Assignment 1: INFR 3120

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September 19, 2019
Deadline: October 21, 2019

1   Introduction

In this assignment, you should leverage your knowledge to develop a prototype faculty website. Of importance for this assignment is functionality, usability, and appearance. Specifically, you will be designing and developing the front-end (or client-side) of a web content management system for our faculties.[1] You need to form groups of size at most two members for this assignment. Note that similar submissions between any two groups will be considered an academic integrity violation.

This assignment focuses on the front-end design and development of the website. You will develop various HTML web pages, for presenting various contents of our faculty members (e.g., home page, research group page, publication page, news page, teaching page, etc.). You will style the pages with your CSS knowledge and also write the necessary JavaScript code. You will also design simple admin web pages that communicate with the back-end code (which will developed in the next assignment) for updating relevant records in your databases.

In this document, we explain the content of different HTML pages that you need to design. However, this is your job to come up with how you would like to layout each set of contents in an HTML page, style them with your CSS knowledge, write necessary javascript code. You need to use your creativity and talent to make your product appealing for your potential customers. The details and grading schemes are explained below.

2   Front-end Pages

We here explain the contents of each web page. All web pages share a vertical or horizontal navigation bar, which help to navigate between all the web pages outlined below:

- **Home (index.html):** This page includes the picture and short bio of the faculty member. Also, there is a "news" section, which chronologically list the news that faculty member would like to share. Note that there might be some hyperlinks in bio and news.

- **Publications (pub.html):** This page includes the publication lists of the faculty member. The publications fall into five categories: Journals, Conference Papers, Workshop Papers, Posters, and Technical Reports. The title of each academic work needs to be a hyperlink to its corresponding paper.

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[1]This system should facilitate updating and maintaining a faculty member's webpage without requiring them to have operational knowledge of HTML or JavaScript. However, you should not be concern about this updating process in this assignment as the back-end development will be done in the second assignment.

- **Press (press.html):** This page includes the list of the press releases related to the research of the faculty. The title of each "press release" along with link to the corresponding article or video should be included in this section. Also, each release has an associated photo that should be displayed.

- **Research Interest and Programs (research.html):** This page has two categories related to the research of the faculty member: research interest and research projects. For research interest, there should be one or two paragraphs explaining research interest of the faculty members. Some photos might be used for this part. The second part is about research projects. This part includes the list of research projects. Each research project has title, a paragraph description, and an associated photo.

- **Teaching (teaching.html):** This page includes the list of courses that the faculty has taught in past and is currently teaching. The courses are listed in chronological order from the most recent one to the least recent one. Each course should include its title, course number, semester (e.g., Fall, Winter, or Summer) and the year which is offered.

- **Research Group (group.html):** This page should includes information about the students which our faculty member has advised. The students are listed in a chronological order. Student's degree and the year of graduation should be listed here.

- **Contact (contact.html):** The faculty's contact information would be included here. This includes the complete mailing address, email address, phone number, and the map location.

3   Web Admin Pages

For this assignment, you also need to design web admin pages, which will be used in the second assignment for updating the database records. You need to use appropriate form elements (text inputs, radio buttons, checked boxes, etc) to design these web admin pages. Make sure to style your forms and pages too! You don't want your admin pages looks so ugly as your customers spend most of their time on them. Also, you are expected to use appropriate JavaScript code when needed. Here is brief description of these pages:

- **bio-admin.html:** This page gives the faculty member the opportunity to update his/her biography and profile picture.

- **news-admin.html:** Through this page, the faculty can add news to his/her home page. Find out what information each news need to have, then you should create appropriate forms for it.

- **pub-admin.html:** Through this page, the faculty member update his/her publication lists. Make sure you provide this opportunity that different type of publications can be specified by the admin.

- **press-admin.html:** Through this page, the admin updates or add new press releases.

- **research-program-admin.html:** Through this page, the admin updates the list of his research projects and their corresponding information.

- **group-admin.html:** Through this page, the admin updates his/her list of students and their corresponding information.

- **teaching-admin.html:** Through this page, the admin updates his/her courses.

- **contact-admin.html:** Through this page, the admin updates his/her contact information.

4   Real-World Content

Professor Julie Thorpe, one of your potential customers, has agreed to shared her website's content for this assignment. So, you need to populate your HTML pages with her website contents located at `http://thorpe.hrl.uoit.ca/`. If you need some contents (e.g., photos, etc.) that can't be found at her website, you can come up with your own content. Make sure to not be influenced by her current website in your design and don't use any part of her website except the content in your assignment. If any of those happen, you have violated academic integrity and there would be some consequences.

5   JavaScript Code

For all admin pages, you need to write JavaScript code which validate the input of users. Of course, you can use any JS library that you wish for this purpose including jQuery, AngularJS, React, etc. Please make sure to explain in your report which libraries you have used and why it helps your web development.

6   Grading Scheme and Deliverable

You need to submit your code along with two-page report of your design and website's functionality via blackboard by October 20th. This assignment includes 14% of the total mark. The grading scheme is as follows:

- Report: 2%

- Code (12%):

    - Coding all relevant contents and forms in HTML: 6%
    - Styling your code with CSS: 3%
    - Using appropriate JavaScript code (explained above): 3%

- **Bonus** (1%): Hosting your website on a free online web hosting site. If you decided on doing this, please use dummy content for your website rather than the content of Dr. Thorpe's website. Also, make sure to include the url of your website in your report.

7   FAQ

- Can we use bootstrap in this assignment? Yes, you can! The goal is to develop something that you can impress faculty members with your knowledge and skills. So you can use external libraries if you cite them accordingly in your report. You should explain where you have used any external libraries like bootstrap. Note that you can use libraries but you can't copy-paste others' code. These are two different things. One is a skill and the other one is the violation of academic integrity!

- What is bootstrap? It can help you to design fancier websites and possibly make your life easier. But you need to learn it which might make your life a little bit harder :-) If I were in your shoes, I would briefly learn about it to see whether it is useful for your needs or not.

- Should our website be mobile friendly? yes, this is part of grading scheme for CSS.