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**Assignment: Relational Model**

For each relation provided in Excel files, identify:

1. **Primary key**
2. **Attributes**
3. **Foreign key(s)**
4. **Degree of the relation**
5. **Cardinality of the relation**

**Category:**

1. **Primary key ---------------- > cat\_id**
2. **Attributes ---------------- > cat\_id, cat\_desc**
3. **Foreign key(s) --------------- > NONE**
4. **Degree of the relation ----------- > 2**
5. **Cardinality of the relation ------ > 4**

**Color:**

1. **Primary key ---------------- > color**
2. **Attributes ---------------- > color**
3. **Foreign key(s) --------------- > NONE**
4. **Degree of the relation ----------- > 1**
5. **Cardinality of the relation ------ > 12**

**Customer:**

1. **Primary key ---------------- > c\_id**
2. **Attributes ---------------- > c\_id, c\_last, c\_first, c\_mi, c\_birthdate, c\_address, c\_city, c\_state, c\_zip, c\_dphone, c\_ephone, c\_userid, c\_password**
3. **Foreign key(s) --------------- > NONE**
4. **Degree of the relation ----------- > 13**
5. **Cardinality of the relation ------ > 6**

**Inventory:**

1. **Primary key ---------------- > inv\_id**
2. **Attributes ---------------- > inv\_id, item\_id, color, inv\_size, inv\_price, inv\_qoh**
3. **Foreign key(s) --------------- > item\_id, color**
4. **Degree of the relation ----------- > 6**
5. **Cardinality of the relation ------ > 32**

**Item:**

1. **Primary key ---------------- > item\_id**
2. **Attributes ---------------- > item\_id, item\_desc, cat\_id, item\_image**
3. **Foreign key(s) --------------- > cat\_id**
4. **Degree of the relation ----------- > 4**
5. **Cardinality of the relation ------ > 7**

**Order\_line:**

1. **Primary key ---------------- > o\_id, inv\_id**
2. **Attributes ---------------- > o\_id, inv\_id, ol\_quantity**
3. **Foreign key(s) --------------- > NONE**
4. **Degree of the relation ----------- > 3**
5. **Cardinality of the relation ------ > 10**

**Order\_Source:**

1. **Primary key ---------------- > os\_id**
2. **Attributes ---------------- > os\_id, os\_desc**
3. **Foreign key(s) --------------- > NONE**
4. **Degree of the relation ----------- > 2**
5. **Cardinality of the relation ------ > 6**

**Orders:**

1. **Primary key ---------------- > o\_id**
2. **Attributes ---------------- > o\_id, o\_date, o\_methpmt, c\_id, os\_id**
3. **Foreign key(s) --------------- > c\_id, os\_id**
4. **Degree of the relation ----------- > 5**
5. **Cardinality of the relation ------ > 6**

**Shipment:**

1. **Primary key ---------------- > ship\_id**
2. **Attributes ---------------- > ship\_id, ship\_date\_expected**
3. **Foreign key(s) --------------- > NONE**
4. **Degree of the relation ----------- > 2**
5. **Cardinality of the relation ------ > 5**

**Shipment\_Line:**

1. **Primary key ---------------- > ship\_id, inv\_id**
2. **Attributes ---------------- > ship\_id, inv\_id, sl\_quantity, sl\_date\_received**
3. **Foreign key(s) --------------- > NONE**
4. **Degree of the relation ----------- > 4**
5. **Cardinality of the relation ------ > 11**