**Employee Management System**

**Project Description:**

Design and implement an Employee Management System using Oracle Database and PL/SQL. The system should allow users to perform various tasks related to employee management, such as adding new employees, updating employee information, and generating reports.

**Project Requirements:**

1. **Database Design**: Design an appropriate database schema for storing information about employees, departments, and positions. Include tables for employee details, department information, and position titles.
2. **Data Population**: Populate the database with sample data, including employees, departments, and positions.
3. **PL/SQL Programming**:
   * Implement PL/SQL procedures and functions to handle common tasks such as adding new employees, updating employee information, and deleting employees.
   * Create PL/SQL packages to encapsulate related procedures and functions.
   * Utilize PL/SQL cursors for data retrieval and manipulation.
   * Implement exception handling to manage errors gracefully.
4. **User Interface (Optional)**: Design and implement a simple command-line interface using SQLDeveloper's SQL Worksheet. The interface should allow users to interact with the system by executing SQL queries and PL/SQL procedures/functions directly from SQLDeveloper.
5. **Functionality**:
   * Allow users to add new employees to the system by providing necessary details such as name, department, and position.
   * Implement functionality to update employee information, such as changing department or position.
   * Enable users to view a list of all employees, sorted by department or position.
   * Provide the ability to generate reports, such as employee listings or department summaries, using SQL queries and PL/SQL procedures.
6. **Documentation**: Provide documentation that includes:
   * Database schema diagram
   * Description of tables and their relationships
   * Explanation of PL/SQL procedures and functions
   * Instructions for using the system through the SQLDeveloper interface
7. **Testing**: Test the application thoroughly to ensure that it functions correctly under various scenarios, including edge cases and error conditions.
8. **Stretch Goals (Optional)**: Add additional features to the system to showcase. For example, implement features like employee search functionality, automated email notifications for employee updates, or integration with external systems for data import/export.

This project provides a hands-on experience in database design, SQL querying, and PL/SQL programming, all within the familiar environment of SQLDeveloper and Oracle DB.

Please present your Employee Management System with a 5 minute demonstration on 6/18/2024