

## **Milestone 4**

### **Views and Reports:**

#### **Location Manager:**

##### **Views**

- Revenue of location per month
- All views and reports of managers

##### **Reports**

- Yearly economic performance of location using order sales

#### **Customers:**

##### **Views**

- Invoices
- Current orders
- Profile information (Personal Address, Contact number, Name)
- Available products
- Coupons approved belonging to them

##### **Reports**

- Complaints and suggestions they have to Customer Relations Group
- Orders with their Customer ID and desired products

#### **Sales Person:**

##### **Views**

- Assigned Customer List
- Orders "awaiting approval"
- Coupons of their assigned customers (approved and awaiting approval)

##### **Reports**

- Assigned customer orders and their status (whether it was approved or denied, potential discounts awaiting approval)

#### **Sales Manager:**

##### **Views**

- Coupons of customers assigned to sales people they are managing (approved and awaiting approval and unapproved)
- View of performance i.e. total order revenue per certain month per salesperson

##### **Reports**

- Overall assessment of each salesperson (uses the view above)
- Revenue generated from sales department per month

**Customer Relations Group Employee:****Views**

- Info of any customer (survey information, complaints and inquiries from customers)
- Survey requests they took care of in throughout the year
- View of customer info that have yet to complete surveys

**Reports**

- Scores from each survey
- Gathered requests from customers

**Customer Relations Group Manager:****Views**

- Results of Survey from certain year
- View of employee's performance: view all monthly complaints and inquiries their CRG employees are handling along with their complaint deadlines, status of request and whether a coupon has been issued for that request

**Reports**

- Common complaints and suggestions amongst survey results and requests
- Salesperson with the highest scores and lowest scores from all surveys

**Warehouse Employee:****Views**

- Product information view
- Bill of material (BOM) views

**Warehouse Manager:****Views**

- Inventory at their location
- Bill of material (BOM)
- View of the order notification: Order Number, Order Details

**Reports**

- Completed and current shipped containers

**Purchasing Agent:****Views**

- Info about parts that need restocking at the inventory
- Their previous part purchases

**Reports**

- Items needed to be purchased

**Assembly Person:****Views**

- Container checklist
- Routing sheet
- Product information

**Reports**

- Report of the person's assembly work in the past week (details of steps worked and their corresponding orders)

**Assembly Person's Manager****Views**

- Bill of material (BOM)
- View of worker's performance: The start time and end time of worker assembly of the product ordered by Orders and Products
- Assembly info of recent Orders to corresponding location
- View of External Shipments

**Reports**

- Parts from each order shipped out

**Accountant:****Views**

- Accounts
- Journal entries ordered by Day\_Time for a certain year
- View of invoices of orders placed for the location that the accountant works at

**Reports**

- Cumulative Credits and Debits for each account at a certain year
- (optional and technical) Balance sheet organizing accounts based on their account types
- (optional and technical) Income statement obtained from certain account types

**Payroll Person:****Views**

- Employee information relevant to payroll (salary info, role, benefits, dependents, marital status, tax info, commission)
- Hours worked in a week for Hourly Employees along with overtime hours and shift differentials

**Reports**

- Automatic paycheck calculations

**Indexes:**

**CUSTOMER:** Alphabetical Names (Clustering index)

**EMPLOYEE:** Location (Clustering index), Name (Secondary Index)

**JOURNAL\_TRANSACTION:** Date\_Time (Clustering Index), Accounts (Secondary Index)

**WEEK\_RECORD:** Sunday\_Date (Clustering Index)

**DEPENDENT:** Emp\_id (Clustering Index)

**REQUEST:** Date (Clustering Index)

**ORDER:** Date (Clustering Index)

**STEP\_WORK:** Start\_Time (Clustering Index)

**STEP:** Product (Clustering Index)

**Default Constraints:**

- Base\_Hours\_Worked and Shift\_Differential of a WEEK\_RECORD are zero by default
- All Manager of EMPLOYEE are the president by default
- The default status of an ORDER is "awaiting approval"
- The default status of an INTERNAL\_SHIPMENT is "In\_Route\_To\_Factory"
- The default status of a SURVEY is "Not Completed"
- The default status of a COUPON is "awaiting approval"
- The default reorder point of a part in an inventory is 0
- The default quantity of a part in an inventory is 0
- Base\_Hours\_Worked and Overtime\_Hours and Shift\_Differential of WEEK\_RECORD are zero default

**Check Constraints:**

- Run\_by\_Emp in LOCATION is unique
- The EMPLOYEE which Run\_by\_Emp refers to works in the corresponding Location which they run
- Every LOCATION belongs to some REPRESENTATION
- Dept\_Type in DEPARTMENT has a specific domain {Executive, Accounting, Assembly, Engineering, Information Technology, Inventory, Maintenance, Marketing, Payroll, Purchasing, Sales, Security, and Strategy}
- Every DEPARTMENT belongs to some REPRESENTATION
- Emp\_Manager and Dept\_Type in REPRESENTATION should be the same as the referenced Emp\_Id and its Dept\_Type in EMPLOYEE
- Similarly, Emp\_Manager and Loc\_ID in REPRESENTATION should be the same as the referenced Emp\_Id and its Location in EMPLOYEE
- The EMPLOYEE whose role is "President" is the only one which supervises itself (or could just have a null Manager). The rest have none null Manager which is different than their own Emp\_Id
- The Marital\_Status of an EMPLOYEE has a specific domain e.g. {Single, Married, Divorced, Separated, etc...}
- The count of CONTACT\_PERSON per CUSTOMER is between 1 and 3
- Salesperson of CUSTOMER is none null unless the customer is international
- There is a REGION whose Region\_Name is "International" and whose Assigned\_Location is headquarters Loc\_Id
- The Placement\_Method of ORDER is either "Web" or "Phone"
- If the Region\_Name of an ORDER is "International", then the Placement\_Method must be "Web"
- The Status of an ORDER has domain {awaiting approval, denied, approved, under assembly, shipped, awaiting payment, completed}

- A COUPON applied to an INVOICE has Expiry\_Date that is on or before the referenced ORDER Placement\_Date
- Every LOCATION has some EMPLOYEE which is also a CUSTOMER\_RELATIONS\_AGENT
- All EMPLOYEES which are also CUSTOMER\_RELATIONS\_AGENTS have a specific Dept\_Type. Currently, it is Strategy.
- The Requester\_Id of a REQUEST can only reference a CUSTOMER with a none null Salesperson
- The First\_Purchase\_Date of a CUSTOMER is the earliest Placement\_Date of ORDERS placed by that CUSTOMER.
  
- The Status of an INTERNAL\_SHIPMENT has domain {In\_Route\_To\_Factory, Returning\_To\_Warehouse, Complete}
- Every LOCATION has some EMPLOYEE which is also a PURCHASING\_AGENT
- The status of an ORDER has to be "shipped" before a corresponding INVOICE is created
- Late\_Fees of an INVOICE are applied after the Due\_Date is passed
  
- All PAYROLL EMPLOYEES work in Headquarters LOCATION
- An EMPLOYEE belongs to SALES if and only if they belong to SALESPERSON
- An EMPLOYEE belongs to exactly one of SALES, HOURLY, SALARY
- Base\_Hours\_Worked of a WEEK\_RECORD is between 0 and 40
- Benefit\_Description of a BENEFIT has domain {Health insurance, dental, vision, short and long term disability, life insurance, and 401k}
  
- The status of a SURVEY has domain {"Not Completed", "Completed"}
- The status of a COUPON has domain {"awaiting approval", "approved", "denied"}