Final Project

Due date: Dec 5, 2023, 4:00am

Objective

- Design, develop, and publish a website using HTML, CSS, and client-side JavaScript.
- Apply a front-end library to style a website.

Overview

In the final project, you will implement a website for an (imaginary) company that offers some type of service. The type of service of the company is your choice. Here are just a few example themes:

- Santa Claus hiring
- Professional potty training
- Dog meal catering

The company's customers and potential customers are the target audience of the site. The site must include a homepage, a page displaying details about the offered services, and a page with a price calculator that allows a site visitor to enter and select different service options in a form and then displays a quote for the entered services.

Requirements

Required components of the pages and the final project are listed below. Read also the grading criteria for grade-specific expectations.

- **Your site has to consist of a homepage and at least three additional pages**. A navigation bar allows easy navigation between the pages.
- **Use Bootstrap** to style your site. You are not allowed to use any other libraries or frameworks than Bootstrap. (It would be very hard to grade projects fairly.)
    - Your site has to use at least three Bootstrap components that have not been used in Lab 12 or Lab 13. The left side menu at the Bootstrap Documentation lists the components in alphabetical order from Accordion to Tooltips.
    - Create a simple text file, called readme.txt, that includes the name of each Bootstrap component and the filename and line number(s) in the file where the component is implemented. (I will need this document for grading purposes as I will not be able to search through everybody's files to find these features.)
- **Include a form** with at least three different types of input fields, for example, a dropdown box, a checkbox, radio buttons, and textual input, in addition to a submit button to implement a quote calculator.

  - JavaScript code is used to pre-populate some form component(s) with preset form options. The different options have to be retrieved from a hard-coded array. For example, a drop-down box is populated with the array elements presenting valid service days, or a list of checkboxes is dynamically generated from an array with service options. If the content of the hard-coded array is changed, the form is updated without making any additional changes to the HTML or JavaScript code.
- **The form fields have to be validated**.
  - Form fields must be validated as soon as a value has been entered/selected or when the form is submitted.
  - Feedback is displayed for each invalid form field on the form using Bootstrap features or using your own JavaScript code. Do not use an alert dialog to display feedback.
- **Display the result of the price calculation** after the form has been submitted with valid form fields. The result has to be hidden if the form is resubmitted with invalid data.
- **Follow best web design design practices**, including best practices to make your site accessible and proper indentation of all HTML, CSS, and JavaScript code.
- **The site has to be responsive**, i.e. it is styled for use by smartphones, tablets, and desktops.
- **Mozilla Firefox, Microsoft Edge, and Google Chrome must render each page**.
- **Use a Git repository** during the development process. Make regular commits. Since the repository has to be submitted as part of this project, include the repository in the folder containing your website.

Publishing of Website

You have to publish your personal website on the Internet. You may use your account on the UWG student server or a different service to publish your website if you want to. You need to enter the URL of your website in the textbox on the submission site. The website has to be available on the Internet from the due date on Dec 5 (4 am) to Dec 12 (4 am).

Submission

Archive the folder that contains ALL files with your solution using the ZIP format:

- All files and folders that are part of your website. Do not include libraries or style sheets that your site accesses from a Content Delivery Network.
- The Git repository.
- The readme text file that names your implemented Bootstrap components and their location.

Include your name in the filename of the zip file, for example, *KermitTheFrogFinalProject.zip*. Submit the zip file on the course website before the due date.

Enter the URL of your published website in the textbox of the submission page on the course website.

Grading

The purpose of this project is to apply what you have learned in this class and to demonstrate that you have a good understanding of how HTML, CSS, and JavaScript work and that you can apply a front-end library to style your site. Therefore, design your site so that it shows off your skills and demonstrates what you have learned in this course. You will not receive points for refactoring another person's code, and you will not receive points for including features that trail off too far from what has been covered in class, like server-side scripting or using AngularJS, for example.

A site that does not meet the given theme of the final project will not receive any points.

Point Rubric

Overall site ● At least four professionally looking pages, including a home page, service page, quote calculator page with form ● Easy navigation via a navigation bar ● Proper use of Bootstrap ● Responsive site ● Functional site, e.g. no broken links; form functionality is not included in this category	40
Best practices ● Indentation, no validation issues, accessibility, etc.	10
Three Bootstrap features not used in labs and readme file	12
Form functionality, including quote calculation via Javascript, hiding & unhiding of form results	10
Form includes content populated from an array	5
Form includes three different types of input fields in addition to the submit button	5
Form validation ● Validation beyond checking for empty fields ● Use of Bootstrap or custom JavaScript code to validate fields	5
Repository with regular commits	5
Published site	8