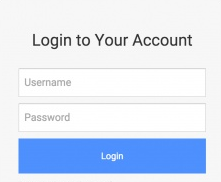
ULK Masters for Internet System

Lab Exercises

Summer Class 2021, July 4

**Practical Labs for Advanced java programming**

Q1.Design a simple login form using HTML and Java Server page



Q2. Write a java program that views, inserts, and update student information stored in a student table of **MIS** database.

Q3. You are required to develop a simple web application for managing products.

1. Use any of the following DBMS: MySql or Oracle, create a database table named “proddb” that will be storing products’ data.

|  |  |
| --- | --- |
| Prod\_db | Product\_ id |
| Product\_name |
| Unit-price |
| Quantity |
| Total\_price |

1. Create a form that will help the end-user to record a new product in the created database table.
2. Provide functions to insert and search product from the database.
3. The table should be displayed using html and css. Use jsp to pull out data from the database.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Prouct\_id*** | ***Product\_name*** | ***Unit\_price*** | ***Quantity*** | ***Total*** |
|  |  |  |  |  |
|  |  |  |  |  |

Q4. You are required to develop a simple application for managing students’ marks for a given course. A student should be characterized by student identification number, first name and last name and marks obtained for the course. a) Use any of the following DBMS: Mysql or Oracle, to create the following table.

|  |  |
| --- | --- |
| **Student** | |
|  | StudentId |
| FirstName |
| LastName |
| gender |
| marks |
| grade |

b) Create a Form that will help the end-user to enter a new student’s id, first name, last name gender and marks. The user should select gender using radio button; Use the marks obtained by the student and calculates the grade according to the following grading scale: A = [100-80], B =] 80-70], C=] 70-60], D=] 60-50], E=] 50, 40], and F=] 40-0].

c) Create a Table to display all students’ information from the database.

d) Provide functions to update and search student from the database.

e) Handle all exceptions that may arise during the runtime of the application.

Q5. You are required to develop a simple MIS for managing construction plot in kibungo sector.

a) Use MY SQL or oracle to create the following table.

|  |  |
| --- | --- |
| **Plot** | 1. Plot number |
| 1. Owner firstName |
| 1. Owner lastName |
| 1. Village |
| 1. Long side of plot |
| 1. Small side of plot |
| 1. Area |

i) Create a form that will help the end-user to enter a new plot’s number, Owner first name, Owner last name, village, long side of plot and small side of plot.

ii) Create a table to display all plot information from the database.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Plot number*** | ***Owner first\_name*** | ***Owner***  ***last\_name*** | ***Village*** | ***Long side of plot*** | ***Small sideof plot*** | ***Are(square meter )*** |
|  |  |  |  |  |  |  |

iii) Provide functions to update search and delete plot from the database.

iv) Handle all exceptions that may arise during the runtime of the application.

Q6. Assume that a bank maintains at least two kinds of account for customers, one called as savings account and the other as current account. You are required to develop a simple banking application using Java that will store customer details and accounts information.

The number of customers should be entered by the user through the keyboard. For each account record, the application should store the customer name, id number, account number, balance, and type of account.

1. Create a form that will help the end-user to enter a customer’s information.
2. Accept deposit and update the balance
3. Permit withdrawal and update the balance
4. Display the balance.
5. ViewResult( ): This function must print the result of all accounts, in tabular format, that exist in the database.

For example :

|  |  |  |  |
| --- | --- | --- | --- |
| Account No  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Account Holder | Account Type  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Balance  \_\_\_\_\_\_\_ |
| 2024003 | Mugabo Ally | Saving | 140000.0 |
| 2024010 | Uwase Anne | Current | 120000.0 |
| 2025030 | Kagaba Josue | Saving | 280000.0 |