Spring 2022

INF240a – Website Development

Course Project

Documentation

As part of the required assignments for this course, we were tasked with designing and developing a proper website, through which I decided to model a potential e-commerce clothing store. This website consists of four pages: the landing page (*index.html*), the company "about us" page (*about_us.html*), and two clothing showcase pages (*store_men.html*, *store_women.html*). Aside from HTML and CSS, JavaScript has also been used extensively to implement various features on each page. To better demonstrate this implementation, each webpage will be considered one-by-one, beginning with the landing page. The code for this site may be found in separated folders in the project ZIP file.

Landing Page (*index.html*)
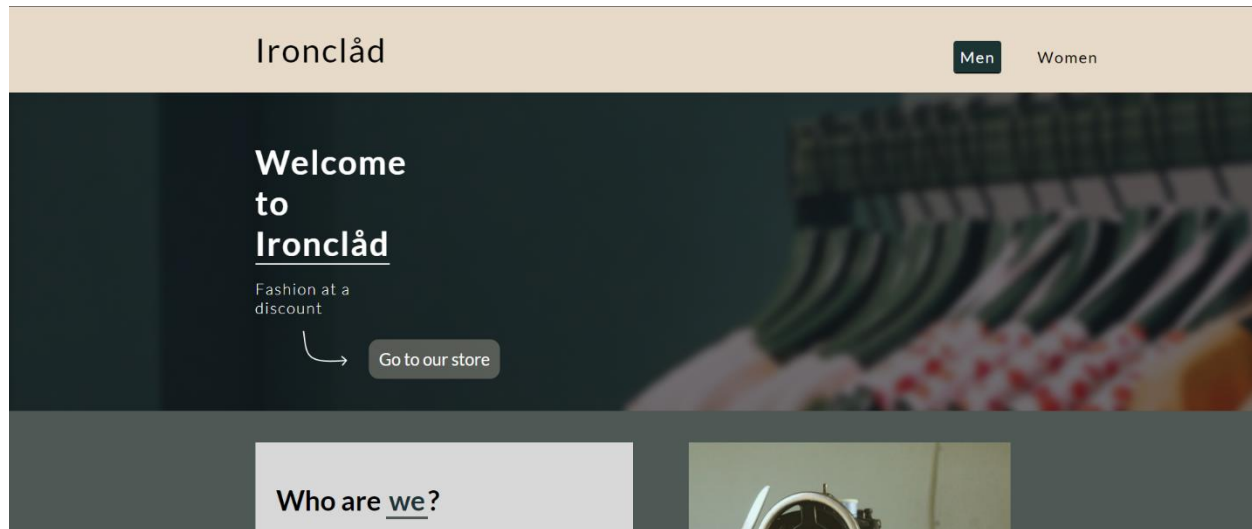
All pages, including the landing page, contain headers and footers featuring similar designs. Apart from the descriptive title, the header also has two buttons (implemented through anchor elements) to select the gender of the customer – a choice which then determines what page the *"Go to our Store"* button redirects to. If *"Men"* is pressed, this button redirects to *store_men.html*; whereas, when *"Women"* is active, it redirects to *store_women.html*. This swap occurs through JavaScript and the chosen gender is depicted graphically to the user by a small underline. The layout for these elements uses CSS flexbox, automatically spacing them based on the available screen width. In addition, they are all sized using relative units (either *em, rem* or percentages), serving as a foundation for potentially making this site responsive. Some responsiveness has indeed been added, mainly by setting the *flex-direction* property (which dictates flex displays to be organized into columns by default) to *column* on smaller screens. Counter-intuitively, this forces flex containers to be placed into rows instead of the default columns. Some shifting is also done to the margins, paddings, and

