DESCRIPTION

The primary purpose of this assignment is to expand your front-end web development knowledge and skills. To accomplish this goal, you will create a real-world website for Phipps Conservatory.

Assignment Background

Phipps Conservatory and Botanical Gardens is a complex of buildings and grounds set in Schenley Park, Pittsburgh, Pennsylvania (near the Carnegie Museums in Oakland). Phipps Conservatory, a great steel and glass Victorian greenhouse, has been inviting visitors to explore the beauty and mysteries of plants since 1893. Set amidst one of Pittsburgh's largest greenspaces, Schenley Park, Phipps Conservatory stands as a cultural and architectural centerpiece of the city's Oakland neighborhood.

Assume that Phipps Conservatory is hoping to attract more visitors and volunteers from local colleges and universities. As a free-lance web development consultant, you have been hired to design and build a new version of the website directed specifically at college students. The purpose of the website is to showcase Phipps and promote their various exhibits. Phipps has provided you with a detailed overview of their expectations and requirements (see Appendix A). Phipps has provided you with some initial content for the website (attached in the WebDevProject folder). You have permission to develop and organize additional content as necessary. You may also use lorem ipsum place-holder text for content (not for navigation or headings).

Please note that all images and descriptions and most narrative is courtesy of the Phipps Conservatory. Any reproduction of this material beyond the class project must be coordinated with the Rights and Reproduction / Photo Services office at Phipps Conservatory. All materials should be cited in your website.

Note: You will work on this **assignment individually** and prepare a list of features that you feel demonstrate your own creative abilities and contribution. You may create your own images, logos, text, etc.

ASSIGNMENT LOGISTICS

The web development assignment is worth 10% of your final course grade. Faculty and teaching assistants will be available to assist with the assignment during the semester as well on an as-needed basis or during office hours. Keep in mind, additional time may be required outside of classroom to complete the assignment. Please consider Chrome the official browser of our class (e.g., your websites will be viewed and graded in Chrome).

Submit your website to the dropbox on Blackboard by 12:00 PM (noon) on Thursday, March 26, 2015. Late submissions with a ten percent penalty will be allowed for a maximum of two days.

You must submit a zip file (appropriately named as webdevproject-lastname.zip (e.g., webdevproject-quesenberry.zip)) of all your webpages, stylesheets (.css), javascript files (.js), any necessary supporting files or graphics, and supporting documentation.

A penalty of five percent will be applied if the html files use absolute addresses (excluding the external links) (e.g., unzipping the project MUST yield a functional website in a browser).

APPENDIX A – CLIENT CORRESPONDENCE

Phipps Conservatory
One Schenley Drive
Pittsburgh, PA 15213
http://phipps.conservatory.org/

February 25, 2015

Congratulations! We are delighted to announce that you have been selected to develop our new Phipps Conservatory website focused on building stronger connections with college students in the western Pennsylvania area.

Phipps Conservatory and Botanical Gardens is a complex of buildings and grounds set in Schenley Park, Pittsburgh, Pennsylvania (near the Carnegie Museums in Oakland). Phipps Conservatory, a great steel and glass Victorian greenhouse, has been inviting visitors to explore the beauty and mysteries of plants since 1893. Set amidst one of Pittsburgh's largest greenspaces, Schenley Park, Phipps Conservatory stands as a cultural and architectural centerpiece of the city's Oakland neighborhood. As a part of our new strategic plan, we hope to build stronger connections with the many colleges and universities located in the area. We view this website initiative as a major cornerstone of the effort.

As discussed in our project kick-off meeting, outlined below are the critical components of the new website initiative:

Engaging and clean design
The website must remain consistent with the Phipps Conservatory brand (see the attached brand manual) but should depart in ways which will appeal to college students. Logo usage and writing styles must adhere to the brand manual. You may alter design layouts, typography and color palettes where appropriate. The layout must follow a grid structure. We also require consistent, well-placed and informative navigation – something that encourages students to get involved with Phipps.

Your design must be understandable and readable with clear headings, where appropriate, and sufficient "white space." The website should, at a minimum, use the following HTML tags: page title, lists (both ordered and unordered), headings and horizontal lines, which are appropriately styled. The home page must be named index.html. The website must consist of at least three individually linked pages.

All layout and design must be controlled with CSS (HTML table layouts are prohibited). Any formatting (colors, backgrounds, fonts, text control, borders, etc.) created with HTML tags are prohibited. The <font> tag should NOT be used. You may create multiple stylesheets for your website, although your primary stylesheet must be named styles.css. Your stylesheets must be located in a sub-directory folder named css.

