

ITEC 2380 – Web Development Final Project

OVERVIEW:

Your final project will be a team project. Each team will be randomly assigned and consist of two to five members, which, [based on research](#), is an optimal size for a team. The ultimate size of the team will depend on the class size and be at the discretion of the instructor. Completing the project individually is not an option, nor is selecting your own team members. The reasoning and purpose of this is to simulate working on a development team. Starting out in the workforce, you generally will not be selecting your own team but will work within an existing or newly developed team where you will need to be able to work with individuals from different backgrounds and skill levels.

Teams are expected to communicate regularly and contribute their share of work to this project. I will create discussion areas within D2L for each team. All discussions should occur within D2L (one thread per team). This allows me to see if individuals are not being responsive to the team, which will negatively impact that individual's grade. Teams is another option. However, you will need to receive prior approval from the instructor to use Teams.

GRADING:

The final project is worth 30% of your final grade in the course. The final project will consist of multiple parts, each worth 100 points. Your first part of the final project will be a Progress Report which serves as a checkpoint for some of your deliverables. This will allow me to provide you with some feedback before you submit your final project. The Progress Report will be worth 10% of your total grade on the final project. You will also be required to submit your final website (40% of final grade), a presentation (20% of final grade), website documentation (20% of final grade), a reflection paper (10% of your final grade), and a Team Participation Assessment Form which will be used to assess each individual's contribution to the team project.

Grade Example:

Progress Report:	$95 \times 10\% = 9.5$
Website:	$85 \times 40\% = 34$
Presentation:	$90 \times 20\% = 18$
Documentation:	$80 \times 20\% = 16$
Reflection:	$95 \times 10\% = 9.5$
Final Grade:	$9.5 + 34 + 18 + 16 + 9.5 = \mathbf{87}$

FINAL PROJECT DESCRIPTION:

Paw Paw's Bakery is a local for-profit company specializing in handmade baked pet treats for cats and dogs. Paw Paw's Bakery has a physical location in Warner Robins, GA, but is looking to expand its customer base by increasing its online presence. The store currently has no website,

but it hopes that a website will help expand its reach and raise awareness about its products. The company does not currently sell products through the website. However, they plan to expand to online sales soon. The website should, at minimum, accomplish the following objectives:

1. Explain who they are and their mission.
2. Showcase each of their products.
3. Display costs of all products.
4. Contain a web form to collect information from potential customers who would like to sign up for their newsletter, which contains news about new products and promotions.
5. Tell people where they are located, store hours, and how to contact their company (phone/email/social media/etc.).
6. Provide details about their upcoming digital store.

The owner of Paw Paw's Bakery has decided to contract a development team to create the website. Each team will simulate competing for the development of this site by developing a prototype website with associated website documentation and a presentation. The prototype website should be at least a six-page website (home page plus five content pages).

WEBSITE REQUIREMENTS:

- Use HTML5 syntax with semantic tags.
- Use W3CSS or Bootstrap framework.
- Use an external CSS.
 - The site should **NOT** contain inline styling; all styling should be through frameworks or external CSS.
 - The use of multiple external CSS documents is allowed but should not impact the consistent branding elements outlined below.
- The website should contain a mixture of written text, images/multimedia, and hyperlinks. All content should be appropriate for the requested site, no filler Latin text or use of nonsensical words.
- All written content should be grammatically correct with proper capitalization and punctuation.
- All images are in their own folder with relative paths within your HTML document.
- The site should look professionally developed both in its presentation and the HTML/CSS development. Clean HTML/CSS (JS as well if used) with appropriate comments, spacing, indentation, etc.
- Consistent branding and navigation throughout the website. These elements should be the same on every page:
 - Color scheme and typography
 - Logo
 - Header
 - Navigation
 - Footer
- The website utilizes a multi-column design (2 or more) on at least one page using responsive grid techniques.