widths of the elements. Below the "Welcome" section, there is a small description of the company coupled with two anchors linking to the "About Us" page. One can be seen in
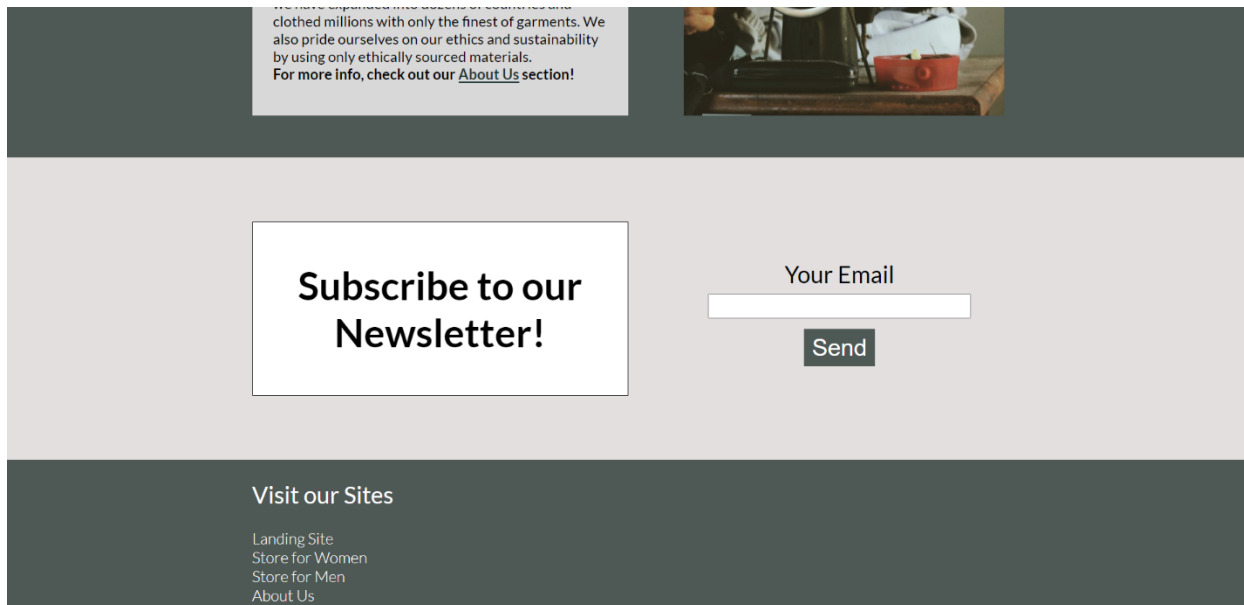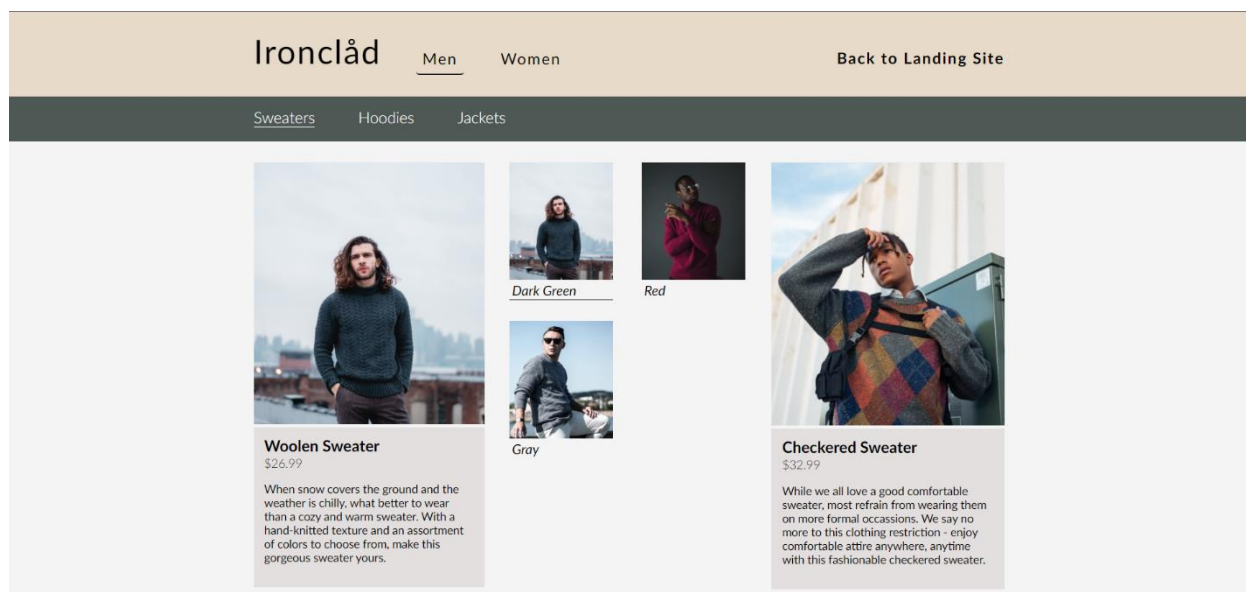

