

Flaire by invis@Wear Technologies

GUI II PROJECT ALPHA VERSION

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March 8, 2016

COMP 4620

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Review of Goals and How They Have Changed

The team's goals to date included setting up a Git repository and environment, creating a navigation bar, choosing a theme and color scheme for the web-page, creating a gallery of product images, and setting up a skeleton for each of the web pages. The team successfully executed all the goals to date (see Figure 1) and made some minor adjustments to some of the web page specifications.

The team's first goal included setting up a Git repository and environment. The Git repository was set up via the invisaWear Technologies private Github account and each of the team members were granted permission to contribute to the project. Next, each of the team members set up a development environment on their laptop and cloned the Git repo into their local environment. Jeremy created a navigation bar which remains in place as users scroll up and down. Rajia created a gallery of sample product images obtained from existing jewelry stores. Lastly, a skeleton was created for each of the pages and navigation was implemented between all the links.

The skeleton for the Home and About pages were created by Rajia. Contrary to the original project specifications, the developers choose to redesign the Home page so that it no longer includes a slide show. This change was implemented in hopes of making the web page both simpler and more visually appealing. Madhu created skeletons for the FAQ, About Developers, and How to Set Up the Device pages. Rajia created the skeleton of the Shop page and both Alex and Jeremy created the skeletons of the Create Account/Login, Register Devices, and Cart pages. The developers decided to scrap the Proceed to Checkout page and instead sum up the total of all the purchases and allow users to enter their credit card information on the Cart page.

Figure 1. Project Goals 2/4/16 - 3/5/16.

Goal	Date	Assignee
1. Proposal	2/4	Everyone
2. Set up GIT repository	2/6	Everyone

3. Set up environment	2/7	Everyone
4. Create navigation bar	2/8	Jeremy
5. Create a theme and color scheme for all the webpages to follow	2/12	Everyone
6. Take pictures of the products and pictures for the website	2/14	Rajia and Madhu
7. Setup skeleton of pages: <ul style="list-style-type: none"> • Create all pages without styling • Visual mock-ups of all pages 	3/1	Everyone
7.1 Setup skeleton of Home page	2/24	Rajia
7.2 Setup skeleton of About page	3/1	Rajia
7.3 Setup skeleton of FAQ page	2/21	Madhu
7.4 Setup skeleton of About the Developers page	2/25	Madhu
7.5 Setup skeleton of Setting Up Device page	3/1	Madhu
7.6 Setup skeleton of Shop page	2/24	Rajia
7.7 Setup skeleton of Product Details page	3/1	Jeremy
7.8 Setup skeleton of Create Account/Login page	2/19	Alex

7.9 Setup skeleton of Register Device page	2/22	Alex
7.10 Setup skeleton of Proceed to Checkout page	3/1	Alex
8. Implement Navigation between Pages and Links	3/5	Everyone

New Issues

Conducting usability testing with classmates during the March 8th class period provided the team with very valuable feedback. Some of the suggestions included: converting the About Page to a sub-menu, modernizing the color scheme and changing the logo.

Currently the About Page contains an image of jewelery and links to the FAQ page, the About Developers page and the How to Set Up the Device page. A classmate suggested that this page does not serve a useful purpose and can be substituted by placing a sub-menu in the About Page tab on the navigation bar. After assessing the suggestion, the team has decided that this would make the website more user-friendly and easier to navigate.

A lot of the other suggestions the team received were regarding the color scheme and layout of the pages. Classmates said: “The website looked unappealing”, “very dated” and the “GUI could’ve been better, smoother and more appealing”. The constructive criticism was much appreciated especially because the invisaWear Technologies web page is going to be visited by many of the company’s customers who could be potentially deterred if they find the site to be visually unappealing. The team has already put extraneous effort into modifying the page layouts so they each have a more modern and appealing look. However, more changes will still need to be made. Figure 2 displays the web site’s original appearance at the time of the usability tests and Figure 3 shows the new redesigned appearance.

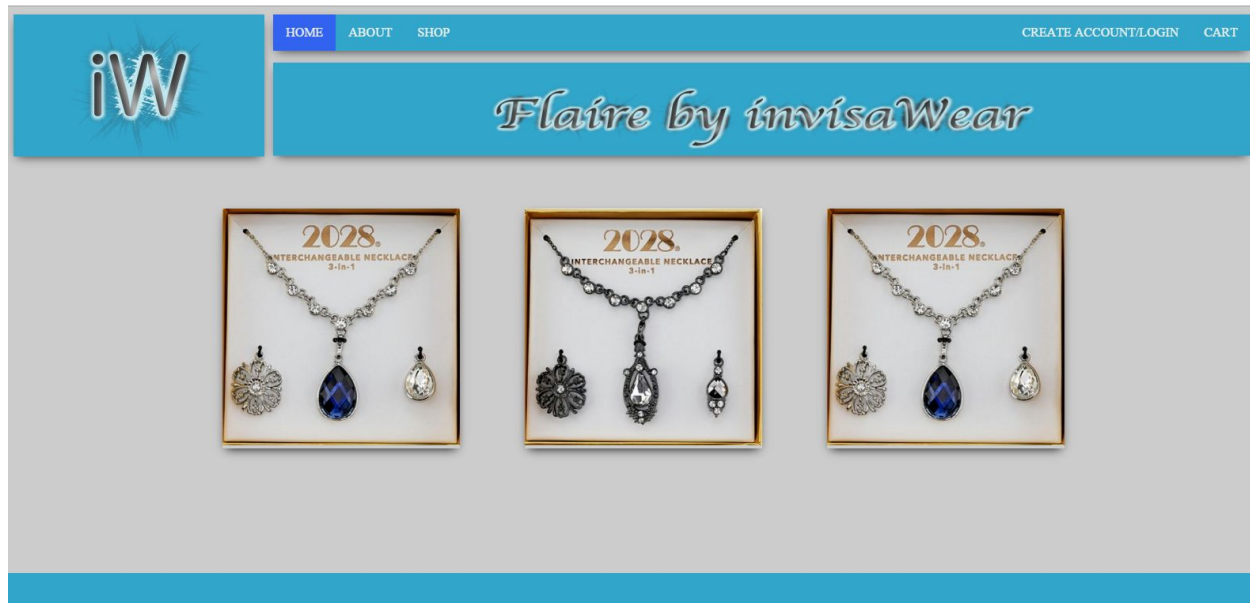


Figure 2. Original Website Home Page.

