UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

MZUMBE UNIVERSITY
FACULTY OF SCIENCE AND TECHNOLOGY

CSS 221 : TEST 01

Instructions

- Attempt all questions
- Time allowed: 60 minutes

Question One

"All HTML tags are paired tags". Briefly discuss this with support of relevant examples. (3 marks)

Question Two

Write a piece of code to insert an external CSS into an HTML document [Assumption: the CSS file is saved as **styles.css**] (2 Marks)

Question Three

Write an HTML code to insert an image as an anchor, which when clicked will navigate to a page called **more_info.html.** Use your **first name** as the name of the image, with a PNG extension. (3 Marks)

Question Four

Among the ways to insert colors in an HTML webpage by using CSS is through the use of *hexadecimal codes* and *RGB* techniques. Using color **GREEN** as an example, show how you can insert it by using hexadecimal and RGB techniques. (2 Marks)

Question Five

With the aid of a diagram, differentiate between **padding** and **margin** in positioning HTML elements. (5 Marks)

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1. HTML tags are Paired tags but others are not Paired tags.

For Xample of Paired tags are like paragraph tag, and header tags

<P> This is web programming </P> - this is Paired paragraph tag.

<h1> My first test </h1> - this is header Paired tag.

But: Un Paired tags are like Images and break tags.

<img src = "Mswimia.jpg" alt = "ombeni.tz"> - This is unPaired tag.

2. <link rel = "stylesheet" type = "text/css" href = "styles.css">

3.
```
<!DOCTYPE html>
<html>
<head>
<title> Image insertion as anchor #1
</title>
</head>
<body>
<a href = "more_info.html" name = "ombeni.PNG"> Picha-link
</a>
</body>
</html>
```

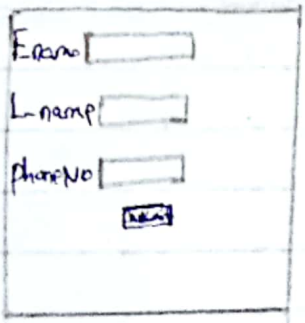
4. By using hexadecimal codes to insert CSS colors assume to use internal CSS

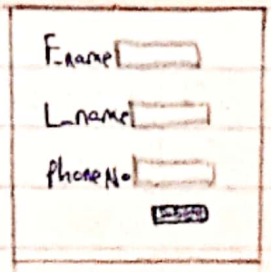
```
body {
    background-color: #00FF00;
}
```

By using using RGB techniques.

```
body {
    background-color: RGB(00, 225, 00);
}
```

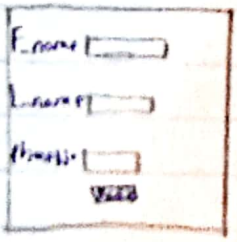
5. To deal with form as element to differentiate Padding and margin.

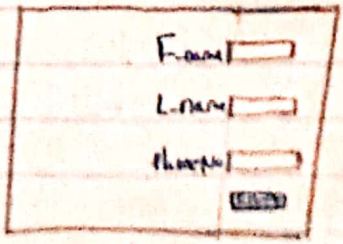




The diagram above explain the Padding, Padding make the contents to be away from the border of the form below, form{padding-left: 10 Px;} => using

while





Margin Used to move the whole form as you want, may be margin left, you will move this if you create div for form eg. to move left: #form1 {margin-left: 100 Px;} as shown in the figure below.

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CSS 221 : TEST 02

Instructions

- Attempt all questions
- Time allowed: 60 minutes

Question One

With examples, explain the difference between **authentication** and **authorisation** as applied in web applications. (3 Marks)

Question Two

Consider a database called **KIKOBA**, with a table called **BALANCE**, which is as seen below:

client_id	firstname	surname	balance
1	John	Shenyange	143000
2	Anna	Msemwa	76500
3	Suleman	Mutalemwa	452000
4	Bernadetha	Johnson	432500

The database is created in a MySQL server environment, hosted at an IP address 172.168.10.10. Where applicable, assume **your first name** to be the username of the administrator's account, while **your surname** is the corresponding password.

TASKS:

a) Create an HTML form that will enable a user to submit their **client's ID** and the **amount** they wish to deposit as savings (to be added to the **balance**). (3 Marks)

b) Create a PHP script that will add the amount **submitted through the form in (a)** to the **current balance** of the user having the submitted **client's ID**. If the client ID submitted in the form does not match any in the database, the user should be given an appropriate notification. (6 Marks)

Question Three

Create a PHP script that creates two sessions, named **SURNAME** and **AGE**, and then directs the user to a page called **welcome.php**

NB: assign any values to the two sessions, and you are not to create the page welcome.php (3 Marks)

$_SESSION['id'] = $id;

if ("

header("location: welcome.php");

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2. (a)

```
<!DOCTYPE html>
<html>
<body>
<form action = "#" method = "post">
< input type = "text" name = "client_id" >
< input type = "number" name = "Balance" >
< button type = "submit"> submission </button>
</form>
</body>
</html>.
```

