**Course code: SE 204**

**Course name: Software Construction**

**Assignment type: Project Assignment**

**Submission deadline: 03/05/2024**

**Instruction: Only the group leader should submit the project via STIX.**

In a group of 10 students, you are assigned to develop a Java JDBC application that allows users to log in and perform database operations based on your group's assigned case study.

**Note: Your database tables must include a login table.**

Your report and tasks should be organized according to the following table:

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| --- | --- | --- |
| **TITLE** | **DESCRIPTIONS** | **MAX. MARKS** |
| Format / Layout | * Page Number * Header (project title) * Footer (course code and course title) * List of group members * Table of Content | * 1 * 1 * 1 * 2 |
| Chapter 1: Introduction | * Give a brief description of your topic. | * 5 |
| Chapter 2: Database Tables | * List all the tables in the table with their structure * Show the tables with sample data | * 5 |
| Chapter 3: JDBC Implementation | * Utilize JDBC to establish connections to the database from your Java application * Implement CRUD operations (Create, Read, Update, Delete) for managing the database table * Implement robust error handling mechanisms to gracefully handle exceptions and errors that may occur during runtime | * 30 |
| Chapter 4: User Interface | * Develop a user interface (UI) using Java Swing to interact with the database tables. * Include functionalities for users to browse, search, view, and add/remove from the database tables. * Implement features for users to log i, and manage their profile information. | * 25 |
| Presentation | * To be presented by group members | 30 |
| **Submission** | * **Project report (PDF format only)** * **Netbeans Project folder (including database file)** * **Presentation slides (PowerPoint only)** |  |
| **TOTAL** | | **100 marks** |