



COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

NCIS 403 : WEB APPLICATION DEVELOPMENT

END OF SECOND SEMESTER EXAMINATIONS

MAY 2021

LECTURER: MR MUKHALELA

TIME: 7 HOURS

INSTRUCTIONS

Answer any **ALL** questions in Section A. Submit answer this section as code(s) and output as screenshots via **email: mukhalelab@africau.edu**. Answer any **ONE** question in Section B as essay type answers and submit via **Moodle**.

The marks allocated to **each** question are shown at the end of the section. Include citations where possible in your essay type answers.

Credit will be awarded for logical, systematic and neat presentations.

Section A-Compulsory mini-project exam Question.

Design and implement via your localhost XAMPP sever an e-commerce web application for local medical hospital. The client told you that they are interested in a simple dynamic application that will allow the Hospital Admin to see administer especially the Admitted Patients unit of the hospital. The proposed site should now allow the relative (Next of kin) of the admitted patient or the patient him or herself to fill in a web based form that collects information about the patient 's demographic details, Financial Payments Details and Drugs details (this part of the form is to be filled in by Hospital staff only). Admitted Patients are allocating a bed in a certain Ward. Nurse aids many Patients at a time and a Doctor can also administer many Patients.

Required:

Develop a Web Application for this Hospital and input at least the following;

- a form as prescribed above
- a SQL database for storing the descriptions given above.
- include CSS for beautifying and bringing consistency on the Application's pages.
- include Java Scripts for validating the form.
- include relevant image(s) and a logo for the hospital.
- links to sister hospitals or its partners in the industry.
- php for connecting and sending data back and forth the layers of the 3-tier architecture of the web application.

NB: Your creativity shall earn you more credit. [40 marks]

Section B-Select any one.

Question 1.

Comment on the usefulness of some Content Management Systems to a Web Developer. Use examples and illustration on installing and using one. (Include screenshots as your illustration, these should include address bar for the screenshots files showing the illustrations) [20 marks]

Question 2.

'Maintenance of Web Applications require that one should be fluent of many technologies including ability in optimization of web applications on search engines and cloud hosting,' said a senior Web Analyst. Comment on the citation above, and give own examples of such technologies. [20 marks]

END OF EXAMINATION