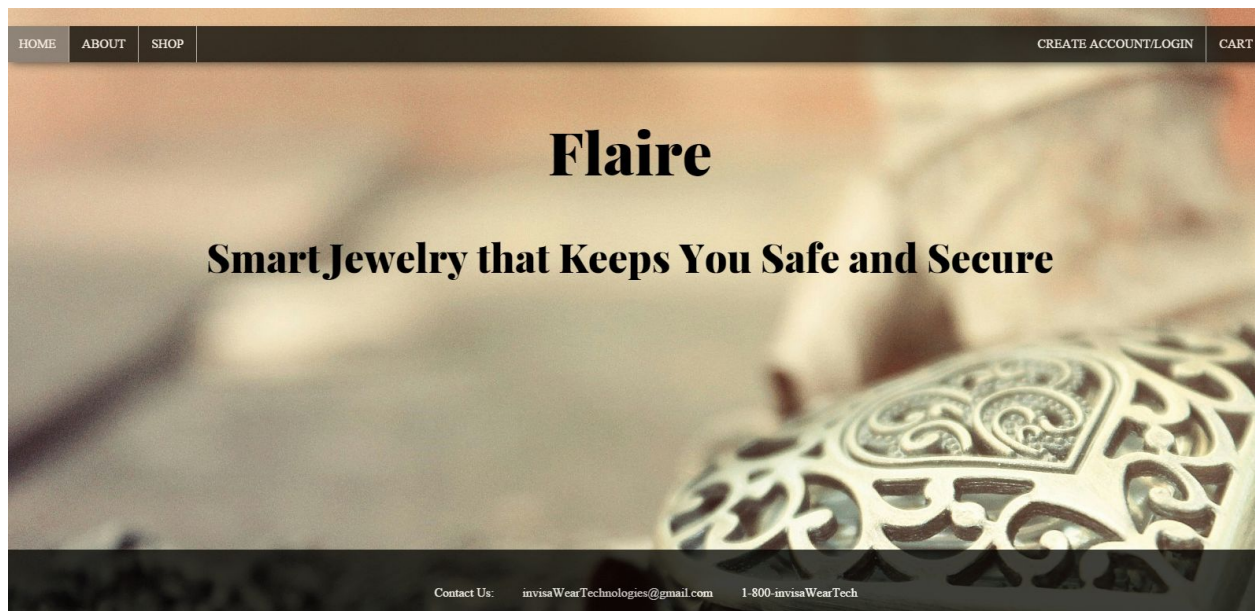


Figure 3. Re-Designed Home Page.

Another one of the common comments the team received was with regards to the logo needing enhancement. The logo has already been modified from the original design (see figure 4) to the new design shown in figure 5. The new logo is more appealing and the simpler design

is more consistent with logos of newer web pages. However, the logo will be continually enhanced as the layouts and styles of the site are redesigned.



Figure 4. Original Logo.



Figure 5. New Re-Designed Logo.

After receiving multiple questions from classmates with regards to what the product actually is, the team has decided that an additional page should be added to explain exactly what Flaire is and what the product does. Currently the About page gives users information about the developers, how to set up the device and FAQs. However, it does not explicitly describe what the product is or what it does. Because the web site may receive visitors who do not know what the product is, it is necessary to add more information. A new page called “Learn

More” will be added to provide this information and a “Learn More” button will be added to the home page under the text that says: “Smart Jewelry that Keeps You Safe and Secure”.

All the new issues have been added to the schedule and the dates have been modified to accommodate the addition of the new tasks.

Current Feature Evaluations

The Home Page

Originally, the Home page was intended to display the company logo, product name and slides that show sample product images. It was also intended to have links for users to create a new account or to log into their existing account (see Figure 6).

Currently, the page displays the company logo, product name and a caption that describes what the product is (see Figure 7). The developers choose to redesign the Home page so that it no longer includes a slide show. Instead the page now displays a large background image of a heart Flaire component. This change in design was made in hopes of making the web page appear more visually appealing and to give it a more modern look and feel. The navigation bar was created as intended and allows users to navigate between the About, Shop, Create Account/Login, and Cart pages. At the bottom of the page, there is information regarding how to contact the developers by email or phone.

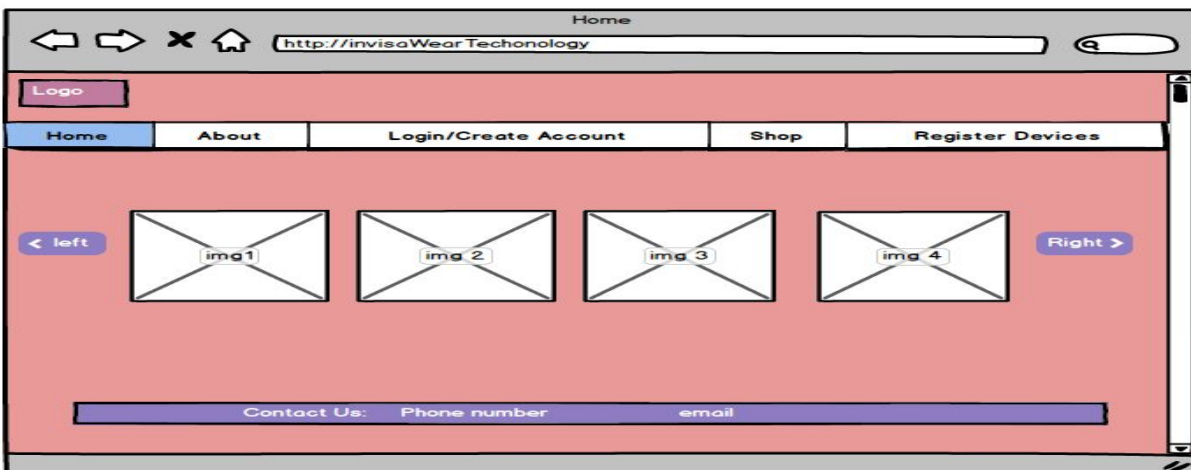


Figure 6. Original Specification of Home page Layout.

