**Shop Management System**

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| **PRODUCT\_INFO** | **STOCK** | **CUSTOMER\_INFO** | **STATUS** | **PURCHASE\_LOG** |
| ***ATTRIBUTES***  ID (AUTO, VARCHAR2)  NAME (VARCHAR2)  PRODUCER (VARCHAR2)  MRP (NUMBER)  CURRENT\_DISCOUNT (NUMBER) [0 – 100, PERCENT]  DISCOUNT\_UNTIL (DATE) | ***ATTRIBUTES***  PID (AUTO, VARCHAR2) {PRODUCT\_INFO.ID}  MIN\_MARGIN (NUMBER)  CURRENT\_STOCK (NUMBER) | ***ATTRIBUTES***  ID (AUTO, VARCHAR2)  NAME (VARCHAR2)  ADDRESS (VARCHAR2)  REGISTER\_DATE (DATE)  TOTAL\_PURCHASE (NUMBER)  STATUS (VARCHAR2) {STATUS.STATUS\_NAME} | ***ATTRIBUTES***  STATUS\_NAME (VARCHAR2) <BRONZE, SILVER, GOLD, PLATINUM>  DISCOUNT (NUMBER) [0 – 100, PERCENT] | ***ATTRIBUTES***  CID (VARCHAR2) {CUSTOMER\_INFO.ID}  PID (VARCHAR2) {PRODUCT\_INFO.ID}  QUANTITY (NUMBER)  PER\_COST (NUMBER)  TOTAL\_COST (NUMBER)  TOTAL\_COST\_W\_MEM\_DISCOUNT (NUMBER)  PURCHASE\_DATE (DATE) |
| ***PROCEDURES***  ADD\_PRODUCT (NAME, PRODUCER, MRP)  [*Should add itself to the STOCK table, with MIN\_MARGIN set to a default value = 10*]  REMOVE\_PRODUCT\_BY\_ID (PID)  REMOVE\_PRODUCT\_BY\_NAME\_PRODUCER (NAME, PRODUCER)  REMOVE\_ALL\_PRODUCT\_BY\_PRODUCER (PRODUCER)  GET\_PID (NAME, PRODUCER)  GIVE\_DISCOUNT (PID, VALUE)  CHECK\_DISCOUNT (PID)  GIVE\_DISCOUNT\_BY\_PRODUCER (PRODUCER, VALUE)  GIVE\_CONDITIONAL\_DISCOUNT (MARGIN, BELOW, ABOVE, EQUAL, VALUE)  GIVE\_CONDITIONAL\_DISCOUNT\_BY\_PRODUCER (PRODUCER, MARGIN, BELOW, ABOVE, EQUAL, VALUE) | ***PROCEDURES***  REST0CK (PID, AMOUNT)  DECREMENT\_STOCK (PID, AMOUNT)  CHANGE\_MIN\_MARGIN (PID, VALUE) | ***PROCEDURES***  ADD\_CUSTOMER (NAME, ADDRESS)  REMOVE\_CUSTOMER (CID)  CHANGE\_ADDRESS (CID)  SEARCH\_BY\_NAME (NAME)  SEARCH\_BY\_ADDRESS (ADDRESS)  SEARCH\_BY\_STATUS (STATUS) | ***PROCEDURES*** | ***PROCEDURES***  MAKE\_PURCHASE(CID, PID, QUANTITY)  [*This will auto insert into the table, set PURCHASE\_DATE to current date and also calculate PER\_COST = MRP \* DISCOUNT, TOTAL\_COST = PER\_COST \* QUANTITY and* TOTAL\_COST\_W\_MEM\_DISCOUNT = TOTAL\_COST \* STATUS\_DISCOUNT]  SEARCH\_BY\_CUSTOMER (CID)  SEARCH\_BY\_PRODUCT (PID)  TOTAL\_PURCHASE\_OF\_PRODUCT (PID)  PURCHASE\_IN\_LAST\_N\_DAYS (PID, N) |
| ***TRIGGERS***  **/** | ***TRIGGERS***  ON UPDATE => {IF CURRENT\_STOCK < MIN\_MARGIN: SHOW A MESSAGE THAT IT IS BELOW AND MENTION THE AMOUNT} | ***TRIGGERS***  ON INSERT => {SET STATUS TO BRONZE}  {SET REGISTER\_DATE TO CURRENT DATE}  {SET TOTAL\_PURCHASE TO ZERO}  [CAN ALSO HANDLED INSIDE THE PROCEDURE]  ON UPDATE => {  IF PURCHASE > 100 : STATUS := BRONZE  ELSIF PURCHASE > 500 : STATUS := SILVER  ELSIF PURCHASE > 2000 AND MEMBERSHIP\_DURATION > 6 MONTHS : STATUS := GOLD  ELSIF PURCHASE > 5000 AND MEMBERSHIP\_DURATION > 12 MONTHS : STATUS := PLATINUM  } | ***TRIGGERS***  / | ***TRIGGERS***  / |