- Responsive design techniques are implemented throughout the website to facilitate viewing on desktop, tablet, and smartphone devices.
- Use at least one unordered or ordered list.
- Implement a table with table headers.
- Utilize a web form.
- The site should include pictures of products along with a description and price.
- Pages should display correctly in major browsers (I.E., Firefox, Opera, and Chrome)
- Social media image links
- Alternative text for graphical navigations, images, and videos where appropriate.
- Web Accessibility checked, and any errors corrected.
- Check the readability of your site. Is it appropriate for your target audience? Update accordingly if necessary based on testing.
- The site must be uploaded to the WebDav server, and a URL must be provided to access the site.
- The site should **NOT** contain any errors in the HTML or CSS; use your validators to find and clear any errors.

DELIVERABLES:

Deliverable 1: Deliverable 1 will be completed as a team. Each team will create a website based on the criteria outlined above. **Each team member must equally contribute to the creation of the website.** Use HTML/CSS comments and the Final Project Tracker Form to indicate what each team member completed. The site must be uploaded to the WebDav server, and the URL to the site listed in the D2L comments section. All files associated with the website must be zipped and submitted in D2L (This means all HTML, CSS, images folders and images, etc.). Each team member will submit an identical submission.

Deliverable 2: Deliverable 2 will be completed as a team. Each team will create a report that documents their website. The report should look professional and should include the following:

- Explain your [site structure](#) and include your [flowchart diagram](#).
- [Storyboard your website](#) with wireframes/sketches/etc.
 - Wireframe Options
 - <https://moqups.com/>
 - <https://www.figma.com/wireframe-tool/>
 - Create or select your own.
 - Insert in the report as an image.
- Choose a color scheme and include relevant color codes and samples.
 - Color generator options:
 - <https://coolors.co/>
 - https://www.w3schools.com/colors/colors_picker.asp
 - <https://www.canva.com/colors/color-wheel/>
 - You can use one of these or other color scheme generators.
 - Provide a sample of the colors and color codes you plan to use on your site.

- Document WAVE accessibility Results (<https://wave.webaim.org/>). Errors should be cleared. If not, explain why?
- Document WebFX readability Results (<https://www.webfx.com/tools/read-able/>). Explain these results. What do they mean? Is the site readable for its target audience?
- Document PageSpeed Insights optimization results (<https://developers.google.com/speed/pagespeed/insights/>). Explain these results. What do they say about the site you created? What does this tell the owner about the site you created?
- Documentation of **usability test** results with real people. I encourage you to seek out friends and family outside of the classroom.
 - 5 people is sufficient
 - Tell who the people are anonymously.
 - Ex. Male, age 43, lives in Warner Robins and works in Macon, etc.
 - Document the process of how you enhanced your website using feedback.
 - This isn't a comprehensive usability test, but these sites should help guide you on how to generally conduct your testing:
 - <https://www.hotjar.com/usability-testing/>
 - <https://www.browserstack.com/guide/website-usability-testing>
- If awarded the contract, explain the 'next step' to further develop this site for the organization.

Deliverable 3: Deliverable 3 will be completed as a team. Each team will create a recorded presentation that will be used as the team's pitch to the owner of Paw Paw's Bakery. I recommend using something like [OBS Studio](#). Videos can be hosted on YouTube, MS Stream, or OneDrive. **However, make sure you have granted me permission to access the presentation.** The presentation should include a demonstration of the website and showcase what your team has developed for the company. It should also include elements from your documentation: the site structure and diagram, the color scheme selected, test results (WAVE, WebFX, PageSpeed, usability), and the next steps. Project Tracker **must** also be covered in the presentation, explaining how each team member contributed to the project. Each team member must have a speaking part in the presentation. The presentation should be a single presentation, not multiple videos for each member. Try to keep the video to no more than 10 minutes, but take the time you need to complete all the requirements.

Deliverable 4: Each team member will complete Deliverable 4 individually. Each team member will submit a short reflection on any challenges they experienced or things they learned during the process of completing the final project. The report should be approximately one page and in Arial or Calibri 12-point font with 1.5 line spacing. Submit as a Word or PDF document.

Deliverable 5: Deliverable 5 will be completed as a team. **Each team will submit their completed Final Project Tracker Form.** Your individual contribution will be assessed with this form, along with my evaluation of the team's discussions. The form submitted here must contain the same information that is covered in the video presentation and report.