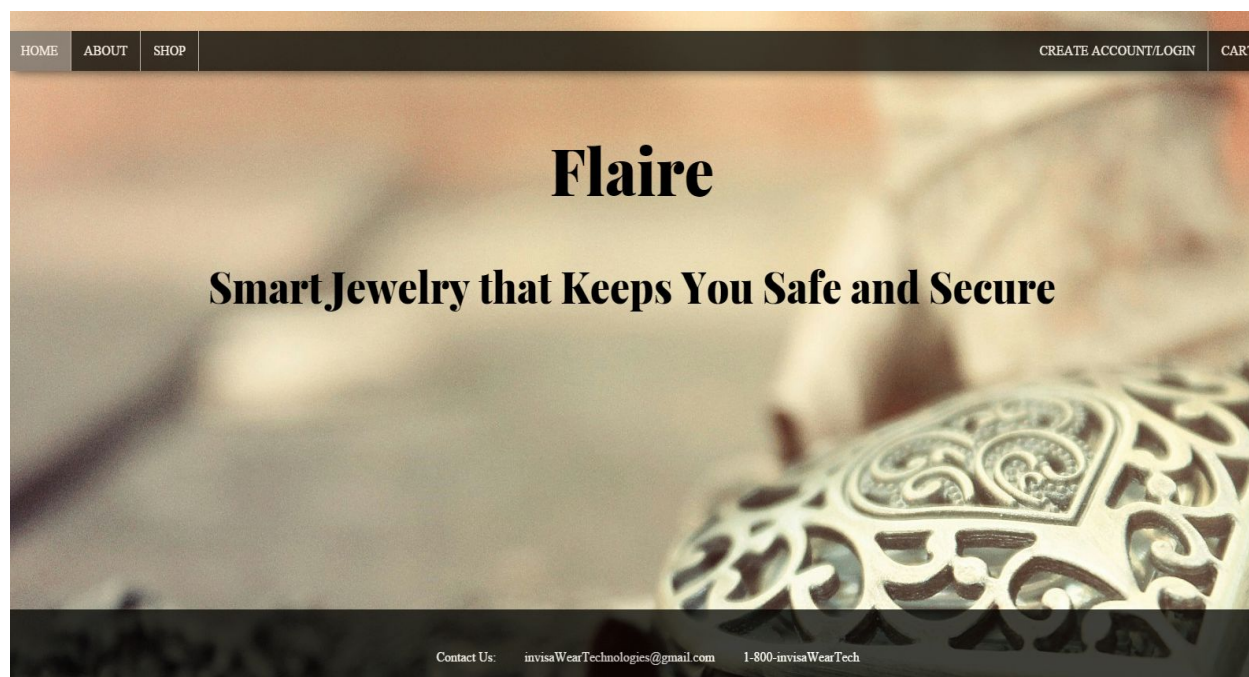


Figure 7. Current Home Page Layout.

About

The About page currently contains an image of jewelry and links to take users to a FAQs page, an About Developers page, and a How to Set Up the Device page (see Figures 8 and 9). The FAQ page has an image at the top of the page and a border around four frequently asked questions. The questions are in bold and the answers are directly below them (see Figure 10). This page is intended to clarify user's questions regarding the product and returns. From this page, users will be able to navigate to all the other pages through the navigation bar. However, currently they are not able to get to the How to Set Up the Device and About Developers pages because the sub-menu has not yet been implemented.

The About Developers page currently contains pictures of the developers and a brief description about each of them (see Figure 11). Lastly, the How to Set Up the Device page contains information about how to configure the device and app (see Figure 12).

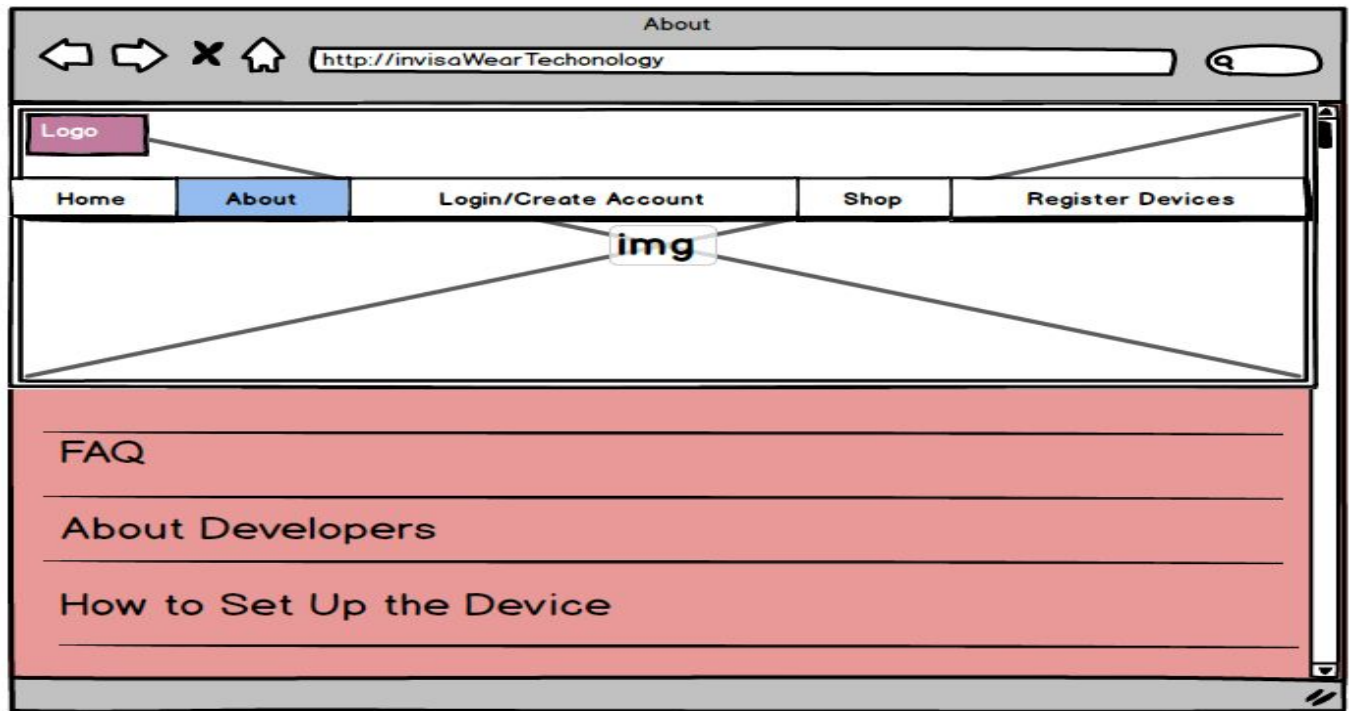


Figure 8. Original Specification of About Page Layout.

