



COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

NCSC205 INTERMEDIATE WEB APPLICATION DEVELOPMENT

END OF SECOND SEMESTER EXAMINATIONS

APRIL/MAY 2020

LECTURER: MR MAGWAGWA

DURATION: 48 HRS

INSTRUCTIONS

You are required to answer question/s as instructed below:

When submitting your answers compress (zip) the practical and submit theoretical question as separate file in MOODLE

Submit an exported database to questions that use a database

Answer One(1) questions

Credit will be awarded for logical, systematic and neat presentations

Question 1

- a) Africa University is redesigning their website. The below image is the proposed design of the Home page. Produce the Homepage and further design the About, My Academics and Alumni pages in HTML5, CSS3 and PHP code. The About, My Academics and Alumni pages should be developed using the same concept of our homepage. **Please note you are expected to create desktop and mobile views**

[70 Marks]

The wireframe shows a desktop layout for the Africa University Alumni Association homepage. The total width is 1100 px. The layout is divided into several sections with specific dimensions and CSS class names:

- Header:** A yellow bar with a width of 1100 px. It contains links: "Vacancies", "Apply online", "Pay Online", a search box (length: 250px, height: 20px), and a "Go" button (bgcolor: #9f0). The text is in Color #000, Font 12px.
- Logo:** The Africa University logo, featuring a tree and the text "AFRICA UNIVERSITY A United Methodist-Related Institution".
- Section Header:** "AFRICA UNIVERSITY ALUMNI ASSOCIATION" in Color #900, Font 14px.
- Navigation Bar:** A dark red bar with a width of 1100 px. It contains links: "Home", "About", "My Academics", "Admissions", "Newsletter", "Alumni", "Donate to AU", and a "AU" button (Color #fff, Font 20px).
- Slide:** A large image of the Africa University campus with a width of 1100 px and a height of 500 px. It is labeled "AU ONLINE".
- Form:** An "Application Form" with a width of 1100 px and a height of 160 px. It contains fields for: Firstname, Lastname, Gender (with a dropdown menu showing "V"), Age, Email Address, Cellphone, Password, and Confirm Password. A "Save" button is at the bottom.

Class names and dimensions are indicated on the left side of the wireframe:

- Class - top_head - #fff Class - top_head - #fff 20
- Class - bottom_head - #fff Class - bottom_head - #fff 270
- Class - navi - #000000 40
- Class - slide 500
- Class - Reg_Form 160

Desktop View

Additional information:

Main image should cover the inter-screen
Menu bar should also cover the inter-screen

Top-head class should be hidden in mobile view

logo - logo.png

Main image - slide.jpg

Padding on menu links - 15px

body font size is 14px

Form input elements are all equal in width


Gender dropdown menu should have Male and Female options

Links/ Menu

Home - index.html; About - about.html; Admissions - admissions.html; Newsletter - newsletter.html


Alumni - alumni.html; My Academics - academics.html; Donate to AU – donate.html; applyonline – apply.php; Vacancies – vacancies.html; Pay Online – online.html

[Vacancies](#) | [Apply online](#) | [Pay Online](#)


AFRICA UNIVERSITY
A United Methodist University

AFRICA UNIVERSITY ALUMNI ASSOCIATION

[Home](#)
[About](#)
[My Academics](#)
[Admissions](#)
[Newsletter](#)
[Alumni](#)
[Donate to AU](#)



Application Form

Firstname

Lastname

Gender

Age

Email Address

Cellphone

Password

Confirm Password

Mobile View

- b) Validate using JavaScript the HTML form in question 1 a) as follows:
 - i) First name and Last name to accept only letters and should not be empty [2 Marks]
 - ii) Age and Cellphone number to accept only digits [5 Marks]
 - iii) Email address must in format of email address [5 Marks]
 - iv) Password and Confirm password must be the same [3 Marks]
- c) Using the Form in a) write PHP code snippets that will
 - i) Connect to a database called **Alumnidb** which has username **user1** and password **pass1**
 - ii) Create a new record in table called **Pdetails** with columns **id, fname, lname, gender, age, email and pass** [15 Marks]

Question 2

You are an IT expert and you have been approached by the Ministry of Health and Child Care of Zimbabwe(MoHCC) to develop a Web application specifically for the Covid-19. The system is expected to do the following:

- i. Allow the public to register if they have the symptoms(applicant).
 - ii. The applicant can track the status of his registration
 - iii. Allow the administrators at MoHCC to respond using email and the portal
 - iv. Develop administrator level 1 rights which allows for the creating and viewing for new records.
 - v. Develop administrator level 2 rights which allows for viewing, updating and deleting records.
 - vi. Have page for the public to view statistics for pending investigations, current and recovered infections
 - vii. Allow administrators to be viewed by only administrators
-
- a) Discuss in great details web technologies that can be used to generate such a system. [20 Marks]
 - b) Develop a prototype web application that can performs 4 of the requirements listed in the project brief. All the forms used in the prototype should be validated (*indicate the functions developed and use two tables which are users_tble and register_tble*) [60 Marks]
 - c) Advise the MoHCC through a memo on how you will protect the system and the data uploaded [20 Marks]

Question 3

The Ministry of Tourism has resolved to rebrand their image. The process requires the creation of a logo and development of new website.

- a) Review the website <https://www.zimbabwetourism.net/> and develop a concept paper which outlines the following:

- i. Findings of the review - mention the pages and functions on the website
- ii. Propose website features you would implement to improve the website
- iii. Provide an analysis of the drawing system theories and justification of the drawing system selected for logo development
- iv. Discuss how you would promote and market the website with a budget of US\$200

[70 Marks]

- b) Develop a website prototype using a Content Management System with the functions you have mentioned in the concept paper

[30 Marks]