), and "Password" (Required). Below the input fields is a link "Don't Have an Account?" and a yellow "Log-in" button.

My Account

Welcome to SENIOR

Shop New Shop Used Sell My Account Login / Signup

Log-in

Username

Email

Password

[Don't Have an Account?](#)

Log-in