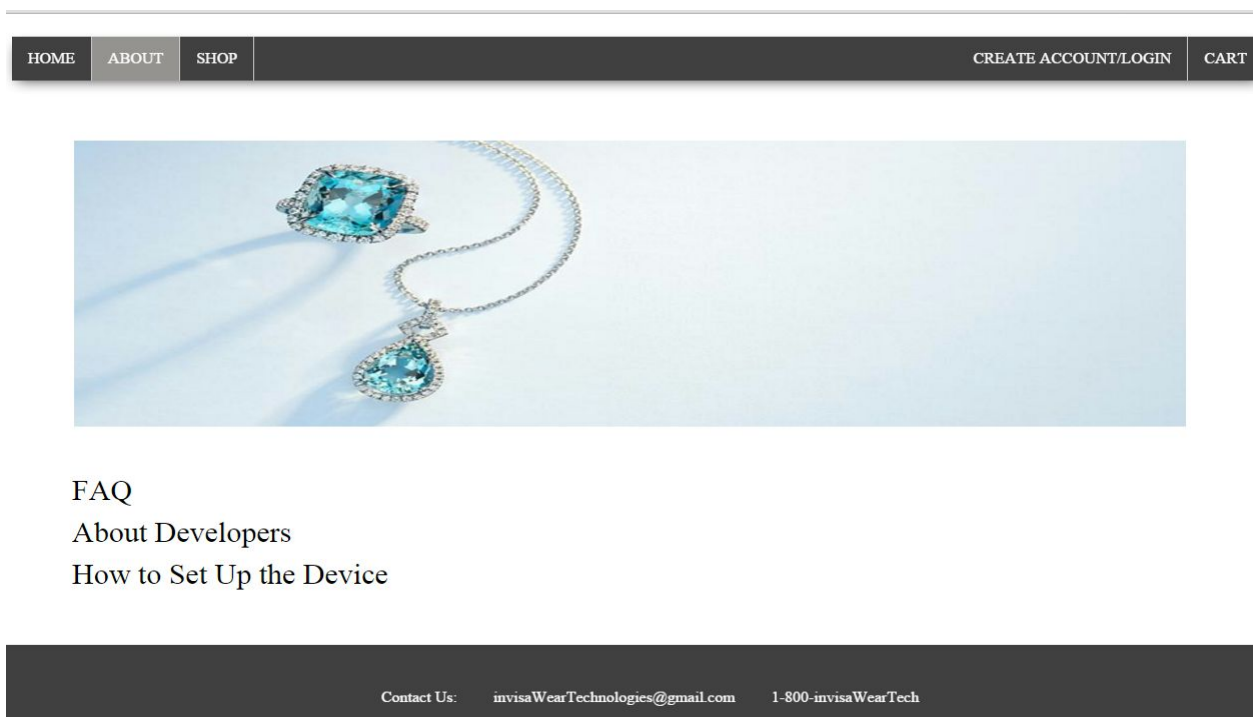


Figure 9. Current About Page Layout.

