"Investing in Africa's Future"

COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES

NCIS403: WEB APPLICATION DEVELOPMENT

END OF SECOND SEMESTER EXAMINATION

APRIL/MAY 2023

LECTURER: MR O MAGWAGWA

TIME: 3HOURS

INSTRUCTIONS

You are required to answer questions as instructed in each section

Start **each** question on a new page in your answer booklet

Answer all questions in **Section A**

Answer any Two (2) questions from **Section B**

Credit will be awarded for logical, systematic and neat presentations
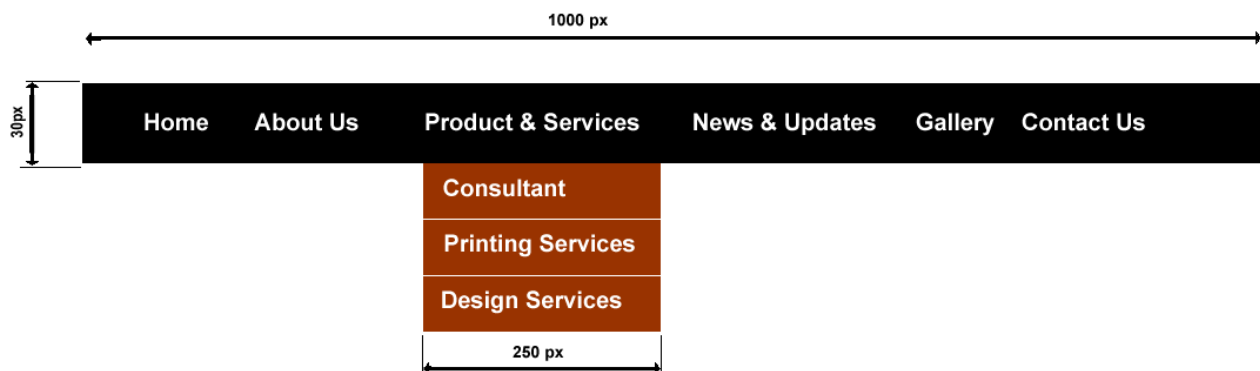
SECTION A

QUESTION ONE

Write HTML and CSS Code for the following

    a) Create the table below: **[8 Marks]**

Student ID	Student Name	Nationality
190041	Kristine Hope Shupe	Ethiopian
190350	Kudakwashe Antony Mutara	Zimbabwean
190646	Leanah Nyaruwiro	Zimbabwean
190004	Loyce Domisian Kalembo	Tanzanian
181201	Musenge Lev MUTOMBO	Congolese
190311	Thabani makiwa	Zimbabwean
190600	Triphina Mazwanga	Zambian
190624	Wilfred Kanyera	Zimbabwean
190159	Admire Tanaka ZAKEYO	Zimbabwean
190535	Charity Mapanzure	Zimbabwean
181899	Dada Suzanne RAMAZANI	Congolese

    b)

The above image is the proposed menu for the Africa University Print Press Website. Produce the HTML and CSS code for the menu. Use a separate CSS to the index file and the name of the CSS is style.css. Use the width and height dimensions indicated at the edge of the image.

Additional information:
Background color for top level - #990000
Background color for dropdown level - #ffcc00
Padding on menu links - 15px
Menu font size is 15px

Links

Home - index.html; About - about.html; Product & Services - services.html; News & Update - news.html; Gallery- gallery.html; Contact Us - contact.html; Consultant – consultant.html; Printing Services – print.html; Design Services – design.html **[12 Marks]**

QUESTION TWO

The above image is a registration form to social media driven website with a MySQL Database.

Additional information:
Database Host: localhost
Database username: root
Database password: Test123*
Database name: staffregistration
Salutation dropdown: ddsalutation
First Name textfield : txtFName
Last Name textfield : txtLName
Date of Birth :txtDOB
Email textfield : txtEmail
Mobile number: txtNumber

a) Write the HTML code that generates the Form in the diagram above **[8 Marks]**

b) Produce validation for fields firstname and lastname, making them mandatory **[4 Marks]**

c) Mobile number field validation to make sure it only accepts digits *(Using JavaScript)*

[5 Marks]

d) Produce PHP code that creates a new record in the database table **[8 Marks]**

e) Explain the code below:

UPDATE Customers

SET ContactName = 'Alfred Schmidt', City = 'Frankfurt'

WHERE CustomerID = 1;   **[3 Marks]**

f) Correct the error on the code below to enter new record:

INSERT Customers (CustomerName, ContactName, Address, City, PostalCode, Country)

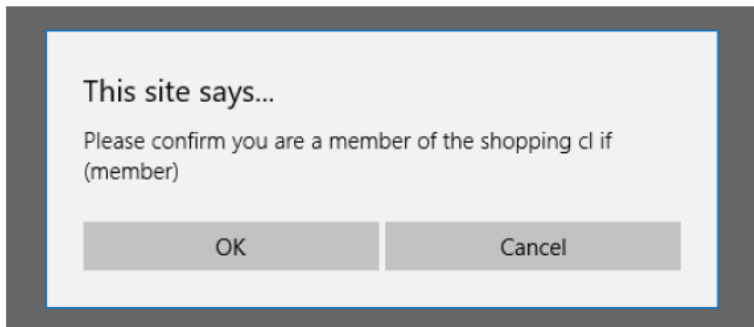SET ('Cardinal', 'Tom B. Erichsen', 'Skagen 21', 'Stavanger', '4006', 'Norway');

                                                         [2 Marks]

QUESTION THREE
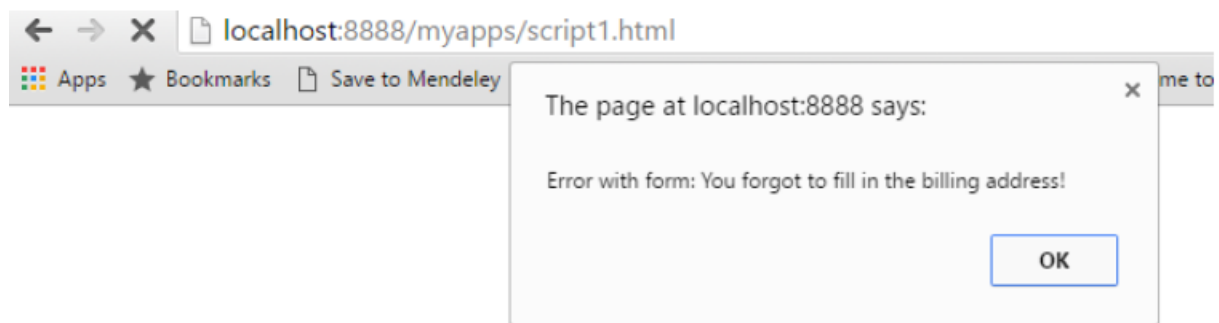
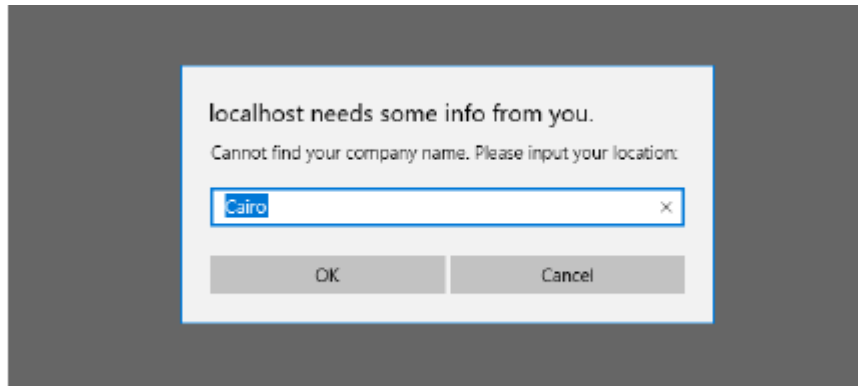Generate JavaScript code to produce the following Popup windows:

a)

                                                         [3 Marks]

b)

                                                         [3 Marks]

c)

[4 Marks]

SECTION B
QUESTION FOUR

a) How can an organisation increase its web presence **[10 Marks]**
b) What is DNS resolution? Discuss in full the DNS resolution process from the initial request till website is produced on user browser **[10 Marks]**

QUESTION FIVE
a) What are the components of a CSS Style? **[6 Marks]**
b) What is the difference between type selector and universal selector? **[4 Marks]**
c) Explain with examples what are the following
  i. Class selector
  ii. Id selector
  iii HTML element **[10 Marks]**

QUESTION SIX
a) Discuss what you understand by Web application Integration **[5 Marks]**
b) What is an API and which types of API are there **[5 Marks]**
c) With the aid of an example explain how the API can be used to integrate systems and the benefits using such **[10 Marks]**

END OF EXAMINATION