Introduction to IT: ITWS 1100

Take Home Final: Due April 27, 11:59:59pm

* Place your name on the top of this document in the header
* Enter your answers 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 or similar)
* Save this document as;
  + ITWS1100-S20-FinalExam-*yourRCSID*-*yourname*.docx
* Place all documents including this one in a folder ***inside*** your iit folder named;
  + finalExam
* When finished with the quiz, zip your entire iit folder and all related files into a file named;
  + ITWS1100-S20-FinalExam-*yourRCSID*-*yourname*.zip
  + Make sure you extract your SQL database (include the CREATE statement) – save the output as *yourRCSID-website.sql.* Place it in your iit root
* And submit it to LMS

Remember to save as you go,

Good luck!

1. HTML, CSS, JavaScript, jQuery, PHP, and then some … (65 Points)

In lab 3 you built a simple website using (primarily) static HTML. In Lab 9 you modified your projects page to read from a JSON file using jQuery and AJAX.

Now I want you to repurpose your websites again. This time, I want you to build them using data stored in your DBMS and setup your pages using PHP.

* + Databases: create a database in your MariaDB (MySQL) server named, ‘myIntroProjects’
    - In this database, create a table named ‘projectList’
    - Make sure you have a primary key, that is automatically set that is 4 bytes in length
    - Create the fields necessary to store your project data
  + Forms: You are now going to fill your database with the data necessary to build your projects page (hint: convert your JSON data)
    - Write a program named loadData.php which will display a form on the screen to accept the data for your lab and insert it into the database. It should validate the entry using JavaScript and/or jQuery – your choice.
    - It may follow similarly in function to the examples in class
    - It must have the look and feel consistent with your website’s design
  + PHP: Convert your index.html and projects.html from labs 3 & 9 to PHP so that when I go to iit/finalExam the index.php file will be served by default. This will be the new homepage for your website.
    - In your finalExam folder add a new folder named ‘resources’
      * In it you will place the CSS, JavaScript and any other resources for your site
    - Convert your index.html file into an appropriate php file
    - Modify your projects.html file (or whatever you named it) to read the content from your new SQL database instead of the JSON file. You are to use PHP, the mysqli API, and prepared statements as we discussed in class and in the lab

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. Facebook and AirFox Cases: (20 points)
   1. Why does Facebook consider TikTok to be one of its biggest current threats? (6 points)

Facebook was a world-famous social application. Facebook bring human into online social. E-commerce is the most popular now, TikTok is the boss in E-commerce industry, the short video makes people connect and people love to watch funny videos, or they like to spend time to learn about others. The interaction between users is increased on TikTok, and as a platform, many common things, if they are post on TikTok, the information will quickly resonate, and users will be retweet crazy. As a video platform, TikTok user fully spend their talent on making the short video. Many people are making money by recording video on TikTok.

Everyone is discussing TikTok video right now, and less and less people discuss Facebook, therefore Facebook consider TikTok be one of its biggest current threats. It will impact Facebook business.

* 1. What is Blockchain? Explain to someone who may not understand tech (e.g. your grandparents) and to someone who does (e.g. the professors). (6 points)

For grandparents: Blockchain is a chain of block that all information connects. Block, which is the digital information; chain, which is the public database. Blockchain is mean we store all information into a public database. In some simple words, blockchain is like when a family go out to shop, after they shopped, they use a piece of paper to record how much money they spend every time. In this case, a piece of paper is a chain, it is a database. The money information recorded on the paper is block, they are the information we stored into the database.

For Professors: Blockchain is a new technology, it is not private. All user can view the information inside the blockchain, and no one can access into the blockchain then use it as their own benefits. For example, if we purchased something on a server that is using the blockchain technology, every time we made the transaction, there will have a unique code represents this transaction information. Inside the blockchain, this piece of transaction is as a block that connect with another block. The unique code use to separate every block of information.

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* 1. How might blockchain technology be applied to help with the delivery of news and information on social media? (8 points)

Blockchain technology could allow social media users have more personal privacy. In social media, users like to post some information about their daily life and retweet some funny posts or official news. All this information will contain some user’s favorite stuff or what they like to read about. Without the blockchain, this information is collected by the server, and you will always have some ad related to what we just read. In some shopping website, we can use our social media account to login, but, after we login, we will always see some message on our social media that is about the shopping website.

In the 2016 US election, there are some fake news affect citizen to vote. This has reminded us that the news provided by social media is not as good as we thought comprehensive and true. At the same time, the convenience and low threshold of social media dissemination of information also facilitate the spread of false news and rumors. The decentralized and unchangeable attributes of the blockchain can be used to help the social media get rid of the false news, and re-establish the authenticity

Blockchain could help user control their’s privacy by themselves. The purpose of the application of blockchain technology in the social field is to change the control of the social network from a centralized company to an individual (user). So that, the control of the data is firmly in the hands of the user.

1. Introduction to ITWS Term Projects: (15 points)
   1. What was one thing you learned this semester that would have made it easier to implement your project if you were able to do it over?

There is one thing I learned this semester would help me easier to implement my project in PHP. PHP is strong and I can use this language for a lot of purposes. PHP could help me access database information, I could use PHP to receive user input then turn the information in the database. PHP is strong. My group project is making the Game Tactics Forum. We need to have the area for the user to post. When we receive the user’s information, we use JavaScript(ajax) and PHP to save and store the data.

* 1. Discuss one excellent characteristic from each of two (2) other Term Projects in this Class that you will try to incorporate in future ITWS Projects. Name each of the other Term Projects and the characteristic that you found to be excellent in each. Answer in complete sentences.

I have the deep impression with Group 5, the Plan.it project. This project is so cool. They use the advantages of the database to store every task created by users, and their design is very cute. The excellent characteristic from this project is the interact with the system by completing the progress of the task. The earth represents different progress. This is so funny.

I also have the deep impression with Group 6. They create the first-year student help session is amazing. From their’ site, I can know they use database to store many information and use PHP to show the content. The characteristic on their project is they collect all information about RPI then store them into database, display them using PHP. In the site, it collects all important information regard to the school, and they provided all helpful links for new students learn about the school. To be honest, their project could release to public and show to every new student in RPI.