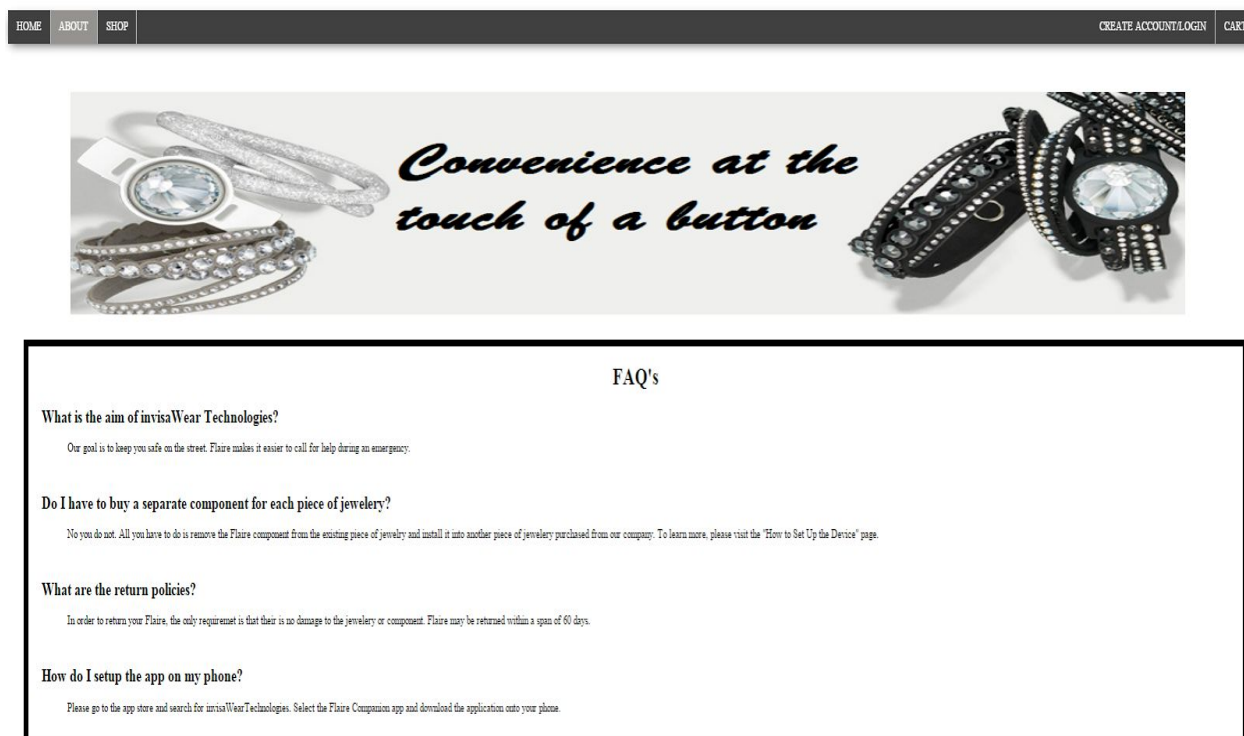


Figure 10. Current FAQ Page Layout

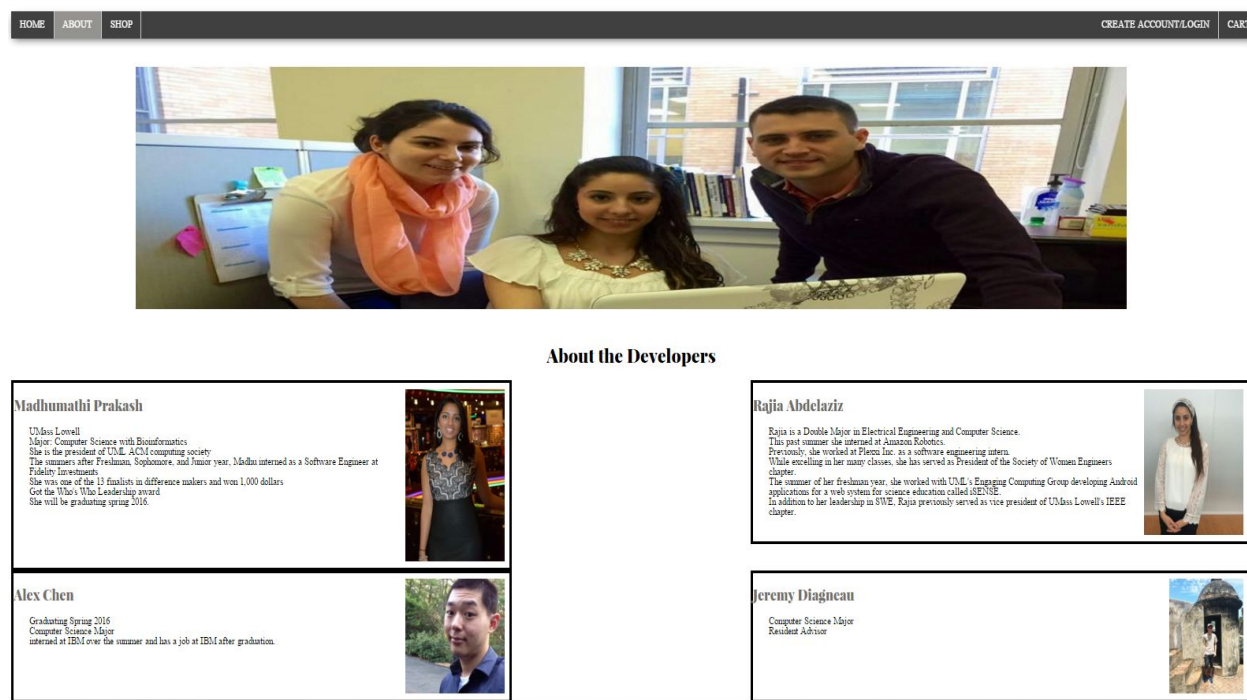
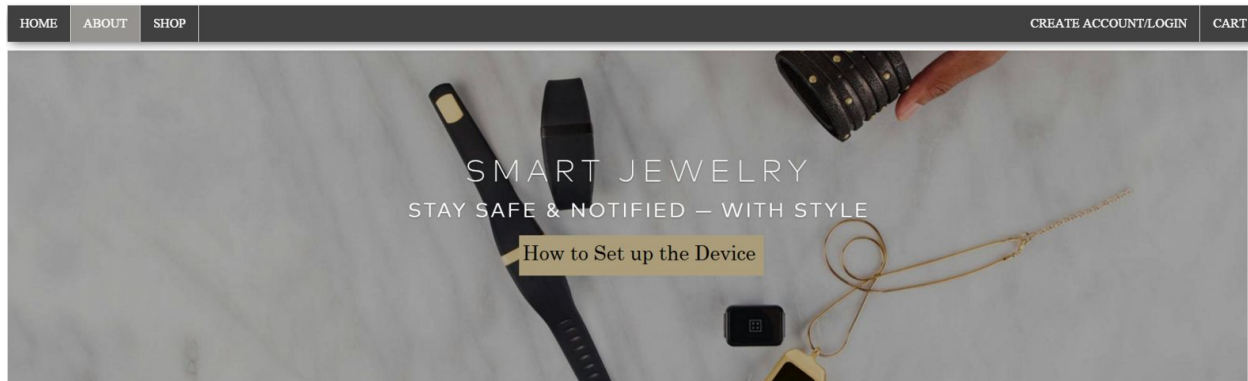


Figure 11. Current About Developers Page Layout



Please Follow the below steps to setup the device:

01. Install the Flaire Companion App from the App Store.
02. Fill out the Personal Information Page.
03. Fill out the Additional Information Page.
04. Fill out the Emergency Contact Information Page.
05. Connect Your Device to the Phone.
06. Your Device will now be ready for use! Press the button on the component in the event of an emergency.

Figure 12. Current How to Set Up the Device Page Layout

Shop

The Shop tab was originally intended to have three sections: Components, Watches and Bundles. Each section was supposed to have an option to scroll through a variety of products with scroll buttons on the left and right, and each product was supposed have its price and description listed below it (see Figure 13). When users click on a product, they were supposed to be directed to a Product Details page displaying a larger image of the product, a description and cost.

Currently, the Shop page has three sections each containing two product images (see Figure 14). Each image has a description and cost below it. The slideshow of products has not yet been implemented, however it will be implemented in the next couple of weeks and more product images will be added. Clicking on a product currently redirects users to the Product Details page which displays a zoomed image of the product, the cost, description and an add to

cart button (see figure 15). In the future, this page will also allow users to choose the size and color of the product they choose using a drop down menu.

