**Final Project SEIS630**

**Proposal of Point-of-Sale Database Project**

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This is supposed to develop a database system for the **Point-of-sale** system. The product would have contain information about **Products, Sales Details, Inventory, Returns Details, Replenishment Order** and **User Login**. It can be used for any retail store point of sale billing system.

I am choosing this topic for my project because of I belongs from business family and I would like solve my store problems with this project.

The following steps will be used in completion of this project:

1. Design the POS System database and will follow an **E/R** approach; then go through the normalization process to come up with a collection of tables that are in Boyce-Codd normal forms.
2. Logical and Relational diagram will be designed using Oracle Data Modeler.
3. Constraint and relationships will be clearly defined.
4. I will use Oracle Cloud database to create normalized tables.
5. Populate the database by using oracle insert statements or with importing csv file using Oracle SQL developer.
6. Develop a collection of non-trivial and application oriented queries, addressing user needs and correct implementation in oracle cloud DB.
7. Write an interface in python. The main interface and functionalities will contain new sales, return items, backroom operations and exit application.
8. The python interface will also generate report and automatically replenish the inventory order.
9. Application security will be secured by user authorization.

The database and python interface connection will be done using API’s of cx\_Oracle connect.