Introduction to ITWS

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, and use proper grammar

There are multiple questions on this test. Make sure you complete them all.

Make sure your answers use an alternative font and/or color – (not black or red)

Create a branch for this quiz called quiz2 and switch to that branch

Create a folder, somewhere under the root of your website (iit) for this quiz called quiz2

Save this document into that folder as *yourName*-*yourRCSID-F23*Quiz2.docx

Create a readme file in the same folder and discuss any relevant information about the quiz.

(Include at least; your GitHub id, Repo name, Azure homepage link, and Discord handle.)

Place all quiz other specific documents (if any) in the same folder

Commit your changes as instructed below and push to GitHub

DO NOT create a pull request or merge your changes into Production

NOTE: You are not to discuss this quiz with anyone. You are not to reference old (previous semester) submissions for ‘help’ or guidance. You may not solicit or receive help online or in-person. You may reference online resources, and you may use the notes from this class, but all work must be your own and you must figure out the solutions on your own. Note that content simply lifted from the results of a search and put as your answer is plagiarism – Answer in your own words in order to demonstrate your understanding of your question, and your answer.

1. Technology (coding): (40 points, 30 minutes)
   1. Create a JSON file named quiz2.json, which will contain a list of songs. Make sure to include the title, artist, album name, (link to) cover art, and the copyright year). NOTE: the data does not need to me real – so don’t waste time looking up real sources. Make sure your data is formatted correctly and contains at least 3 songs. (10 points)

Done inside the folder

* 1. Create a quiz2.js file, and using JavaScript and/or jQuery, write the code necessary to display a random song which you will read from your JSON file and display somewhere in your header. Assume your file data is already contained in a variable named musicList (similar to the inclass exercises) (20 points)

Done in the folder

* 1. What does $.on() do? Explain, in your own words, how and where we used it class. Also explain how it is useful, and why we need/don’t need it. (10 points)

$.on() takes a selector using the $ sign and then assigns an event to the selector, and the function that will occur when that event is clicked. It is a part of jQuery and the syntax is like this $(selector).on(event,childSelector,data,function,map). We used it in our lab 6 to assign on-click events that would change the HTML/CSS of a page. This method is useful because it allows us to write less code to perform more actions. I believe we do need it because it allows us to create actions that the user can do to change their interface without changing much of the source code.

1. Technology (description) (30 points, 20 minutes): Web Development
   1. What is a CDN and how do we use them in this class? Be Specific and give an example used in class (5 points)

A cdn is used to deliver content through a network. In this class we use CDN’s to display what we write in our class. For example, we use CDN’s when trying to show our code on a server.

* 1. Explain, in explicit detail, what is happening in the following code samples. (20 points)
     1. <html>

<head>

</head>

<body>

<h1 class=”mainHead hdr” id=”top”>My Site</h1>

<button type=”button” onclick=”pop();”></button>

<a href=”#top” class=”linktype”>Where am I</a>

</body>

</html>

In this code first we make a header which displays “My Site” of class “mainHead” and of id “top”. Then under that we make a button which has an onclick event pop() that occurs when you click on it. Then we have a link which displays “where am I” and when you click on it, it takes you to the link which cannot be found.

* + 1. getElementsByTagName(p);

this searches a live html collection of elements with the same tag name “p”.

* + 1. .contactInfo {height:50px;width:120px;float:right;clear:right}

This is a css code for a class. Here we are creating the class called “contactInfo”. This class assigns a height of 50px and a width of 120px. It also makes it float to the right and makes it clear right to anything with that class.

* + 1. $(document).ready(function () {

let age=50;

let insuranceCutOffAge=60;

if (age<insuranceCutOffAge) {

alert(‘yep’);

} else {

alert(‘nope’);

}

});

In the code above we have code that runs when the document is ready and opened. Upon opening the document the variables are assigned and the blocks of code are run. In this case, 50 is assigned to age and 60 is assigned to insurancecutoffage which then runs and triggers an alert on your browser which says “yep” indicating that you are under the insurance cut off age.

* 1. Let’s say that I am trying to run my JavaScript code above, and the file is not loading. How would I test out my code and try and identify the error. (Be specific and explain your debugging process) (5 points)

If my code was not working I would use chrome developer tools to try and debug the error. I would first open the DevTools in my browser while having the file open. Then I would open in sources my file which I would want to debug. After that I would check the file and add some breakpoints for debugging. If my file isn’t loading I would want to make sure that my variable values are correct and that my syntax is correct.

1. Web Science (10 points, 15 min) (Explain in detail)
   1. According to the Lecture by Dr. Erickson, what is Web Science? Why is it important?

According to the guest lecture by Dr. Erickson, web science is the process of designing things in a very large space. It is important because it ties together a lot of information and it important to the development of systems everywhere. It also is important because it allows us to analyze the web in different ways. It affects people and has effects on society through the web science method.

* 1. How could Web Science concepts (from your answer to a) be used to help identify and perhaps create awareness around some world problem (pick your problem – poverty, health, whatever you choose)

For an issue like poverty, we can apply the web science method to cause change in our societies. First we find out issue. Then we apply creativity and find an idea to reduce the poverty rate in an area. We then design and bring about technology and social awareness about this change we are trying to bring about to poverty which leads to micro changes, and eventually leads to macro changes for the better.

1. HCI (20 points, 10 minutes) (Explain in detail)
   1. According to the lecture, what are the two main principles in interface design? How are they used, and why are they so popular?

The main principles in interface design is to be user oriented when creating your design and to optimize your interface in the best way possible to the user. For example, try your best to follow the principles of the Gutenberg diagram so that users can see most important information in the best way possible. Prototyping is important, trial and error over a long period of time will eventually lead to success. Be user oriented and try and cater to the users needs. There is no point in designing the interface without keeping in mind who you are making this for.

* 1. What is a user persona? Why do we use them? How do we develop them?

A persona is a person a fake or real user whom you can use as an example of what needs you need to fulfill when creating your project. We can use persona’s as a way to share who our project would assist and show perspective of the user. We develop them by being mindful of what the goal for our program is and empathizing with the user. Persona’s can also help us out a lot when we are prototyping our projects.

* 1. Explain how these concepts have or are informing your plans for your group project.

These concepts have helped me create a better plan for my project. In my group we wanted a user friendly application to help people who like watching movies, books, or tv shows to review them and keep track of reviews they are creating over time. We wanted to add many features but by creating a persona, we understood that creating many features may blur the goal of the project and make people who are new to technology like this not want to use it. Therefore, we tried to make it more simplistic and straightforward so people can keep track of what they watch or read easily. The concept of prototyping also helped us create a board of all the tasks we need to complete before our project is done.