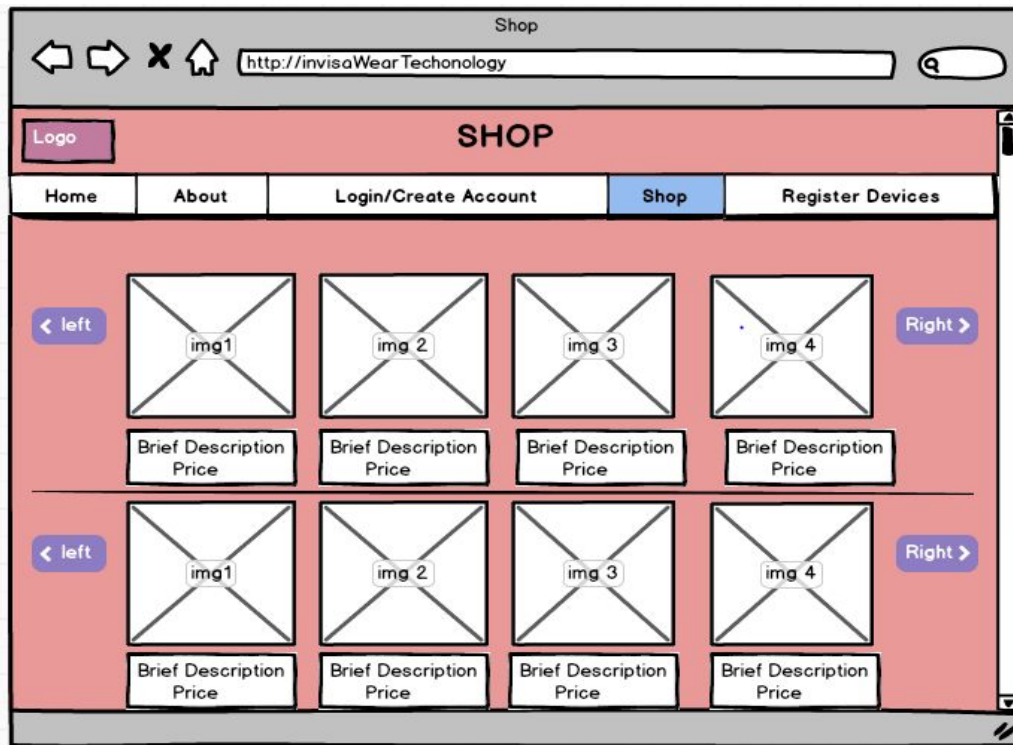


Figure 13. Original Specification for Shop Page Layout.

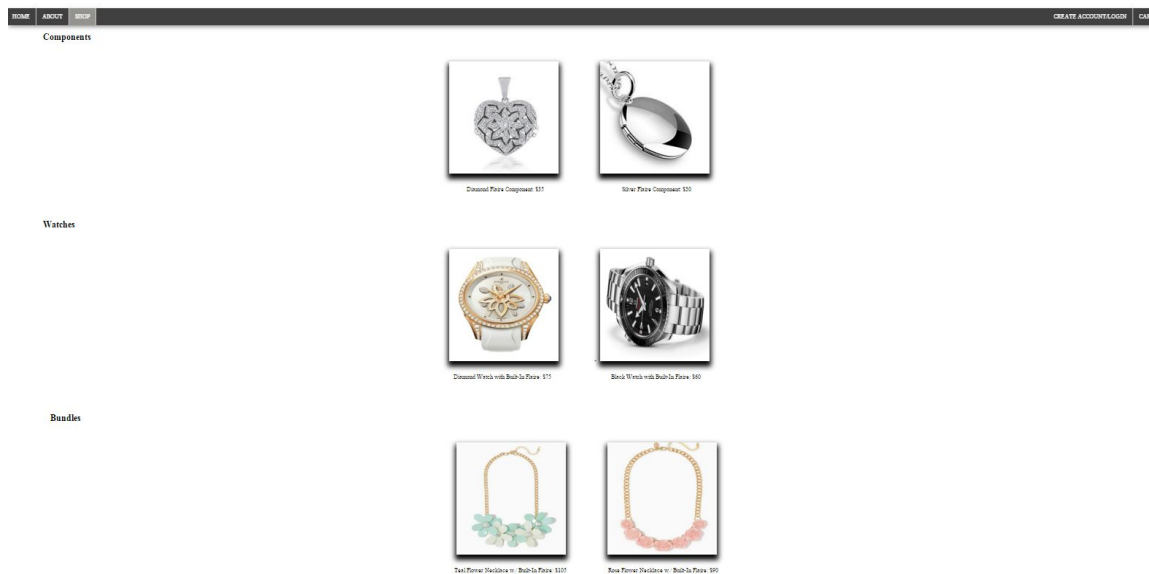


Figure 14. Current Shop Page Layout.

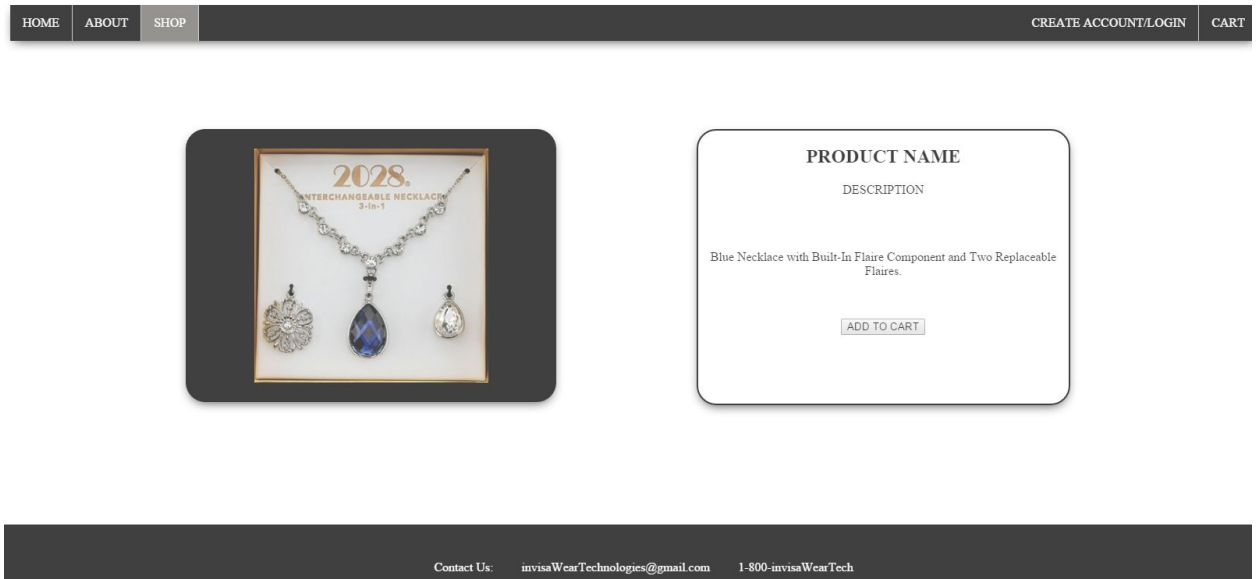


Figure 15. Current Product Details Page Layout.

Cart/Proceed to Checkout

In the original specifications, the Proceed to Checkout page was intended to allow users to see a listing of all the products in their cart. At the bottom of the page the users would be able to click “Next” to enter their credit card information and address. Then after all their information was entered, users would be able to click the “Order” button and the system would present them with a message that says, “Thank you for purchasing an invisaWear product” (see Figures 16a and 16b). After further examining the initial specifications, the team has decided to scrap this page and instead combine it with the Cart page.

The current Cart page implementation is very simplistic. It is consistent with the original plan for the cart design. It has two hard coded temporary products in the cart, a placeholder for the price, and a placeholder for the number of products in the cart (see Figure 17). At the bottom of the page, there is a “Proceed to Checkout” button. Currently, the button is a placeholder for when a checkout procedure is implemented.

