

Faculty of Computing and Technology

Department of Computing

Bachelor of Science (Hons) in Software Engineering

End - Semester Examination

Year 2024, Semester 3 - Batch 01

SE 2104 - Web Technologies

Duration: 3 Hours

Instructions to the candidates:

- 1. Answer ALL the questions.
- 2. Illustrate your answers with clear diagrams wherever applied.
- 3. The paper is marked out of 100 Marks.
- 4. Follow the General Guidelines given by the Department of Examination for exam Start time and closing time.

Question 01

		- 400	• • •	
а	1)	State three (03)	services of Internet.	(03 marks)
		D : - 0 1- i	41in and a Cincular season of give yield designs	,
t))	Briefly explain	the main goal of implementing responsive web designs.	(02 marks)
	S.	Distinguish ha	tween the Internet and the World Wide Web (WWW).	,
C	;)	Distiliguish de	tween the internet and the world wide web (** ** **).	(04 marks)
C	l)	Expand the fol	lowing acronyms and briefly explain each term.	
		i.	HTTP	
		ii.	FTP	
		iii.	URL	
		iv.	ISP	(08 marks)
	e)	You are asked	to create a web site/web application to maintain and display Saegis	s Students
		Exam Results	. Select your choices from the requirements below and explain your	r selections.
		i.	Static or Dynamic content	
		ii.	Development languages	
		iii.	Database	
		iv.	Network (LAN, WAN)	(08 marks)
			[Tota	1 = 25 marks
Que	st	ion 02		
8	1)	List three (03)	types of Internet attacks.	(03 marks)
ŀ)	State two (02)	advantages of using JavaScript when developing a web site.	(04 marks)
	•			Page 2 of 6

c) Examine the following HTML Code:

```
<form name="myform" onSubmit="displayMark();">

<label for="mark"> Enter your mark: </label>
<input type="text" size="10" name="mark" id="mark"/>

<input type="submit" value="Submit"/>
</form>
```

i. Write a JavaScript function displayMark() to output the following classification based on the mark entered:

Above 70 – Distinction
$$60 - 69 - Good Pass$$

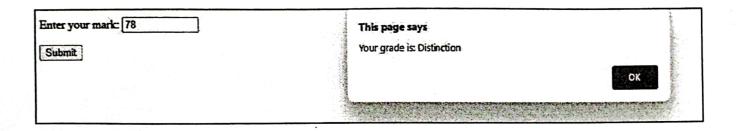
$$40 - 59 - Credit Pass$$

$$0 - 39 Fail (10 marks)$$

ii. If the mark is outside the range of 0 to 100 then the user must be told to enter in a number between 0 and 100.

(08 marks)

Sample output of i.



Sample output of ii.

Enter your mark: [-5	This page says
Submit	Please enter a number between 0 and 100.
	ok

[Total = 25 marks]

Question 03

a) State two (02) benefits of using Cascading Style Sheets (CSS).

(04 marks)

b) Draw the output of the following HTML code segment when rendered by a web browser.

```
<html>
<body>
<u> Important Sites </u>

<a href= "www.mohe.gov.lk/index.html">Ministry of Higher Education</a>
<a href= "www.ugc.ac.lk/index.html"> University Grants Commission</a>

<center>BSc Hons Degree Programmes<br/>
<br/>
Saegis Campus, Nugegoda </center><hr>
</body>
</html>
(06 marks)
```

c) Consider the following HTML code segment.

```
<body>
<h1> Introduction to Web Technologies </h1>
<h3> HTML </h3>
 HTML is the standard markup language for creating web pages 
</body>
```

Write down the internal styles required to apply the styles mentioned in the following table for the elements h1 and p in the above code segment.

Element Name	Attribute	Attribute Value	
	color	blue	
h1	text-align	centre	
	font-family	Arial	
	background-color	Yellow	
p	font-size	12px	

(15 marks)

[Total = 25 marks]

Question 04

-Customer Details
Customer Name:
Phone Number:
Email:
Pick up Address:
- Vehicle Details-
Vehicle type: Car ✓
Air Condition: With AC O Without AC
Tour Staff:
Yes O No
-Date Details
Start Date: mm/dd/yyyy 🗂
End Date: mm/dd/yyyy 🗂 Submit

a) Construct html code ("vehicledetail.html") to display the above form. Your form method should be post and action page name should be "insert_ vehicledetail.php".

(05 marks)

- b) You have a database "vehicle_db", inside that there is a table name "vehicle_booking".

 Username for the database is "root" and the password is con@34#!
 - i. Write a "config.php", to create a mysqli database connection object.

(04 marks)

ii. What is the main advantage of using mysqli database connection as a separate file "config.php"?

(02 marks)

c) Create a php file "insert_ vehicledetail.php" and complete it by adding php codes for following requirements.

i. Import "config.php" file.

(01 mark)

ii. Capture all the user inputs you received from "vehicledetails.html".

(03 marks)

iii. Insert data into "vehicle_booking" table by using an insert query.

(04 marks)

The structure of the table ("vehicle_booking") is as below.

name	phone	email	address	vehicle_type	air_condition	starting_date	end_date
							-

d) Create a php file "display_vehicledetail.php" and display a record (according to the sample output format given below) available in the table "vehicle_booking".

(06 marks)

Sample output:

Customer detail:

Customer Name: Namali Gamage

 $Customer\ Email:\ namaligamage@gmail.com$

Customer Phone Number: 0773452312

Customer Address: No 17, Galle rd, Colombo 07

Vehicle details:

Vehicle Type: SUV Air Condition: Yes

Starting Date: 22/03/2018 End Date: 25/03/2018

[Total = 25 marks]

********** End of the Paper **********