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| Module Code | DWD 504 | Module Title | DWD 504 Database Concepts |
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Task 1: Entities and attributes

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| **Entity** | **Attributes** |
| **Customer**  to store relevant customer details | Customer\_ID, first\_name, Last\_name, mobile\_number, email\_address, adress |
| **Categories**  Categorization of products. | Category type (Sports\_Car, Family\_car, luxury\_car.) Category\_ID, category\_name, |
| **Employees**  To store relevant employee details | First\_name, Last\_Name, Employee\_ID, mobile\_number, email\_address, branch, job ( which branch they work at and what their job is at the branch, date\_hired, Salary |
| **Invoice**  Tracking of payment details. | Invoice\_ID, payed\_date, due\_date, price (cost of the payment before tax), tax, Total (total cost) payment\_type |
| **Product**  Details about specific products, so it’s easy to reference and check details about specific products | Product\_ID, Product\_name, stock, price, warranty, discount |
| **Order**  Details about the order, referenced later in the purchase phase. | Order\_ID, Order\_Type (online or in person order), Order\_date, Salesperson |
| **Discounts**  Discount Details | Discount\_ID, Discount\_value, Discount\_Name |
| **Delivery**  Delivery details | Shipping\_ID, Shipment\_Date, Delivery\_method |
| **Warranty**  Warranty Specifications | Warranty\_duration, warranty\_provider, warranty\_id |

Task 2: Business Rules

1. Under the **‘Category’** types section, it should include either: family cars, luxury cars, and sports cars.

2. It should be included in the **Product** information section that cars being sold can be used or new.

3. **Payment** can be either direct payment, or situationally a monthly invoice, where you receive the payment in parts over 5 years.

4. The salesperson who makes a sale should be recorded for their commission-based payment under the purchase **order** details.

5. New cars come with 4 years of Mechanical warranties from the manufacturer, this should be noted under the **warranty** section.

6. In a single sale **order,** the customer can trade in no more than one of their used cars but can purchase any number of cars.

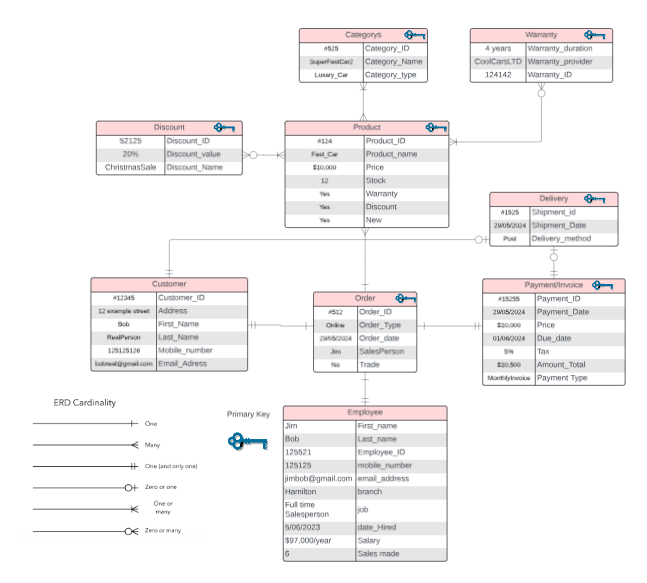
7. **Employees** can only work under one of three branches, Auckland, Hamilton, or Wellington.

8. **Employee** types include full-time salespeople, part-time salespeople, an admin staff, and branch managers.

9. All **employees** work on a salary-based payment, however salespeople receive a commission-based payment on top, where they receive extra payment depending on how many sales they make.

10. The company has a weekly **discount** system where a few select cars are discounted. This can affect the final price of the sale.

Task 3: Entity Relationship Model



Should this not be readable, a link to the lucid chart is here. [Safeco Cars Lucid Chart](https://lucid.app/lucidchart/469e85ad-a671-4d43-a1a6-074b0364f2a6/edit?viewport_loc=-894%2C-1165%2C2490%2C1387%2C0_0&invitationId=inv_c25884fb-5aab-4f83-929a-0917375c1496) (lucid account required to view)