MGMT 38200-002

Team Project

DUE SUNDAY, AUGUST 10, BY 11:59 PM

Summer 2025

Project Overview

Your team represents the brains behind one of the following fictional companies:[1]

- Eloheh, offering healthcare products and services
- Tekton, offering products and services related to building construction
- Coltivare, offering products and services to the farming industry
- Zayt, offering products and services related to oil production

In this two-part project, you will develop both a functional website and a working database for your company. The learning objectives for this project include the following:

- Efficient, independent acquisition and application of new technology tools
- Self-learning of technology tools through video instruction, tutorials, and trial and error
- Application of the systems development process in a team environment
- Exposure to common relational database tasks

The following pages provide detailed instructions for all elements of the project. Note that the **ENTIRE PROJECT** is due by the due date - no exceptions - and you are encouraged to **turn your project in early**! Lastly, it is the whole team's responsibility to assure the on-time submission of the project as well as the timely completion of all project elements. Therefore, it behooves each team member to make sure that **all** members have done their parts of the assignment correctly and on time. **Any and all deductions apply to all members of the team.**

[1]The company names are just placeholders. You are not obligated to choose a new name, but you may do so if your team wishes.

Part I: Website Development

Before beginning, go to https://github.com/education and create a free account. From there, follow this tutorial to create a repository and start coding!

Individual Web Pages and Requirements

EACH MEMBER of the team will be responsible for developing **ONE** page of the website. For teams with four members, pages 1 and 2 below should be combined to form a single page for one team member to complete, with the other three members responsible for pages 3, 4, and 5. Teams with five members are responsible for having one page for each item listed below:

Individual Pages

1. A company story and history page (this will be a page that generally describes your company and gives a brief history of the company)
2. A management team page (this is a page that describes the owners and various people that work at the company and should contain more than just a list of the managers and employers)
3. A company products page (this page will describe the various products that your company sells to its customers and should contain more than just a list of the products)
4. A company services page (this page will describe the various services that your company offers and should contain more than just a list of the services)
5. A customer testimonials page (this is a page of customer success stories and may also include quotes from your customers)

Page Requirements

- Each page must demonstrate boldfacing, underlining, italics, at least two font colors, at least two different font sizes (excluding headers), and at least two different font styles.
- Each page must contain at least one hyperlink (no more than three). At least one hyperlink must link to a relevant site outside of your company site. Links to sites outside of your team member's pages (i.e., outside of your company's pages) should not cause any of your company's website pages to be replaced in the browser window with another entity's page.
- Each page must contain a "contact me" link to send email to the person that created the page. (If you are uncomfortable having your email address online, use fake email addresses.)
- Each page must include at least one picture, an ordered list, and an unordered list.
- Each page must include a file that can be downloaded that is relevant to the company.
- Each page must include the date that the page was modified at the bottom of the page, and indicate that it is the date last modified. This must be done using code such that the programmer does not have to manually update this entry each time the webpage is updated.

Team Web Page and Frames

In addition to the individually created web pages, your team will also need to work as a group to create a **TEAM WEB PAGE** using frames. This page will be hosted in one of your team member's accounts, and is must use the HTML tag "frameset." The page must have a right frame and a left frame. The right frame must initially hold a team home page, consisting of your company name, your team number, and a list of the names of the team members that worked on the project. The left frame must be a navigation frame that will point to the various pages on your site. When someone clicks on the page name link in the left frame, the right frame should show the chosen page. The left frame should remain as a navigation frame. As with the other pages on the site, both the team page and the left navigation frame should show the date that each file was last modified.

Rules and Instructions for Creating Web Pages

Each of your pages must be created using either the built-in coding tools in **GitHub** or using a plain text editor such as **Notepad**, **Notepad++**, **TextEdit**, or **CodeEdit**. You are **NOT** to use third-party products (e.g. DreamWeaver). **As a reminder, AI-enabled tools are prohibited, meaning any built-in AI helps in GitHub are off limits.** You are also **NOT** to use another web page as a starter page and make changes to it, including the use of any pages created by members of your own team. In other words, you cannot use any web pages - including your teammates' web pages - as templates. The reasoning for this is twofold: First, you are meant to learn and implement a targeted technology, in this case HTML. In the real world, if your company told you to work in, say, SAP, you couldn't go out and use an enterprise tool that you had used at your last job. Second, this project is intended to offer you an opportunity to apply the Systems Development Life Cycle framework we are learning in class, and that entails building something from scratch.

EACH TEAM MEMBER is responsible for the coding of their **OWN** web page. Each member's page must reside in his/her own GitHub repository. Thus, your team will have to figure out how to make the links in the navigation frame connect properly to those pages. That said, **THE ENTIRE TEAM** is responsible for the overall completeness and correctness of the team's site. Take care to make sure that the appearance of your pages looks like a company website (as opposed to five different people developing five separate pages and then linking them together). Proper application of the SDLC should lead to discussions of things like common background colors, font types, general feel of the pages, company themes, etc., insuring a professional feel for your site. However, no code should be exchanged. **DO NOT** borrow/send/use code (in whole or in part) from friends, team members, or any other source to complete the assignment. If you don't know what you are doing or whether it is permissible, ask the TA or the instructor. If called upon by your instructor to do so, you should be able to explain what each line of code on your page does. Inability to explain code performance may result in a reduction of grade and possible academic misconduct charges if it is deemed to come from a source other than the student responsible for the page.