Landing Page 2

the image above as an underlined "we". When hovered over, the background around the word and the font color will change to indicate the presence of a button. This is achieved through the use of box-shadows with the *inset* property, which essentially forces the box-shadow to render on the inside of an element (thereby overriding its default behaviour of rendering on the outside). When hovered over, a box-shadow will appear inside the anchor, with an included *transition* property making the shift look seamless. After that, there is a newsletter section containing a form which asks for the user's email. Lastly, the page contains a footer with navigation links to all pages within the website. This footer looks identical in the other pages, except for the addition of a form allowing users to sign up for the company newsletter (as a separate fully-fledged newsletter section is only included in this landing page). The navigation links (coupled with most links and anchors in the other pages) include animated underlines which

appear only when the links are hovered over. This is implemented through an empty *::before* pseudo-element placed right before the links. By manually giving it a fixed height of 2 pixels and applying a scaling transformation when hovered over, the underline appears on the left when the link is moused over (with this left origin being specified through the *transform-origin* property) and promptly disappears to the right when unhovered.

Store Page (*store_men.html, store_women.html*)

Store Page 1

The header and footer in the store page are the same as the ones described above, other than an additional anchor in the header which links back to the landing page. Right below the header, there is a small strip containing different clothing categories a user might choose to view. The different tabs accessed through this strip are simple *div* elements with their *display* properties set to none by default (except for the first "sweaters" tab which is visible upon first loading the page). When a category is

clicked, a script runs and switches the respective *div*'s display to *flex* (in order to use

CSS Flexbox properties). Clothes are displayed on each tab, with different containers
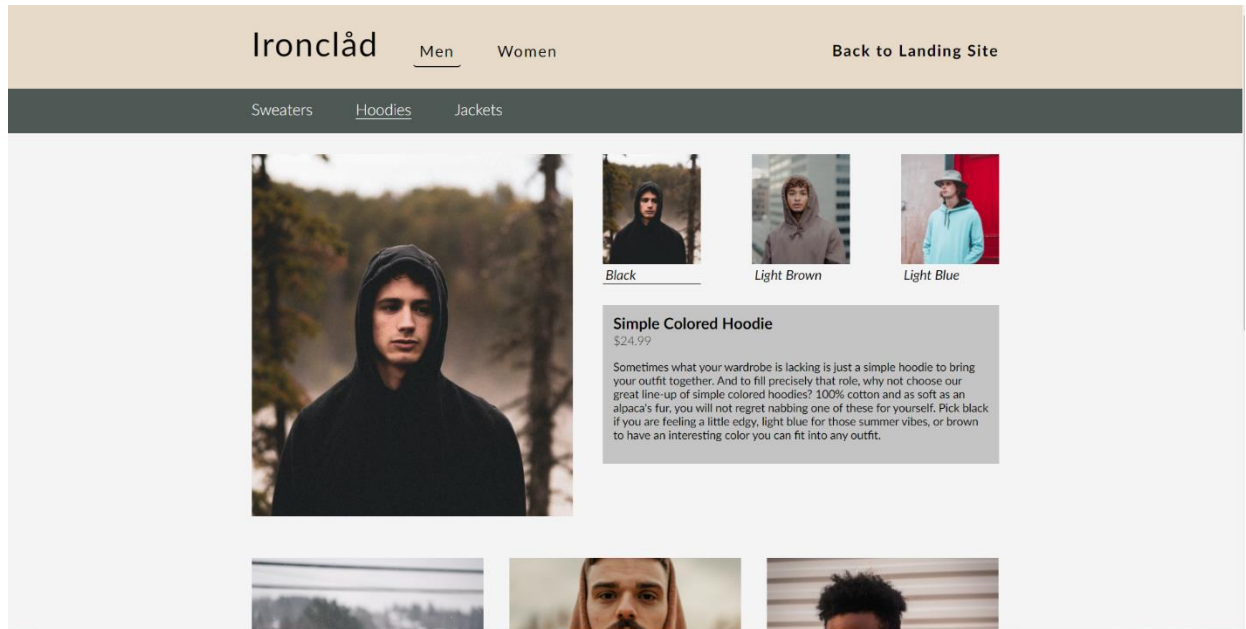
designed to hold their descriptions and images. There is a simple container to display

