1ˢᵗ sit Coursework Question Paper   **Spring Semester 2023**

Module Code:	**CS5054NI**
Module Title:	**Advanced Programming and Technologies**
Module Leader:	**Mr. Prithivi Maharjan (Islington College)**

Coursework Type:	**Groupwork**
Coursework Weight:	This coursework accounts for **50%** of your total module grades.
Submission Date:	**Week 12 (Monday, 8 May 2023)**
When Coursework is given out:	**Week 6**
Submission Instructions:	Submit the following to Islington College's MST Portal before the due date (1pm on the due date): ● **Files should be in .pdf** ● **.java, and .class file should be zipped**
Warning:	London Metropolitan University and Islington College take Plagiarism seriously. Offenders will be dealt with sternly.

Plagiarism Notice

You are reminded that there exist regulations concerning plagiarism.

Extracts from University Regulations on Cheating, Plagiarism and Collusion

Section 2.3: "The following broad types of offence can be identified and are provided as indicative examples …...
(i)   Cheating: including copying coursework.
(ii)   Falsifying data in experimental results.
(iii)   Personation, where a substitute takes an examination or test on behalf of the candidate. Both candidate and substitute may be guilty of an offence under these Regulations.
(iv)   Bribery or attempted bribery of a person thought to have some influence on the candidate's assessment.
(v)   Collusion to present joint work as the work solely of one individual.
(vi)   Plagiarism, where the work or ideas of another are presented as the candidate's own.
(vii)   Other conduct calculated to secure an advantage on assessment.
(viii) Assisting in any of the above.

Some notes on what this means for students:

1.   Copying another student's work is an offence, whether from a copy on paper or from a computer file, and in whatever form the intellectual property being copied takes, including text, mathematical notation and computer programs.
2.   Taking extracts from published sources without attribution is an offence. To quote ideas, sometimes using extracts, is generally to be encouraged. Quoting ideas is achieved by stating an author's argument and attributing it, perhaps by quoting, immediately in the text, his or her name and year of publication, e.g., " e = mc2 (Einstein 1905)". A reference section at the end of your work should then list all such references in alphabetical order of authors' surnames. (There are variations on this referencing system which your tutors may prefer you to use.) If you wish to quote a paragraph or so from published work then indent the quotation on both left and right margins, using an italic font where practicable, and introduce the quotation with an attribution.

Further information in relation to the existing London Metropolitan University regulations concerning plagiarism can be obtained from http://www.londonmet.ac.uk/academic-regulations

Deliverables

You are required to submit two components before the submission deadline.

1. The software with the entire coursework project containing Java classes source codes. For this you can zip your project.

2. Report in PDF format

Project Information

This group coursework is about an E-commerce website (Clothe Website) where you should develop an e-commerce system with its report. You should follow the given points.

● Project should follow the MVC pattern.

● There must be three packages within this project – model, view, and controller.

● Controller folder should contain Servlets which accept all the request of user

● Model folder contains method for all the database operation and model class

● View folder contains the .jsp and html file for the response of the user.

Task 1: [20 marks]

Login System [10 marks]

● User can register (user must upload image while register)

● Both user and admin can login

● Password should be encrypted

● Login session should be used

Admin Panel [10 marks]

You are required to create the admin panel page (.jsp file). This page should contain following features:

● Only admin can view this page and use its operation

● The admin should be able to add product information with images to the database.

● The admin should be able to view the product lists.

● The admin can edit and delete the product

● The admin can view the order list of each client

Task 2 [20 marks]

Home Page [10 marks]

● Home page consists of products. The product information consists of image, price, stock and AddToCart option and also have search option.

● User should be able to search the product list from search option

● User should be able to filter the product according to category, highest price and highest rating

● Users can view the homepage without login and can search the product with category, price and brand.

● If the user wants to order the product s/he have to click in the Add to cart option (if the user has not login the website, then user have to login for add to cart option and if the user has not registered then register the user)

When user is logged [10 marks]

● Users can edit their profile (name, address, phone number, image etc).

● Users can change their password.

● Users can search the product according to category, price, brand etc

● Users can view their purchased or cart products.

● Users can order the product by using AddToCart

● Users can view their order list of products.

● There must be logout system for the user (when the user is logged out all the session should be expired)

● Users cannot go directly to the respective page without login.

Task 3 [10 marks]

Validation and Exception Handling [5 marks]

There must be exception page which include all the exception handling codes

Programming Styles [5 marks]

Comments and naming conventions must be properly used.

Task 4 [40 marks]

A reflective report (1500 words), which concisely documents:

1.   Well-structured report which includes font size, font family, alignment, introduction, conclusion and other report essentials.

2.   Proper description of the tools, techniques and libraries used for programming, designing and reporting. About the tool and how you have used them and what its benefits must be explained with proper images.

3.   Wireframe and actual design should be showed with proper evidences

4.   Class diagram and detailed description of the classes' purpose, properties and methods is required.

5.   Test cases with proper evidence (screenshot of the system) is required. At least 5 test cases are required.

6.   A reflection of your experience of the development task, what issues you experienced, your solution to overcome it and any lessons learned.

Report Structure

1.   Introduction [3 marks]

1.1.   Aim

1.2.   Objectives

2.   User Interface Design [5 marks]

2.1.   Wireframe

2.2.   Actual design

3.   Class diagram [5 marks]

4.   Method description [5 marks]

5.   Test cases [5 marks]

6.   Tools and libraries used [5 marks]

7.   Development Process [5 marks]

(Should portray the entire journey of system development)

8.   Critical Analysis [5 marks]

9.   Conclusion [2 marks]

10.   Reference

Task 5 [10 marks]

Viva – Oral Presentation

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