(b):

```
<? Php
$connect = MySqli_connect("172.16.8.10.10", "ombeni",
"Mswima", "KIKOBA");

if (isset ($_POST['submit'])){

$id = $_POST['client_id'];
$Balance = $_POST['Balance'];

$q = "UPDATE BALANCE SET balance = balance + $balance
WHERE client_id = '$id'";

$query = MySqli_query ($connect, $q);

if ($query){
echo "Addition successfully";
}
else{
echo "Addition failed";
}
}
?>.
```

3.

```
<? PHP
    session_start();

    $Name = $_POST['SURNAME'];
    $Miaka = $_POST['AGE'];

    $_SESSION['Jina'] = $Name;
    $_SESSION['Miaka'] = $Miaka;

    if( $Name && $Miaka){

        header("Location: Welcome.php");
    }

?>
```

1. Authentication is the process of verifying who someone is while Authorisation is the process of verifying what specific applications, files and data a user has access to.

Example of Authentication in the system when the user first login in the system must give their password and username in MU-ARMS but the exa mple of Authorisation it means when the user succe d to login there is specific pages to access not every page must be accessed. In MU-ARMS example student has access to specific pages like to see their results only.

MZUMBE UNIVERSITY
(CHUO KIKUU MZUMBE)

Faculty of Science and Technology
End of Semester II/Re-sit Examinations: July, 2022

Course Code:	CSS 221
Course Title:	Introduction to Web Programming
Programme:	BSc. ITS-II, ICTB-II & ICTM-II & EDU (MICT)-II
Date:	19/07/2022
Time:	0300 – 1100 Hours
Venue:	LT3, Mazengo – A110 & A113, Kingalu

INSTRUCTIONS

1. There are **Four (4)** questions in this paper
2. Attempt **All** questions
3. Marks are indicated against the questions

QUESTION ONE (20 MARKS)

a) Differentiate the following terms as applied in web programming: **(@ 2 Marks)**

i. Web application vs desktop application

ii. Front-end vs Backend

iii. Session vs Cookies

iv. Get vs Post form methods

v. RGB vs hexadecimal codes for colors

b) What are any four circumstances that would make you advise a client to adopt a web application as a solution to their problem? **(10 Marks)**

QUESTION TWO (20 MARKS)

a) Assuming that there is already an HTML page structure with the head and body sections, create the following HTML elements:

i. An alphabetical ordered list of any five fruits. **(2 Marks)**

ii. A form with a field where a user can select only one region that they want to visit next out of a pre-defined list of regions in Tanzania. Use at least five (05) regions as sample. **(3 Marks)**

iii. A table with four (04) rows and three (03) columns. The first row should be the header row, and the table must have a visible border. Use any contents for the table. **(2 Marks)**

iv. An image with a JPG extension, which is also an anchor to a page named **ue.php** . The image should

have 300px and 90% height and width, respectively.
(2 Marks)

v. A third level heading with at least one word bolded, one word underlined, and one word in italic.
(2 Marks)

vi. A form with at least one input field and a reset button, that when placed will set the input field to its initial value.
(3 Marks)

b) What are the roles of the following technologies in making a website available to users?
(@ 2 Marks)

i. Web server

ii. DNS

iii. Web browser

QUESTION THREE **(20 MARKS)**

a) "CSS has no effect without HTML." Explain. **(3 Marks)**
b) With the aid of a diagram, differentiate between margins and paddings in CSS. **(5 Marks)**
c) With examples, briefly explain any three CSS properties related to fonts. **(6 Marks)**
d) Differentiate between DIV ID and DIV CLASS from the HTML point of view. How do they differ as CSS selectors?
(6 Marks)

QUESTION FOUR **(40 MARKS)**

Assuming that there is a database called SHOP, with two tables: STAFF and PRODUCT, that have the following data:

Staff

staff_id	firstname	surname	sex	secret_phrase
1	LUGHANO	MWAKAPUKU	M	Mbeya
2	MWAJUMA	IDRISSA	F	Binti wa Idrissa
3	BERNADETHA	SALVATORY	F	Niache kama nilivyo

NB: staff_id is the Primary Key

Product

product_id	product_name	quantity	price	staff_who_updated
1	SABUNI YA MAJI	540	1500	3
2	CHUMVI	60	200	1
3	DODOKI	100	350	3

NB: product_id is the Primary Key, while staff_who_updated is a Foreign Key that references the staff_id in the STAFF table.

Also, the database is hosted in a MySQL server having an IP address 192.168.1.10, with admin and admin1234 as the username and password of the administrator's account, respectively.

TASK - create a web application that:

a) Has a page where a staff can submit their ID and secret phrase for authentication. If successful, the page creates a session for the staff's ID and directs them to a page called **staff.php**. If not successful, the system should notify the user accordingly. **(10 Marks)**

b) In the page **staff.php**, it enables a staff to sell a product by submitting the product's name and quantity to be sold in a form. The system should then update the quantity of the product in the database by deducting the amount sold. **NB:** If the sale would result into a negative balance, the system should notify the staff of the situation and reject the sale. Moreover, the system should store the

ID of the staff who conducted the sale in the database.

(20 Marks)

c) Has another page called **delete.php**, where a staff can delete a product by simply filling its ID in a form and submitting it. If successful, the staff should be notified accordingly.

(10 Marks)