

Assignment #1

Front-End Development

GROUP WORK (Project VI Groups)

Due Date: See Instructional Plan

Please provide your answers directly below each question and submit this Assignment document. A code snippet or reference to where in your code you answered each question is required. Please do not simply submit your raw code without an explanation. Any question that does not meet these requirements will not be awarded any marks.

Part 1: HTML

1. [4 marks] Go to <https://github.com/> and set up a GitHub account for this course and for the project. *Include a link to your GitHub repository(s) you will use for the project when you hand in this assignment.*
2. [4 marks] Read the guide at <https://docs.github.com/en/get-started/quickstart> and answer the following questions:
 - a. What is a *branch* and how is it different from a *master* branch?
 - b. What is a *commit*? Are commits made to a branch or to the master? Explain the importance of commit messages.
 - c. What is a *pull request*? How will pull requests be useful in Project VI?
 - d. What happens when you initiate a *merge*?
 - e. Include a link to your hello-world repository, created in the hello-world activity
3. [4 marks] Set up Git and/or GitHub Desktop on your computer, create a local *and* remote repository using the Git/GitHub resources provided in class. Include a screenshot of the repos on your computer and on GitHub and provide a link to your remote repository. Make sure you can git push and git pull between local and remote repositories.

Note:

- You should set up a Git repository in the same directory as your server (/var/www/html or /htdocs folder) so that you will be able to synchronize changes between your local and remote server via a simple git pull.
4. [4 marks] Build the **About Project VI** (about.html) page and a **Home Page** (index.html) page and upload to your GitHub repository for Project VI. Please include a link to both web pages in your submission
 5. [4 marks] Build the **Project Plan** page and a **Log Book** page for each member in your group and upload to your Project VI repository. Upload any References or Specification Sheets you have for Project into a 'references' folder and link to them from you Project Plan page. Please include a link to all web pages in your submission.
 6. [4 marks] Add links between your Home Page and all the other pages in your project website. At the bottom of your Log book add a link back to the Top of the same page. Experiment in building a menu that can be pasted to every page of your site (hint: use an unordered list for the menu items)

7. [4 marks] Add a picture of yourself to your log book page and add a caption. Add a picture of your team to the 'About' page and add a caption. Create a logo for your team and add it to your homepage.
8. [4 marks] Create a Gantt chart of your project plan and add it to your groups Project Plan page. The top row should contain a column for each week (Weeks 1-14) in a table header. The first column should contain the individual tasks, also within a table header. In each cell, place the initials of the team member responsible for that task in a given week.
9. [8 marks] Create two new pages on your project website: A **Login** page (where users can log into restricted access pages on your site) and a **Request Access page** (where users can request an account for access to restricted content). Your login page will need a field for a Username and for a Password as well as a link to your Request Access page if they would like to request an account. Your Request Access page must have all the fields necessary for the user to enter their personal information (you may define the necessary fields). Create two PHP pages (one for Login page and one for Request Access page) and have them echo the values input to the forms. Please submit the PHP code separately as it will not run in GitHub pages. Ensure your home page links to your Login page.
10. [4 marks] Add a map to the Cambridge campus to the About page
11. [4 marks] Add <meta> tags for author (team member responsible for the given page), description, robots and pragma to all your pages
12. [4 marks] Add a Copyright © Your Name to each of the pages you are the author of
13. [4 marks] Make a short video to introduce your project and team members and add it to the About page of your project website.

Part 2: CSS

14. [8 marks] We are going to add a **Project Details** page to the site which we will style with CSS. We will also add a link to the Project Charter to this page.
 - a. To get started complete the following steps:
 - i. Copy the HTML file from https://github.com/mgalleconestoga/Project-6/blob/master/proj_details.html to your Project VI site.
 - ii. Download the two images from <https://github.com/mgalleconestoga/Project-6/blob/master/images/fig1.jpg> and <https://github.com/mgalleconestoga/Project-6/blob/master/images/fig2.jpg> and copy to your /images folder with the names fig1.jpg and fig2.jpg.
 - iii. Download the Project Charter from eConestoga and place it into your /documents folder and name it Project_Charter.pdf (it should match the link at the bottom of the Project Details page you downloaded).
 - iv. Add a link from the **About** page to this page
 - v. Create a CSS stylesheet called 'project_details_style.css' and save it to the /css folder on your site (should match link at top of HTML page)
 - b. Using only CSS format the text of the Project Details page according to the following **specification**:
 - i. Font family must be Georgia, or as a last resort serif
 - ii. Font size: Paragraph/list text (100%), H1 text (160%), H2 text (125%)
 - iii. Paragraph and list text: Line height of 20px and text alignment justified
 - iv. The first line of every paragraph must be indented by (15) pixels
 - v. Images: set the height to 300px
 - vi. Figure captions must be aligned center, italic with a font size of 90%

- vii. Underline, bold, italicize text so that your page looks like the one at https://github.com/mgalleconestoga/Project-6/blob/master/proj_details.html
- Elements targeted by class are in red (don't color yours red)
 - Elements targeted by id are in blue (don't color yours blue)
15. [4 marks] Create a specification for the text in the rest of the pages on your site. Implement these specifications by creating a new CSS sheet and linking all of your pages to it. When you modify this sheet, all of the pages on your site will change (and look the same).
16. [4 marks] Edit your `project_details_style.css` sheet to:
- Place the contents of the entire page in a 950px box, add a padding of 10px and center it on the page. Add a 2px border that is solid and black
 - Center the two figures and images on the page
 - Add borders to the figure and image elements (2px, solid, green/blue)
 - Add a box shadow to the images: 10px left and 10px down, blur radius 5px, gray
 - Add rounded corners to the figure boxes: 25px radius
17. [4 marks] Style the Request Access page so that the inputs are aligned. Add your own design elements to the fieldsets, form boxes and buttons.
18. [4 marks] Create a custom button using an image rollover to replace the 'Request Access' link on the Login page. You may use a sprite (single image with all 3 buttons for :link, :hover and :active states) as an alternative.
19. [4 marks] Structure the pages in your project website using HTML5 layout elements. Ensure that older browsers that do not know the new HTML5 elements will render them as block-level elements.
20. [12 marks] Following Steps 1 – 7 from the lecture slides, structure the pages of your project website to use Bootstrap. In step 7, read the primary resource and style any HTML elements on your pages using Bootstrap styles. In step 6, produce a CSS stylesheet for any custom styles or custom breakpoints you would like to use.
21. [4 marks] Add your age and a Copyright with a date (should update yearly) to your short Bio in the project (see code in slides).
22. [4 marks] Add the current date and time to the home page of your Project website.
23. [4 marks] Add event listeners to the User Login page on your Project website. For both the Username and password fields, make sure they are both at least 7 characters.
24. [4 marks] In the User Login page of your Project website, give focus to the Username text input when the page has loaded using a `load` event.
25. [4 marks] In the Request Access page of your Project website, add the number of characters remaining in a `<textarea>` box. If the user enters more than 180 characters give the user a message that they have exceeded that maximum number of characters allowed.
26. [8 marks] Use the JavaScript form validation techniques learned in class to ensure the user has completed all required fields in the form on the Request Access page of your project website.

Marking Scheme: See Rubric in eConestoga

PLEASE INCLUDE A SCREEN CAPTURE WHEN POSSIBLE IN YOUR SUBMISSION