The image shows a web browser window titled "Proceed To Checkout". The main heading is "Proceed To Checkout". Below it, the section is titled "Products In cart". There are two product entries, each consisting of a placeholder image (a mountain and a circle) and a quantity selector. The first entry has a quantity of 1, and the second entry has a quantity of 2. A "Next" button is located at the bottom right of the cart section.

Figure 16a. Original Specification for Proceed to Checkout Page Layout (part 1).

The image shows a web browser window titled "Proceed To Checkout". The section is titled "Mailing Information". It contains four input fields: "Full name", "Street Address", "City", and "Zip". To the right of these fields is a "State" dropdown menu. Below the mailing information section is a "Payment" section. It contains four input fields: "Full name", "Credit Card Number", "Expiration Date", and "Billing Address". A "Check out" button is located at the bottom right of the payment section.

Figure 16b. Original Specification for Proceed to Checkout Page Layout (part 2).

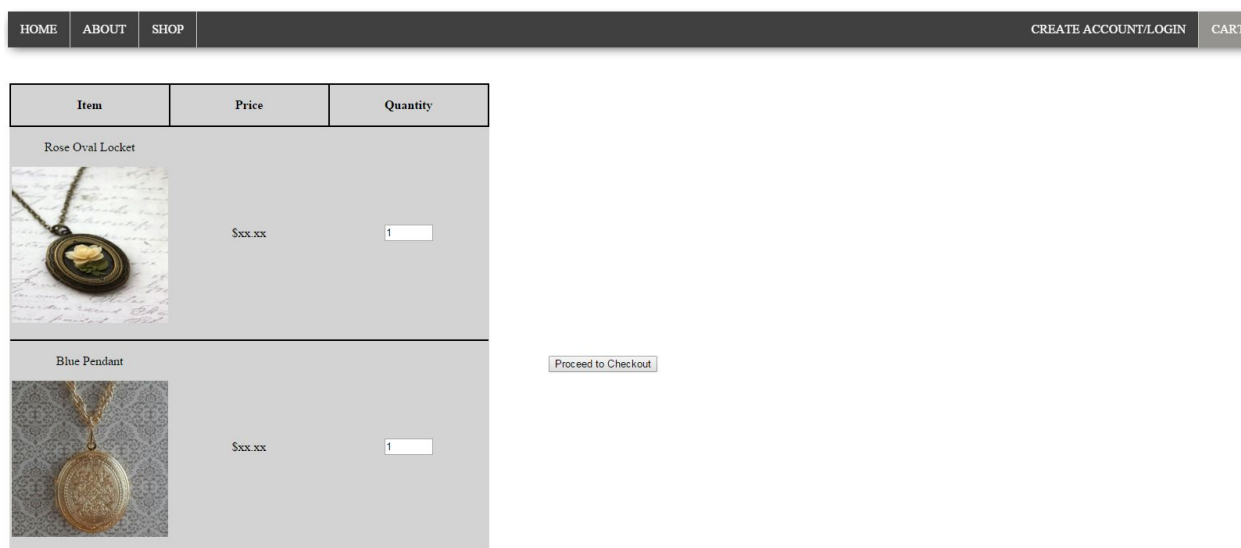


Figure 17. Current Cart Page Layout.

Login/Create Account

Users can get to the Login/Create Account page from a link on the Home page. As shown in Figure 18, the original specification required that the page be divided into two parts. The left side would display a login form for users who already have an account, and the right side would display a form for creating a new account. Currently, the page is divided into two sections per the original specifications (see Figure 19). The create account form allows users to enter their name, email, username, and password. The login form allows users to enter their username and password into textboxes and submit. After entering all the required information on either form, users are redirected to the Register Device page.

Login	Create InvisaWear Account
<p>Username <input type="text" value="Username"/></p> <p>Password <input type="text" value="Password"/></p> <p><input type="button" value="Login"/></p>	<p>Full Name <input type="text" value="Full Name"/></p> <p>Email Address <input type="text" value="Email Address"/></p> <p>Username <input type="text" value="Username"/></p> <p>Password <input type="text" value="Password"/></p> <p><input type="button" value="Submit"/></p>

Figure 18. Original Specification for Login/Create Account Page.

HOME	ABOUT	SHOP	CREATE ACCOUNT/LOGIN	CART
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Login	Create invisaWear Account
<p>Username <input type="text" value="Username"/></p> <p>Password <input type="text" value="Password"/></p> <p><input type="button" value="Login"/></p>	<p>Full Name <input type="text" value="Full Name"/></p> <p>Email Address <input type="text" value="Email Address"/></p> <p>Username <input type="text" value="Username"/></p> <p>Password <input type="text" value="Password"/></p> <p><input type="button" value="Create Account"/></p>

Figure 19. Current Login/Create Account Page.

Register Device

On the Register Device page users are able to register the devices that they purchase. This is part of the account creation process and this page is reached after users create an account for the first time. As shown in Figure 20, users are able to input their personal information including their first name, last name, gender, age, date of birth, height, weight, school and medical conditions. This information allows police and responders to better respond to an emergency and to more easily locate users when they initiate an alert using their Flaire device. The personal information includes the user's name, age, height, weight, and any medical conditions they have. Once all the information is filled in correctly, users are able to enter their device's registration number (a unique number combination that activates their device). Once this portion of the site is completed correctly, the user is redirected to the home page.

Register a Device

Basic Information	Medical Condition(s)
First Name <input type="text" value="First Name"/>	<input type="text" value="Medical Condition"/>
Last Name <input type="text" value="Last Name"/>	<input type="text" value="Additional Condition"/>
Gender (M/F) <input type="checkbox"/> Age <input type="text" value=""/>	<input type="text" value="Additional Condition"/>
Date of Birth <input type="text" value="(MM/DD/YYYY)"/>	<input type="text" value="Additional Condition"/>
Height <input type="text" value=""/>	<input type="text" value="Additional Condition"/>
Weight <input type="text" value=""/>	<input type="text" value="Additional Condition"/>
School <input type="text" value="School"/>	<input type="text" value="Additional Condition"/>

Registration Number <input type="text" value="Registration Number"/>
<input type="button" value="Submit"/>

Figure 20. Current Register a Device page

Not Yet Implemented Features

Although all the team's goals to date have been successfully completed, there are still many important features that need to be implemented in order for the web site to be fully functional. These features are very important for the website's functionality so it is imperative that they be completed on time.

