**RDBMS MINI PROJECT**

**(SPRINT 1 &2)**

**INVENTORY MANAGEMENT SYSTEM**

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1. **Introduction**

This document outlines a mini project for the RDBMS LOT. The project is to design the database, reports the queries related to Inventory Management System of electronics appliances. This document contains information about the attributed that will be participating in the system and guidelines about reports.

* 1. **Setup Checklist for Mini Project**

Minimum System Requirements

* Physical Memory (RAM) - 1GB Minimum
* Virtual Memory - Double the amount of RAM
* Disk space - Total 5 GB
* Processor - 550 MHz minimum
* Video Adapter - 256 colors
  1. **Instructions**
* Follow standards while coding
* Create a directory by your name in drive <drive>. In this directory, create a subdirectory MiniProject. Store your Project here.
* You can refer to your course material.
* The total time required to complete this mini project is 8 hrs.
* Maintain the code.

1. **Problem Statement**
   1. **Objective**

Designing the database, developing the queries and basic reports required for INVENTORY MANAGEMENT System of Electronics appliances.

* 1. **Abstract of the Project**

This database is used as Electronics Appliances Management for the staff so that they can give best services to the customer. Also some basic reports have been developed. Since this database is to be used by front end systems, it also requires some backend query and procedure designing.

* 1. **Functional components of the project**

Design the normalized relational database using the following details. You can make appropriate assumptions wherever required. Some of the attributes are given below with the restrictions on data it can contain. Find the required attributes for all the tables and create appropriate constraints on it. (For Ex. Primary key, Foreign key, etc.)

Some of the entities and attributes are as follows:

* STAFF – staff\_id, staff\_name, staff-mobile, staff\_address.
* CUSTOMER – cust\_contact, cust\_name, cust\_id , cust\_adress, cust\_email.
* PAYMENT – pay\_cust\_id, pay\_id, pay\_amt , pay\_date, pay\_desc.
* INVENTORY – inv\_id, inv\_item, availability.
* REQUIREMENT – req\_id, p\_id, demand, staff\_id
* TRANSACTION- trans\_no ,cust\_contact, pay\_amt ,trans\_date, t\_mode.
* PRODUCT- p\_id , p\_type , p\_desc.

Some of the guidelines/protocols are given below:

* Normalize the tables.
* Create additional tables, if necessary.
* Customer can demand more then the product available in inventory.
* Many customers can order or come to shop at same time.
* Payment can be by any of mode like card mode, cash etc.
  1. **Technology Used**

Databases:

Oracle 11G Express Edition

1. **Implementation in RDBMS LOT**
   1. **Guidelines on the functionality to be built:**

**SPRINT 1 -**

* Create a procedure which take contact, name, , address , email of customer as input and store customer details in system , so that we can use that data for futher purpose also. By this we can evaluate weather the customer is new or old customer.
* Create a procedure which trans\_mode,date, cust\_contact as input and the information about the mode by which customer is paying bill , it can be by card, by cash , by UPI .
* Create a procedure which will take requirement of the customer for a single or for more than one product as input. The output should give: req\_id, p\_id, staff\_id , demand(requirement).
* Create a procedure which will ask the customer about the product he wants should be of which country.
* Create a trigger which gets triggered when there is any update or inserting on payment table , it will not allow anyone to make payment on holidays.
* Create a function which will tell you, how many transactions undergoes till now.

**SPRINT 2**

1. Perform performance tuning on the database and the pl/sql code built.
2. Create the entire database in mongo db.
3. **Evaluation and assessment parameters:**
   1. **Evaluation**

* Evaluation will be done at the end of Oracle training
* Total Marks: 100
* Marks Distribution mentioned below.

This Mini project will be done individually. Implement the Software development life cycle for the project and develop code for the respective functionality. Evaluation will be done using online presentation mode, where participant will present their work.

This project shall be evaluated in two parts:

* Marks distribution is for one part of project evaluation (Marks: 90)
* Project Presentation is another part of project evaluation (Marks: 10)