You should submit all wireframes (low and high fidelity) in the "wireframes" subfolder in the documentation folder of your project. You should include at least three versions of your wireframes for your home page and at least one version for every other page in your website.

Incorporation of relevant content

The new website will not replace our existing website, but rather will aggregate, condense and present the most relevant information for college students. Our current website has significant content about Phipps and we want you to incorporate it where relevant (see the attached file of what we believe is the most critical content). Again feel free to expand as needed. We hope you can organize the key information for college students, so that they can quickly navigate the material. We also hope you can improve the readability of the content and include interactions such as tabs or accordions for easy reading.

We also believe rich images and videos of our facility will attract new visitors. We would like to see these images incorporated in the website in some interactive way such as lightbox galleries or slideshows. We would also like to see videos included in some meaningful way.

> Details on working with a jQuery effect for photo lightboxes (lightbox2) can be found at:
> http://lokeshdhakar.com/projects/lightbox2/

The website must include information about two or more upcoming exhibitions (including content and media). We do have a clear idea of how this should be presented and we are open to suggestions.

Solicit student involvement

We want to encourage students to volunteer at Phipps and want to include content that will engage them. We think it would be useful to include a list of helpful links to relevant information. The website must include at least five links to external websites. One link must be a graphic/image. The rest can be text or graphics/images. We believe this might be a good opportunity to include links to our various social media platforms. We also think sharing student testimonials is important.

We also want to provide a contact form where students can submit their names (required), zip code (not required but if entered must be a five digit code), email address (required as an email address), how they hope to be involved and if they would like to subscribe to the newsletter (not required as a checkbox). All fields should be appropriately sized and include information to the user (e.g., if required or not). We conduct most of our correspondence via email. The form can be submitted to us via email to (generalinformation@pc.org).

We hope that including statistical information on our college visitors might encourage some friendly competition. We have tracked visitors by college (Carnegie Mellon, University of Pittsburgh and Duquesne University) since January 2014. We would like to include an interactive graph on the website to help encourage more visitors.

> Details on working with Highcharts effects for graphing can be found at:
> http://www.highcharts.com/

Connect with Phipps Conservatory

We have also found that some students have difficulty finding our hours of operation and location. The website must include contact information for Phipps, address (with city, state and zip code), phone number, email address (should be clickable to send email (mailto:), website, and photo (appropriately sized for the page). This information must be included in a HTML table. Our hours of operation should be included. Finally, we would like to use the Google Maps API in the website so visitors can see a map of our location.

> Details on working with the Google Maps API can be found at:
> http://code.google.com/apis/maps/documentation/javascript/tutorial.html

Considerations for responsive design

We would like you to focus on the implementation of the new website for desktop users (with Google Chrome). We would also like you to provide high-fidelity wireframes (at least five pages) for smartphone users that could be implemented at a future date. These wireframes must be included in the "wireframes" subfolder in documentation folder of your project.

Documentation

We would like you to submit all of your work in one zipped folder. This folder should contain all of your web development code (HTML files, CSS files in a folder named css, JavaScript files in a folder named js, images and media in a folder named images). We also require that you include several documentation elements. First, from your planning and analysis efforts, you should include a final copy of your a project plan, and a list of user stories organized by priority. Second, in terms of design, you should include multiple versions of your wireframes (at least three versions of the home page and one version of each other page in your website – these should be both low and high fidelity). Please include a brief narrative of how your design is intended to reach a college student user base and how your design evolved over several iterations. Finally, in terms of design, you should include multiple versions of your high-fidelity mobile / responsive wireframes (at least five pages) for smartphone users.

Please do not hesitate to contact me with questions or concerns at jquesenberry@cmu.edu. I look forward to receiving your project materials on or before 12:00PM noon on Thursday, March 26, 2015.

