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-S24*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 to demonstrate your understanding of your question, and your answer.

1. Technology (coding): (40 points, 30 minutes)
   1. What is AJAX? How do we implement it using jQuery? (10 points)

Ajax is Asynchronous JavaScript and XML. It allows a browser to request data from a server without loading the entire page. It works behind the screen as a user can continue interacting with the web page and the script can run. We can implement it by the usage of $.ajax().

* 1. Write the jQuery function to read your RSS file (either one, but only one) from lab 4 and output the Title, and Link in an ordered list in HTML (20 points)

<!DOCTYPE html>

<html lang="en">

<head>

<title>Quiz 2 Question 1b</title>

<meta charset="UTF-8"/>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>

</head>

<body>

<ol id="rss-feed"></ol>

<script>

$(document).ready(function () {

$.ajax({

type: 'GET',

url: '../labs/lab04/rss.xml',

dataType: 'xml',

success: function (response) {

$(response).find('item').each(function () {

var title = $(this).find('title').text();

var link = $(this).find('link').text();

$('#rss-feed').append('<li><a href="' + link + '">' + title + '</a></li>');

});

},

});

});

</script>

</body>

</html>

* 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)

The $.on() method is a jQuery method that adds an event handler to an element that is selected. We mainly used in class for lab 6 with the onclick function to add a new list item to the site. It’s useful in allowing us to make webpages more interactive and dynamic for the user. JavaScript also helps us do this, so it is not needed.

1. Technology (description) (30 points, 20 minutes): Web Development
   1. Explain, in explicit detail, what is happening in the following code samples. (20 points)

(NOTE i. and ii are related and should be considered together in your answers to each)

* + 1. <html>

<head>

<style>

@import url('https://fonts.googleapis.com/css2?family=Rye&display=swap')

</style>

</head>

<body>

<p class=”chaptText” id=”hdr”><span class=”chaptStart”>O</span>nce upon a time…</p>

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

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

</body>

</html>

This code segment uses html to create a site. The first thing it does it opens the html tag and then a head tag. In the head tag it imports a font from google fonts by the name of Rye. After that the style and head tag is closed and the body tag is opened to create a paragraph with the class of “chaptText” and an id of “hdr”. The html span tag is opened to create an inline container and sets the class of “chaptStart” to the character O. The span tag is closed to then continue and the rest is using the class of “chaptText”. The paragraph tag is closed and a button is created with an onclick attribute of a JavaScript function that creates a popup. Then the button tag is closed and an anchor tag is opened that directs the user to “#hdr” and also has the class of ”linktype” The text that the anchor text is attached to is Where am I.

* + 1. .chaptStart {

font-family: "Rye", serif;

font-weight: 600;

font-style: normal;

font-size: 150%;

}

.chaptText {

font-family: “Rye”, serif;

font-weight: 400;

font-size: 90%;

font-style: normal;

}

This code segment is CSS. The first part styles elements with the class name of “chaptStart” to having the font of Rye in serif form with a font weight of 600 a font style of normal and a font size of 150%. The second part styles elements with the class name of “chaptText” to have the font of Rye in serif form and a font weight of 400 and font sizeof 90% and a font-style of normal.

* + 1. getElementsByTagName(p);

This code segment runs through the DOM and then it returns an array-like collection of HTML elements that have the specified tag name of “p”.

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

This code segment is CSS and styles the elements with the class name of “contactInfo” in giving the element a heigh of 50 pixels and a width of 120 pixels. The element is then pushed to the right and will be moved to the bottom of any other element that is also floated to the right.

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

let age=50;

let insuranceCutOffAge=60;

if (age<insuranceCutOffAge) {

alert(‘yep’);

} else {

alert(‘nope’);

}

});

This code segment utilizes jQuery to first check if the document is ready. Then the code is run when the DOM is ready for JavaScript to manipulate it and the alert ‘yep’ is popped up in the browser since the value of insuranceCutOffAge is 60 and greater than the value of age which is 50.

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?

Web Science is the study of the world wide web as a branch of science mainly to look at how the web has affected society and technology. It is important as the internet is such a big part of our lives but the implications of it is not clearly defined and mainly the affect it has in our culture and society.

* 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)

Web science can show the awareness around different health problems. The web allows us to search through vast amounts of knowledge from around the world without needing to be there in person. Diseases can be learned through the internet and medications can also be learned. Everyday health issues can also be researched online to help those that suffer from it every day. The web also allows us to see and create awareness about health problems we are not privy to.

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

The two main principles in interface design is that the usage of a computer is to aid in their work and not harm it in any way. The second principle is that the usage of the computer will not waste time or need more work than is needed for the task at hand. These principles help provide the user with a seamless experience with the computer and help aid in work.

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

A user persona is fictional representation of your target user for your application. We mainly use them to help design the experience of the application to the target user’s needs. This will help improve their experience with our application. We develop user personas by seeing which group of people will use the application and then from them create the more specific details of that person.

1. Fidelity Case (10 points, 10 minutes)
   1. How did Generative AI affect your answers. Did it help you learn more about the topic and details contained in the case?

Generative AI was used after answering the question myself to help gain a new perspective on the question. It gives more of a general answer to the question and not in depth. It helped me learn more about the topic as it referenced things, I was not aware of such as how Generative AI was already used by Fidelity Labs in some of their products. It also helped me in understanding new terms mentioned in the case itself such as minimum viable products (MVP) and Lean startup.

* 1. Who is Fidelity? What is Fidelity Labs? Why does Fidelity care about technology?

Fidelity is an investment company that offers financial services, mainly planning and advice. They help people learn about investing and what to invest in. Fidelity Labs is a service that helps customers solve a problem by creating multiple different software prototypes and they consult with the customer to see which one to continue working on and eventually lead to a new business. Fidelity mainly cares about the customer. Since technology is constantly evolving and becoming more part of our daily lives, they shifted to more of a technology focused company.