Introduction to IT: ITWS 1100

Take Home Final Quiz: Due December 6th, 11:59:59pm

Place your name on the top of this document in the header

Enter your answers for Q 2 & 3 directly into this document (unless instructed otherwise)

All answers should be in be in Your Own Words, in complete sentences and should use proper grammar

Make sure your answers use an alternative font and/or color – (not red, and not Comic Sans, etc.)

Create a development branch for this quiz. Tag it properly.

Place all documents including this one in a folder ***inside*** your iit folder named:

Quiz3

Save this document as:

ITWS1100-F24-Quiz3-*yourRCSID*-*yourname*.docx

Make sure you extract your SQL database (include the CREATE statement) – save the output as *yourRCSID-website.sql.* Place it in your Quiz3 folder

When finished with the quiz, zip your entire iit folder and all related files into a file named:

ITWS1100-F24-Quiz3-*yourRCSID*-*yourname*.zip

And submit it to LMS

Move your changes into production and deploy

Do not forget your read me

Remember to save as you go,

Good luck!

1. HTML, CSS, JavaScript, jQuery, PHP, and then some … (70 Points)

In lab 3 you built a simple website using (primarily) static HTML. In Lab 8 you modified your projects page to read from a JSON file using jQuery and AJAX.

Now we are going to repurpose our websites again. We are going to refactor our sites to be built using data from MySQL (MariaDB), using PHP.

* + Create an external required PHP file named conn.php which will set up global variables for user, password, database and server for your mySQLi API connection.
  + Using includes, refactor your main site template (ie Header, and Menu) similar in code structure to the lab 9 example.
  + Using the includes from above, make a new index.php file to replace your index.html file from your site’s root. When served, index.php should look like your index.html used to look. (remember to archive or delete your index.html file)
  + Databases: create a database in your MariaDB (MySQL) server named, ‘mySite’
    - In this database,
      * create a table named ‘myLabs’
      * create a table named ‘myProjects’
      * create a table named ‘myFooter’
      * create a table named ‘mySiteUsers’
    - Make sure you have a unique, primary key, that is automatically set that is 2 bytes in length in each table.
    - Create the fields necessary to store the data needed for your site.
  + Replace your labs/projects html page (or menu info) with a new php file which will be built dynamically by reading the necessary data from the myLabs table.
  + Add a new page for your projects (minimum 1 for your group project) which should also be accessible from your menus on all pages. It should use an relative link to your team project’s main page which at this point should also be located on your server(i.e. xx/xx/xx/groupX/
  + Login
    - Add a login button/link/menuitem or form fields, etc to your main page
    - Add the functionality to allow a user to enter a user ID and password. The user, PW, user name, and user type (user or admin) must exist in the mySiteUsers table. Nothing fancy here: They may be in plain text.

Make sure that

* + - * if the user validates
        + add text with their name to your site. (i.e. Welcome XXXX!)
        + Replace the login option with logout (when clicked, the user should be logged out and the site should return to normal
      * If the user validates and is an admin, add an option to the labs menu to add/delete lab entries.
      * If the user does not validate, return with an error
  + Form for new lab entries
    - If the user is authorized and selects the add/delete lab entries, bring up a form that allows for new entries to be made, and lists out all entries. Allow delete as well (this should look/work similar to the movies/actors programs.
  + Note: When completed your index.html and projects.html (or labs.html, etc.) from labs 3 & 9 will no longer exist. They will be replaced with two new php files, each in their appropriate folder so that when a user goes to yourFQDN/iit the index.php file will be served by default. This will be the new homepage for your website.

Document your code and include a readme with an explicit discussion of your IA and the logic contained throughout your site.

The site should be fully functional. DO NOT relocate all your other lab files. Reference them where they currently exist within your iit folder.

1. Cardinal Health & Generative AI: (30 points)
   1. From the case and your research, how is/was Blockchain a transformative technology for Health Care? What is it about Blockchain that is so appealing? Is the hype justified? Why or why not? (min 250 words - 15 points)

Blockchain has emerged as a transformative technology in healthcare due to its ability to address key issues such as trust, transparency, and inefficiencies in the supply chain. It has principles which offer unparalleled advantages for sectors like healthcare which are known for having regulatory issues.

In healthcare, blockchain provides a single source of truth, making it highly effective in managing the pharmaceutical supply chain. For example, blockchain enables real-time product verification, which combats counterfeit drugs.

All the hype around blockchain is mainly justified. While it offers increasing promise in verifying pharmaceuticals it is not without challenges. It is very energy intensive which inhibits widespread adoption. Furthermore, blockchain is most effective in environments requiring collaboration which means it needs to be used within companies.

In summary, blockchain’s transformative potential in healthcare lies in its ability to provide security, transparency, and efficiency. However, you must have an understanding of its limitations, including the need for extensive collaboration and significant energy resources.

* 1. From the case and your research, what is Generative AI? How did it impact your understanding of the case? How did it change your understanding of GAI? Be specific and include personal observations. (min 250 words - 15 points)

Generative AI refers to artificial intelligence models capable of creating new content, such as text, images, or data simulations, based on training data. In the context of the Cardinal Health case, GAI can simulate complex supply chain scenarios.

Through the case, my understanding of GAI evolved from viewing it as a futuristic tool for content creation to recognizing its practical applications. For instance, GAI could complement blockchain by predicting supply chain disruptions or identifying areas where blockchain implementation would yield the highest return on investment.