Sincerely,

John Doe

Executive Director
Phipps Conservatory

GRADING RUBRIC

CATEGORY	Excellent	Good	Satisfactory	Needs Improvement
Content (45%)	All information provided by the student on the website is accurate and all the requirements of the assignment have been met. In other words, there is sufficient content in this website to learn about Phipps Conservatory and build stronger connections with local college and university students.	Almost all the information provided by the student on the website is accurate and all requirements of the assignment have been met. Or all the information is accurate but not all of the requirements of the assignment were met. Information is not complete.	Almost all of the information provided by the student on the website is accurate and almost all of the requirements have been met. If there is little information on the website, then it is satisfactory. If users cannot find what they need on your website, it is satisfactory.	There are several inaccuracies in the content provided by the students OR many of the requirements were not met. Not enough content, very incomplete.
User Centered Design (10%)	The author has made an exceptional attempt to make the content of this website interesting to the people for whom it is intended. The documentation reflection demonstrates depth of thinking about user needs and wireframe iterations.	The author has tried to make the content of this website interesting to the people for whom it is intended. The documentation reflection demonstrates some thinking about user needs and wireframe iterations.	The author has put lots of information in the website but there is little evidence that the person tried to present the information in an interesting way. The documentation reflection demonstrates initial thinking about user needs and wireframe iterations.	The author has provided only the minimum amount of information and has not transformed the information to make it more interesting to the audience (e.g., has only provided a list of links to the content of others). The documentation reflection is missing or does not demonstrate consideration about user needs and wireframe iterations.
Learning of Material (10%)	The student has an exceptional understanding of the skills used to create the website. The code comments and supporting documentation detail the procedures used to make the website.	The student has a good understanding of the skills used to create the website. The code comments and supporting documentation give some insight into the procedure used to create the website.	The student has a fair understanding of the skills used to create the website. The code comments and supporting documentation give little insight into the procedure used to create the website.	Student did not appear to learn much from this project. The code or the supporting documentation do not give much information about the procedures used to create the website.
Layout (5%)	The website has an exceptionally attractive and usable layout. It is easy to locate all important elements. White space, graphic elements and/or alignment are used effectively to organize material.	The webpages have an attractive and usable layout. It is easy to locate all important elements.	The webpages have a usable layout, but may appear busy or boring. It is easy to locate most of the important elements.	The web pages are cluttered looking or confusing. It is often difficult to locate important elements.

CATEGORY	Excellent	Good	Satisfactory	Needs Improvement
Navigation, Background and Fonts (5%)	Links for navigation are clearly labeled, consistently placed, allows the reader to easily move from a page to related pages (forward and back), and take the reader where s/he expects to go. A user does not become lost. Background is exceptionally attractive, consistent across pages, adds to the theme or purpose of the site, and does not detract from readability. The fonts are consistent, easy to read and point size varies appropriately for headings and text. Use of font styles is used consistently and improves readability.	Links for navigation are clearly labeled, allows the reader to easily move from a page to related pages (forward and back), and internal links take the reader where s/he expects to go. A user rarely becomes lost. Background is attractive, consistent across pages, adds to the theme or purpose of the site, and does not detract from readability. The fonts are consistent, easy to read and point size varies appropriately for headings and text.	Links for navigation take the reader where s/he expects to go, but some needed links seem to be missing. A user sometimes gets lost. Background is consistent across pages and does not detract from readability. The fonts are consistent and point size varies appropriately for headings and text.	Some links do not take the reader to the sites described. A user typically feels lost. Background detracts from the readability of the site. A wide variety of fonts, styles and point sizes was used.
Graphics (10%)	Graphics are related to the theme/purpose of the website, are thoughtfully cropped, are of high quality and enhance reader interest or understanding. There are no broken images. Creative uses of lightboxes or image galleries were implemented.	Graphics are related to the theme/purpose of the website, are of good quality and enhance reader interest or understanding. There are no broken images. Basic uses of lightboxes or image galleries were implemented.	Graphics are related to the theme/purpose of the website, and are of good quality. There may be a few broken images. Initial uses of lightboxes or image galleries were implemented.	Graphics seem randomly chosen, are of low quality, OR distract the reader. Many images are broken. No lightboxes or image galleries were implemented.
Work Ethic (10%)	Students always use classroom project time well. Conversations are primarily focused on the project and things needed to get the work done and are held in a manner that typically does not disrupt others.	Students usually use classroom project time well. Most conversations are focused on the project and things needed to get the work done and are held in a manner that typically does not disrupt others.	Students usually use classroom project time well, but occasionally distract others from their work.	Students do not use classroom project time well OR typically are disruptive to the work of others.
General Presentation (5%)	Every webpage contains authorship and date in the comments of your code. Fair use guidelines are followed with clear, easy-to-locate and accurate citations for all borrowed material. There are either no spelling or grammatical errors.	Almost all webpages contain authorship and date in the comments of your code. Fair use guidelines are followed with clear, easy-to-locate and accurate citations for almost all borrowed material. There are a few spelling and/or grammatical errors in the entire site.	Most (75-80%) webpages contain authorship and date in the comments of your code. Fair use guidelines are followed with clear, easy-to-locate and accurate citations for most borrowed material. There are several spelling and/or grammatical errors in the entire site.	Several webpages do not contain authorship or date in the comments of your code. Borrowed materials are not properly documented OR material was borrowed without permission. There are maybe many spelling and/or grammatical errors in the entire site.