

CS 2033A – Fall 2024

Website Assignment

Due: Monday, December 2, 2024

Overview

You are creating a new small business and need to develop the website for its online identity. You must first consider what the company is selling – it must be some kind of physical products, not services, and it **CANNOT** be food-related. Come up with a name for your business. Then create an attractive website that catches the eyes of viewers and provides them with the important information about your business and its products. There are several requirements you must follow in the design and development of the website. However, you are given a lot of freedom in terms of the business itself and the overall design and content of the website. Be creative!

Please read **all** the instructions carefully before beginning to work on anything. There are important requirements and reminders that must be considered when working on it to avoid having to undo or redo work. Do not leave this until the day or even week when it's due to do everything. It will take time and thoughtful consideration so begin early and give yourself time.

Overall Requirements

- You must write your own code (No Dreamweaver, HTML5 Editor, etc., and no pre-built templates or themes)
- You may use Bootstrap elements but this is not mandatory. If you do, you **cannot** use a pre-built Bootstrap template

- The site must be a single, scrolling page (do not create multiple pages)
- **Include the following 4 sections:**
 - About
 - Products
 - Contact
 - References
- All images in the website must have appropriate "alt" (alternate text) and "title" (tooltip) properties set (not necessary if the image is loaded from CSS like the parallax image).
- **You must include "enhanced" parallax** (using JS or jQuery in conjunction with CSS) on a background image somewhere
- **You must include some kind of ScrollFire** so that an element appears/grows/changes when you scroll past a certain threshold
- **You must display a day-specific message** or image using JavaScript to determine the day of the week and if-else statements to determine which message or image to display. It can be messages like "Welcome to our store on this Monday", "Welcome to our store on this Tuesday", and so on. It could be different products or deals highlighted each day such as "Monday's Deal: _____", "Tuesday's Deal: _____", and so on. It doesn't matter what you show as long as it is based on the day of the week and each day has a different message/image shown (there must be 7 unique messages/images).
- You must add at least **one CSS animation** somewhere on the website.
- You must add at least **one CSS transition** somewhere on the website.
- The background of the whole page OR at least one section must have a **tilled background texture** from www.transparenttextures.com. This texture image must be downloaded and stored in your img folder.
- You must include a **constantly visible "Back To Top" button** (it can appear as "Top" or an up-arrow if you wish) that stays in one of the lower corners of the page regardless of where you are on the page (it cannot get hidden when you scroll down). When you click this button, it must bring you back to the top of the webpage.
- **Only use your own photos** or copyright-free pictures from online. See the References section below for more details (same policy as Asst 1)

Folder Structure

- Name the project's root folder "business"
- Web page must be named "index.html"
- Within root folder, add subfolders:
 - "css" to contain CSS file(s)
 - "img" to contain all images
 - "js" to contain JavaScript file(s)

Meta Requirements

- The page title property must include your business name
- Use www.favicon.cc (or another site/software) to create a simple Favicon logo that relates to the business and add this icon to the website (i.e., it could be the initial(s) of the company name or a simple shape). Remember to store this image in the "img" folder and update the path in the favicon HTML tag so that it includes "img/" before the filename.
- Add links to external CSS and JavaScript files within the head.
 - Do **not** use **any** inline or internal CSS – **all** styles must be contained within an external .css file (or multiple .css files).
 - You must have at least one JavaScript function contained in an external .js file. It is recommended that ALL your JS functions are contained in external .js files but you are only required to have one; the rest could be internal in the head section of the HTML file.

Website Requirements – Top

- The top section must contain a banner (it can be either designed in Affinity Photo / Photoshop or it can be made from HTML and CSS) with:
 - The name of your business
 - A short, catchy slogan

- An image that relates to your business/products
- The top section must contain a navigation bar with links to each of the sections of the webpage (you will need to make anchors and link to those anchors). The links must have some kind of CSS rollover effect.

