Sri Lanka Institute of Information Technology

B.Sc. Honours Degree in Information Technology

Specialized in Information Technology

Final Examination
Year 1, Semester 2 (2019)

IT1100 – Internet and Web Technology

Duration: 2 Hours

October 2019

Instructions to Candidates:

- ◆ This paper has 3 questions.
- ◆ Answer all questions in the booklet given.
- ◆ The total marks for the paper is 100.
- ◆ This paper contains 4 pages, including the cover page.
- ◆ Electronic devices capable of storing and retrieving text, including calculators and mobile phones are not allowed.

Question 1   (20 Marks)

a) Compare LAN and WAN networks.

(4 marks)

b) You are asked to create a web site/web application to maintain and display SLIIT Students Exam Results. Select your choices from below requirements and explain your selections.

(8 marks)

    I.   Static or Dynamic content

    II.   Development languages

    III. Database

    IV. Network (LAN, WAN)

c) According to the distribution of components a computer system can be divided in to two types. Name and briefly explain them.

(4 marks)

d) Outline 02 real examples for each of the following e-commerce categories

(4 marks)

    I.   B2B

    II.   B2C

    III. C2C

Question 2   (20 Marks)

a) List 3 types of internet attacks.

(3 marks)

b) Briefly describe the following three terms with respect to Information Security.
   a. Confidentiality
   b. Integrity
   c. Availability

(6 marks)

c) Illustrate and briefly explain how public key encryption works.

(8 marks)

d) Describe the best security practices of YouTube.

(3 Marks)

Question 3 _____ (60 Marks)

Online Vehicle Booking ("**vehicledetail.html**")

```
┌─Customer Details──────────────────────────────┐
│  Customer Name:                                │
│  [                          ]                  │
│                                                │
│  Phone Number:                                 │
│  [                          ]                  │
│                                                │
│  Email:                                        │
│  [                          ]                  │
│                                                │
│  Pick up Address :                             │
│  [                              ]              │
│  [                              ]              │
│  [                              ]              │
│  [                              ]              │
└────────────────────────────────────────────────┘
┌─Vehicle Details───────────────────────────────┐
│  Vehicle type:                                 │
│  [ Car ▼ ]                                     │
│                                                │
│  Air Condition :                               │
│   ⦿ With AC  ◎ Without AC                      │
│                                                │
│  Tour Staff :                                  │
│                                                │
│   ⦿ Yes  ◎ 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**".

(20 marks)

b) You have a database "**vehicle_db**", inside that there is a table name "**vehicle_booking**". User name for the database is "**root**" and the password is **con@34#!.**

(10 marks)

    I.   Write a "**config.php**", to create a mysqli database connection object.

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

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

(15 marks)

    I.   Import "**config.php**" file.

    II.   Capture all the user inputs you received from "**vehicledetail.html**".

    III.   Insert data in to "**vehicle_booking**" table by using an insert query.

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**".

(15 marks)

Sample output:

Customer detail :
Customer Name: Senaka Gamage
Customer Email: senakagamage@gmail.com
Customer Phone Number: 0777589652
Customer Address: No 11, Galle rd, Colombo 04

Vehicle details:
Vehicle Type : SUV
Air Condition :Yes
Starting Date : 15/06/2018
End Date : 30/06/2018

End of the Question Paper