## **Capstone Mid-Term Project for Programming Students**

For your Mid-Term project, each student will need to perform the following tasks.

A series of local businesses have contacted your fictional employer and asked for several types of websites to be created**. All of these sites will require a web server running on Ubuntu (latest version) and feature a database and one web page that can input data into this database and a separate page that can search the database using any one or more of the stored data sets from it.** An example of this is searching for a person’s name, address, phone number, etc. and returning results. **There must be at least 10 data items entered for whatever data set you choose**, and I will leave these up to you; however, they must be pertinent to the topic of the website (ex., patient information for a medical website or pet data if a veterinary clinic is used). **All web pages must fully work without broken links or missing images/files/etc.** You may select any industry as the topic for this site (ex. medical, veterinary, construction, finance, etc.). The database must have appropriate data relationships.

**You must create a fictional company and background story**, or use a real one provided you get written permission to use their name and other real data about them. The website needs to have a catchy name with a clean and professional look and feel (appropriate CSS), plain websites with limited interaction will have points deducted, remember you have seven weeks to work on this and it should reflect that level of work. After selecting a name for the website**, use a domain search tool (unless a real business is used, again get permission) and locate an appropriate domain for it,** you do not need to purchase it, just find one and list it. The domain should end in .com.

**The search page for database items must be password protected and an administrative username and password must be created to access it.** You must provide this username and password to the instructor during submission to test the functionality of the search page.

You must provide ample commentation of all code used for this project, you need to be very descriptive so that someone who does not do coding can easily understand what is going on with your work. These code comments will be a significant part of your grade beyond the functionality of the website.

You will need to install Ubuntu into a virtual machine using VMware Desktop Pro, this is now free to use with no licensing required. You can download it from the web or ask your instructor to place a copy of the installer in D2L. If your personal machine cannot run VMware Desktop Pro, you may use any of the computers in the Computer Information Technology classrooms (242 through 246) to work on this project. I will create a way for you to deliver the finished product to me near the end of the project.

Lastly you will need to provide proper documentation on how to load the code onto a Linux web server and how to operate the website for the owner.

Mahmood Sabri has graciously committed to assisting you with any questions related to HTML. He can be reached at [masabri@northeaststate.edu](mailto:masabri@northeaststate.edu)

Edward Bowlin has graciously committed to assisting you with any questions related to programming. He can be reached at [ewbowlin@northeaststate.edu](mailto:ewbowlin@northeaststate.edu).

**Plaigarism statement:** You are expected to write most if not all of the code to make this project work; however, you are not prohibited from using open-source code. If external code or resources are used, you must properly cite the source with comments preceeding each segment of code use that you did not write yourself. You must state who wrote the code (if known, use anonymous if unknown), where you found it (URL of site or online repository), and why it was important to use it instead of just writing it yourself (this last piece should be an accompanying document turned in at the completion of this project instead of being part of the code comments, one submission of this last part will suffice for all segments if multiple code segments are used). If you use external resources and do not properly cite them there will be a severe deduction in your grade will take place. When selecting images for your website, make sure you use free stock images or have permission to use the ones you are using, the business owner may have images you can use as well.

**Reporting**: There will need to be weekly updates on the progress of this project, there will be an assignment dropbox where you will turn in a running document that outlines what you have done on this project each week, you are expected to work on this gradually each week and not wait till the last minute to cram it all in. You will use a Word doc that you will continually add to for each week’s work and each section will outline how many hours you’ve spent on the project since the last reporting and what items were worked on etc.

**Last Thing**: With any project, the scope is subject to change with little to no notice, if this happens I will post the update in the project section and send out a D2L email alerting you to check your project section.

I understand the requirements of the project and its reporting.

Signed:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_