One of the most important features that has yet to be implemented is the ability to add items displayed on the Shop page into the shopping cart. Currently, the Product Details and Cart pages contain hard-coded mock images. In the final version of the site, Javascript will be used to dynamically change these images so they accurately represent the items users have selected. In addition, a function needs to be created to accurately sum up the cost of each of the items in the cart so that the total price of items is accurate.

The Create Account/Login page needs to be further developed. Currently, the Create Account/Login page redirects users to the Home page. In the upcoming weeks, it needs to be modified so that it accepts a specific hard-coded username and password combination. JavaScript regular expressions will be used to match the user input to pre-programmed hard-coded values. If a correct username and password combination is detected, users will be logged in and the menu option for going to the Create Account/Login page will be replaced by the hard-coded username.

The Proceed to Checkout button on the Cart page needs to be implemented so that it redirects users to the Proceed to Checkout page where they can enter their billing information and mailing address. jQuery Validation needs to be implemented and styled appropriately for all the pages requiring user input.

Lastly, all the new issues need to be addressed. The About tab on the header bar will be modified to contain a sub menu. The site's color scheme and logo will be modified and a "Learn More" button will be implemented to give users more information about the product. Picture

Slides will be added to the Shop page so that users can view a variety of products. The last couple of weeks will be reserved for usability testing and configuring feedback from classmates.

Contingency Plans

As with any project, various issues are bound to cause roadblocks for development, many of which will not be anticipated. However, there are some conditions that the team anticipates running into and have created plans in order to overcome these issues if they occur.

Time might still be an issue for validations and for implementing the MEAN Stack into the project. In addition to the development deadlines, all members of the team are students with full course loads, leading very busy lives, further limiting the time available for the project. In preparation for this factor, members have agreed to communicate honestly with each other and notify the team if they will be unable to complete their work. This will allow the other teammates to help the individual who is struggling and will allow the entire team to come up with a plan that will allow all the work to be successfully completed on time.

The next issue is a collection of possible problems that can be summarized as technical difficulties. The website will incorporate various types of plugins that will be used in various ways. Many of these techniques will have to be learned for the first time or be refreshed before being implemented. Specific examples include jQuery validation for account registration, JavaScript to allow for slide shows of the product the website is promoting, JavaScript to provide website responsiveness on mobile devices, and possibly other jQuery and JavaScript libraries that will cause the website to look polished, feel responsive, and be functional. Because many of these plugins and implementation techniques have yet to be learned, the team may run into technical difficulties. However, the team is prepared to utilize its resources such as Stack Overflow and prepared to reach out to alums like Kate Garcia and Curran Kelleher for suggestions.

The final issue the team anticipates could cause problems revolves around the product the website is promoting. The website's purpose is to showcase the Flaire product. As a result, the website must accurately display and advertise the product as well as possible. Therefore, if

Flaire undergoes any changes, the website must be updated to show this. Any unexpected product change will result in unexpected updates to the website. This, along with time restraints, could cause the website to show inaccurate information if the website cannot be updated promptly. In addition, any new versions of the product would also need to be displayed on the website. In order to accommodate for this situation, the team has been in constant communication with the invisaWear Technologies hardware team and is continuously updating the site with updated information.

Delivery Schedule

As shown in Figure 21, all the goals to date have been successfully executed, the new tasks have been added to the schedule and the not yet implemented features are currently on track.

Figure 21. Delivery Schedule.

- **Completed Goals**
- **New Tasks**
- **Not Yet Implemented Features**

Goal	Date	Assignee
1. Proposal	2/4	Everyone
2. Set up GIT repository	2/6	Everyone
3. Set up environment	2/7	Everyone
4. Create navigation bar	2/8	Jeremy
5. Create a theme and color scheme for all the webpages to follow	2/12	Everyone
6. Take pictures of the	2/14	Rajia and Madhu

products and pictures for the website		
7. Setup skeleton of pages: <ul style="list-style-type: none"> • Create all pages without styling • Visual mock-ups of all pages 	3/1	Everyone
7.1 Setup skeleton of Home page	2/24	Rajia
7.2 Setup skeleton of About page	3/1	Rajia
7.3 Setup skeleton of FAQ page	2/21	Madhu
7.4 Setup skeleton of About the Developers page	2/25	Madhu
7.5 Setup skeleton of Setting Up Device page	3/1	Madhu
7.6 Setup skeleton of Shop page	2/24	Rajia
7.7 Setup skeleton of Product Details page	3/1	Jeremy
7.8 Setup skeleton of Create Account/Login page	2/19	Alex
7.9 Setup skeleton of Register Device page	2/22	Alex
7.10 Setup skeleton of Proceed to Checkout page	3/1	Alex

8. Implement Navigation between Pages and Links	3/5	Everyone
8.1 Make About a Sub Menu		Madhu
8.2 Modernize Color Scheme		Everyone
8.3 Modify Logo		Jeremy
8.4 Create a More Details page		Rajia
9. Implement JavaScript validations on all forms	3/12	Rajia and Madhu
10. Style validation	3/12	Alex
11. Implement picture slide for all pages that require it	3/19	Rajia
12. Dynamically change picture and price on product details page		Jeremy
13. Implement Checkout/ Store Items in Shopping Cart	3/26	Alex
14. Implement function to calculate shopping totals	4/2	Madhu
15. Hard code User Login	4/9	Madhu
16. Usability testing	4/14	Everyone
17. Final enhancements/product updates	4/20	Everyone

18. Final presentations	4/24	Everyone
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Final Look and Feel

The final version of the web site will allow customers to understand what the product is, login to an existing account or create a new account, register their products using unique product IDs and input personal information that will be helpful in the case of an emergency (i.e, name, gender, age, height, etc.). Users will be able to view inventory based on what product types/combinations they want, add products to their shopping cart, have their questions answered on a FAQ page, and find contact information for the developers.

The website will have an appealing color scheme that's not too "aggressive" and a visually appealing style. All the pages will be linked to each other to allow for easy navigation so that customers can have easy access to all the important pages. The website's About page will contain detailed FAQs for customer convenience and detailed descriptions about the products. Lastly, the Shop page will have an easy-to-use navigation system and products will be intuitively placed with short descriptions and accompanying pictures.

Current Status

Currently the team has met the goals to date and is on track to complete the remaining ones! All the currently implemented features have been compliant with the original specifications of the project and the schedule has been updated with the new issues. Contingency plans have been set in place for the issues we anticipate may cause problems. We hope that the final version of the website will be appealing to users and will encourage them to buy a Flaire.