As mentioned above, the look and feel of your site, as well as a demonstrated professional effort, will be expected. A site could be technically correct, but if it looks sparse or unprofessional in nature - or if it looks like the team members did not communicate to establish a common look/feel for the site as a whole - then the team may be unable to receive full credit for the assignment. Note: In the same way that it only takes one element of a system to failure for the entire system to fail, it only takes one page on the site to look sparse or unprofessional for the project to suffer. Thus, it is a very good idea for the team's members to not only complete their assigned pages, but also to be responsible for reviewing the other pages on their site to assure that the whole project exemplifies the professional effort befitting a Boilermaker. Remember to let what you are learning

in our Systems Development module inform how you approach and complete this project!

Examples and Resources

Your team's website should pass the "high school hurdle," meaning that it looks more like a real company's website than a high schooler's class project. To give you something to shoot for, here are a few examples of real websites conveying the kinds of business information required for this project:

- Northside Music Co.: https://northsidemusic.com/
- Abstract Technology Group: https://www.abstracttechgroup.com/
- Triple XXX: https://www.triplexxxfamilyrestaurant.com/
- Von's: https://www.vonsshops.com/
- West Lafayette Wellness Center: https://www.westlafayette.in.gov/our-city/wellness-center

To be clear, the websites above serve as a frame of reference for the style/look of your website, not its functionality. There is no need to incorporate advanced functionality to for a professional look and feel. In other words, you do **not** need to use CSS to get an A! Check out *Content --> Module 2: Systems & Databases --> Systems Development --> LEARN: HTML Resources* for the HTML tutorial videos. There you will also find a PowerPoint file that helps out with frames and also gives you a better understanding of who is supposed to have what in their repositories. Note that these videos and help files were created assuming that each student used his/her own Purdue web space (i.e. the www folder created by ITAP) to house his/her work. Beginning in Summer 2025, we are using GitHub instead, so any time reference is made to the www folder, think of that as pointing to your repository. It also includes some additional links, and code for automatically displaying the date your pages were last modified. Beyond these resources, the **w3schools** website offers a host of helpful online tutorials:

https://www.w3schools.com/

Part I Deliverables

One member of your team will upload a **PDF** file with the following information:

- Team number
- First and last names of all team members
- Email addresses of all team members
- URL for the **TEAM WEB PAGE**

Part II: Database Development

Your company from Part 1 needs a database! Use Microsoft Access to create this database.[2] The new database you create must keep track of customer details including customer name, customer ID, address, rating (on a 1.0 – 5.0 scale, with 5.0 being best, representing the type of customer), and phone number. It should also track similar information for suppliers of the products you sell. Your database should maintain the products offered by your company (including the product ID, product name, and selling price) as well as information about which product is sourced from which supplier. (While your company also provides services, these will not be included in this assignment.) Finally, which customers have purchased which products from you should also be tracked. Note that you will need to determine which data should reside in which tables, and structure the relationships correctly. Relevant business rules are as follows:

- Only customers that have purchased one or more products will exist in the database.
- Only products that the company sells will be stored in the database.
- All products in the database will have been purchased by at least one customer.
- Suppliers may be potential suppliers (i.e. they may not have necessarily supplied any products yet).
- If a supplier provides a product, it is the exclusive supplier of that product to your company.

Database Requirements

1. Create the necessary tables to reflect the above information.
2. Submit an ERD for your database that conforms to the format and guidelines we have used in class.
3. Create a query that lists all customers and their information. Then, create a report that uses this query.
4. Create a query that lists customers and the products that they have purchased. Then, create a report that uses this query. The report should list products within customers (ascending alphabetically by last name), grouped by customer name.
5. Create a query that lists products and the suppliers that supply them. Then, create a report that uses this query. The report should be products within suppliers (descending order by the supplier star rating), grouped by star rating and then by supplier name.
6. You will need to populate the tables with enough data to demonstrate adequately that your queries work correctly and your reports display correctly. For example, if grouping is indicated in a report, there will need to be multiple entries for that group in order to demonstrate that your grouping works.

[2] MS Access is not available for Mac. Students with Mac computers can get access using Purdue GoRemote here or by using an on-campus system (e.g. a lab computer).

7. All reports should be properly formatted and labeled, such that fields, headings, titles, and so forth are meaningful and not cut off when displayed. For example, report titles should not be Report 1 or Report A, and field names should not be Field 1 or Ad for Address because these do not convey accurately what the contents are.

Resources

Check out *Content --> Module 2: Systems & Databases --> Databases --> LEARN: MS Access Resources* for the MS Access tutorial videos.

Part II Deliverables

One member of your team will upload the following to Brightspace:

- Your completed database file
- A PDF version of your ERD
  - You may create the ERD by drawing it by hand or using PowerPoint, Visio, or some other tool to draw it.
  - On the ERD, you should include your team number and the names of your team members.