apparel with no color choice, one to display those with multiple color variants, and a

showcase container intended for special outfit pieces.

When hovering over a color option, the respective main image will temporarily change to display that color (and the thumbnail will turn opaque); whereas, when the color thumbnail is clicked, the main image is completely swapped with the clicked image (implemented through JavaScript).

"About Us" page (*about_us.html*)

About Us Page 1

Store Page 3

The "About Us" page contains various text and images describing the company and its history. In addition, a video and SVG drawing are included. The images have been coded into two slideshows using JavaScript, with the image source paths embedded

inside the *img* elements themselves through the use of *data-** attributes – attributes which allow you to store essentially any textual information inside. The slideshow begins when the user hovers over the images and they swap every 2.5 seconds. Upon unhovering, the slideshow stops.
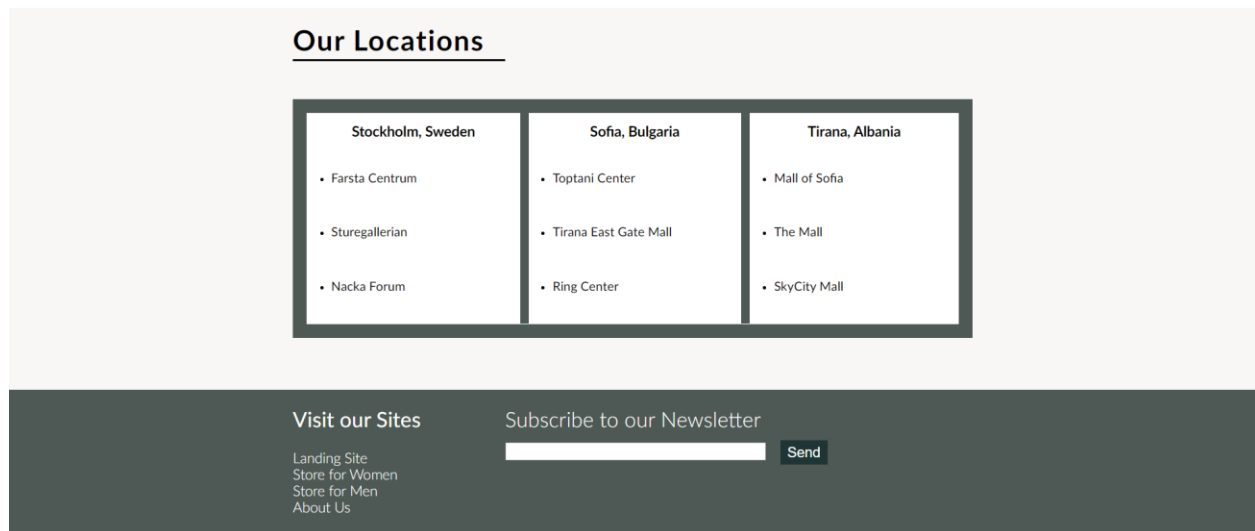
Near the end of a page, a table containing various hypothetical store locations was also added. Each location name also serves as a hyperlink to the appropriate spot in Google Maps.