Website Requirements – About Section

- Write a summary of the business structure and what you sell (3-5 sentences)
- Include at least 2 pictures that are relevant to the business (the team member pictures described next do **not** count toward these 2 pictures).
- Include a section about the "team"
 - Come up with at least 3 members (could be yourself and 2 fake people, or 3 fake people)
 - For each team member, include a headshot or profile picture, name, position in the company, and a short biography (3-4 sentences)

Website Requirements – Products Section

- Come up with at least 4 **different** (unique) products that your business is selling (do not have the same product in 4 different colours or sizes; they must be 4 different products)
- For each product, include the following information:
 - Product name
 - Product code (make up a code consisting of some combination of letters and numbers for each product and they all must follow the same format)
 - Image of product
 - Description (1-3 sentences)
 - Add to Cart button (no functionality needed, just a basic button or a div with styles is fine – nothing needs to happen when clicked).

Website Requirements – Contact Section

- Create a contact web form with the following input fields and include corresponding labels or use placeholders in the text boxes for each field (where applicable):
 - Name (text input)
 - Phone number (text input)
 - Reason for message (dropdown menu **OR** a group of radio buttons)
 - General inquiry
 - Pricing
 - Product info
 - Shipping
 - Other
 - Product ID (text input) *** details on this field are given in the next bullet point about form modification*
 - Message (textarea)
 - Send (no functionality needed, just a basic button is fine – not a Submit button)
- Perform form modification to hide/show the Product ID textbox (and its label) depending on the selection in the "Reason for message" (based on the selection in the dropdown menu or radio buttons). It must be **hidden initially**. If the user selects "Product info", show this Product ID textbox. If anything else is selected, hide this textbox again.
- Apply "onblur" JavaScript form validation on this contact form to indicate if the entered text in each of the text-based fields is valid or invalid. Show the validations by changing the corresponding fields' text or border colour to green (valid) or red (invalid). The validation conditions for each field are as follows (invalid if the given condition(s) are not met):
 - Name: valid if text is at least 4 characters long and contains no digits (any other characters are considered valid).
 - Phone number: valid if it follows the format: 123 456 7890 (3 digits, space, 3 digits, space, 4 digits)

- Product ID: valid if text matches one of the product codes shown in your Products section above (remember this field will sometimes be hidden, but the validation portion shouldn't be affected by this since it can only be triggered when the field is visible and "blurred").
 - Note: you can use a regular expression or a loop with a Boolean variable or you can even simplify it by simply checking if the typed-in code is an exact match with your 4 product codes using simple if-else statements. Any approach is fine here.
- Message: valid if text is 10-30 (inclusive) characters in length.

Website Requirements – References Section

- Include links to the sites from which you obtained each of the pictures used in your site (including the favicon)
- If you took a picture yourself, you can reference it like "Picture of headphones: taken by me"
- Remember that all pictures you use must be copyright-free (read the References Policies section below)
- Format or lay out the references section cleanly

References Policies

For this course, you are **required** to use copyright-free images only. This means you will not be allowed to do a simple Google Image search and use any image that comes up on there. There will be strict penalties applied if you use copyrighted images.

The following websites are acceptable and encouraged as they have many copyright-free images that are high definition and free to use!

- Pexels <https://www.pexels.com/>

- Unsplash <https://unsplash.com/>
- Pixabay <https://pixabay.com/>
- StockSnap.io <https://stocksnap.io/>
- Negative Space <http://negativespace.co/>
- Life of Pix <http://www.lifeofpix.com/>
- Cupcake <http://cupcake.nilssonlee.se/>

If you find an image on a *different* website that you think is copyright-free, it is **your responsibility** to find the terms and conditions regarding copyright. Sites will usually have a page that explains their copyright policies. If you use an image from a site other than those provided in the list above, you will have to find the site's copyright policy and keep track of the link to that policy. This link will have to be included in your submission on OWL so the TAs can determine whether or not your image is indeed copyright-free. Do not ask the instructor or TA to find this copyright policy for you. Failing to find a copyright policy will result in a penalty. The best option is to just use images from the sites above so that you won't have to look up their policies!

