



UNIVERSITY
OF
LUSAKA

SCHOOL OF EDUCATION, SOCIAL SCIENCES AND TECHNOLOGY
BIT214 - ADVANCED JAVA PROGRAMMING
ASSIGNMENT 2024 SEMESTER 2

OBSERVE THE FOLLOWING INSTRUCTIONS:

- Due date: 10th September 2024
- Assignment must be uploaded through Moodle.
- No assignment will be submitted through email.
- Ensure that assignments are uploaded on time.
- Submit your work (code) using notepad++
- You will be expected to demo your software solutions.
- No assignments will accepted after the deadline.

File upload instructions to Candidates:

SUBMIT THE FILE NAME AS FOLLOWS:

BIT214_STUDENTNO__ASSIGNMENT1_S2_2024

e.g : BIT214_BIT121230_ASSIGNMENT1_S2_2024

Please Submit your assignment in NOTEPAD ++ as an attachment to this assignment Header. DO NOT upload any software but ONLY program CODE.

Question 1

Design and develop a graphic user interface (GUI) multi-user chat application. The chat application should allow exchange of text messages and photos.

The graphic user interface (GUI) containers, e.g., windows, forms and dialog boxes that you will use should have the title **CHAT APP – NAME_STUDNO**, where *NAME* is your name and *STUDNO* is your student number.
(40 Marks)

Question 2

Zambezi Trading Company specializes in selling clothes. Their shop is located in the Central Business District of Lusaka. They has decided to set up an **Online Point of Sale Application** with inventory management capabilities. You have been hired as the software developer to design and develop the application using Java programming to meet their requirements. Below are the requirements.

REQUIRED

1. The application is expected to have a security module to manage users. The users should be able to log into the system using a username and password. A customer should be able to register and create their own profile including a username and a password.
2. When items are received at the shop, the system should allow the users to capture the products received and their quantities. When items are received, the stock level should be updated accordingly.
3. The system should allow customers to buy the clothes online. The selling interface should allow the customers to select items that they want to buy and the payment method. *Once this is done the selling transaction should be considered to have been completed.* When items are sold, the stock level should be updated accordingly.
4. At any time, the system should show the stock levels (quantities of products available in the shop) to the customers and users.

Your application should have a menu and on top of your menu there should be a title **POS – NAME STUDNO**. If you use graphic user interface (GUI) components, the main container which will have the **menus** should have the title **POS – NAME STUDNO**; where *NAME* is your name and *STUDNO* is your student number. (60 Marks)

NB: Question Two (2) is a group project. Each group should have three (3) students.