Example: The Pexels policy is found here: <https://www.pexels.com/photo-license/>

Note that Pexels is one of the acceptable sites listed above so you don't have to provide this license link, but this is an example of the kind of policy page you will have to find if you decide to use an image from a site not listed above.

Keep track of the URLs of any images you take from these sites so that you can easily reference them without having to re-find them later.

You are **not** allowed to use an AI image generating system or a text generating tool such as ChatGPT to create any portion of the assignment or the images used for it. Strict penalties will be applied for any use of an AI system regardless of how much it was used for.

Helpful Hints and Reminders

- Link an external CSS file in the head section of an HTML file using:
`<link rel="stylesheet" href="css/filename.css">`
- Link an external JS file in the head section of an HTML file using:
`<script type="text/javascript" src="js/filename.js"></script>`
- If you are loading an image (that is stored in **img**) from a CSS file (that is stored in **css**), you must remember to include `../` in the image path to go up a level, out of `css`, and then include `img/` and the filename. For example: `background-image: url("../img/background.jpg");`
- To insert a Favicon, include the line in the head section of an HTML file:
`<link rel="shortcut icon" href="img/favicon.ico" type="image/xicon">`
- Creating links to bookmarks on the same page involves 2 steps:
 - Create the anchor at the spot where the link will be jumping to. To do this, put your cursor in the spot where you want it and add the HTML: `` (where **AnchorName** is a unique name you want to give it, which should relate to its location)
 - Now add the link using the standard `` tag and for the href value you will use `#AnchorName`, where **AnchorName** is the name of the anchor you want to jump to. This must be the same name you gave the anchor when creating it in the last step.

Submission

The submission process consists of two steps: uploading files to the GAUL server and then submitting your link and relevant information into OWL.

1. Follow the instructions above to create the website including:
 - index.html
 - one or more CSS files stored in a "css" folder
 - one or more JS files stored in a "js" folder

- images stored in an "img" folder
 - a large folder "**business**" containing all the above folders/files
2. Upload this "**business**" folder to GAUL via FTP (WinSCP, FileZilla, etc.):
 - a. Log in with the host name cs2033.gaul.csd.uwo.ca and your UWO login information. The port is 2033 and use SFTP protocol. If you are using FileZilla, you may need to include sftp:// before the host name.
 - b. When logged in, ensure you are in your root area (not inside a lab or assignment folder) and transfer your business folder from your local side (computer or USB) to the remote side (server).
 3. Verify that the files uploaded properly:
 - a. Open the following link (replacing **username** with your Western username):
<https://cs2033.gaul.csd.uwo.ca/~username/business/>
 - b. You should see your main webpage load there. If you don't, verify the filename is index.html and retry the previous step to upload the files.
 - c. If any images do not load properly in the website, check that they are named correctly. When the site is online, the filenames are case-sensitive (locally they might be case-insensitive) and that they are referenced correctly as relative paths. Also check that the filesize of each image is under 75 MB. If any file is about 75 MB or larger, the server will not be able to handle it so you will have to downsample it and try again. Make sure everything on the website loads and works as expected.
 4. Submit the link on OWL:
 - a. Navigate to the **Assignment 2: Website Design** page in OWL (in the Assessments > Assignments page).
 - b. Copy the link of your "business" folder into the submission text box (replacing **username** with your Western username):
<https://cs2033.gaul.csd.uwo.ca/~username/business/>
 - c. Beneath this link, write the words "Websites Notes:" and then provide bullet point notes to explain where you included your CSS animation, transition, transparent texture background, parallax effect, ScrollFire effect, and any other requirements that might be difficult for the TA to find on their own. This is a requirement.

- d. Submit the assignment on OWL. Do not just save it and leave. Ensure that it is submitted! Check your email right away and look for the automatic OWL email verifying your submission. Keep this email in case of any discrepancy.

Important: do not change **any** of your website files (even one minor change) after the last possible day to submit (2 days after the due date) or it will not be accepted and will be given a mark of 0. The timestamps of the files on the server will be investigated when checking for lateness.