## A database for a Vehicle Insurance Company

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#### Team 3

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## **Conceptual Design Model(CDM)**

# **Design Rules**

To design our car insurance database conceptual data model we first needed to decide what characteristics underpin the model under investigation. As a group we decided on various rules that need to be implemented in order for the model to be consistent and precise. Table 1.0 below illustrates these rules.

Design Rule	Description	Example
Rule 1	All individual entity types must be in capital letters	CUSTOMER
Rule 2	An underscore is used to label an entity type with more than one word	TERMS_CONDITIONS
Rule 3	Plurals are not used when labelling entity types	APPLICATION
Rule 4	No abbreviations are used when labelling entity types	QUOTE

Table 1.0

## Assumptions

To design the Conceptual Data Model (CDM) we have a certain set of assumptions. These assumptions will help shape our model to allow consistency within our design. Table 1.1 presents the assumptions used in this model.

Assumption	Description	
Assumption 1	Customer must be a permanent international driving licence	
Assumption 2	The online insurance has no physical high-street presence	
Assumption 3	The online insurance is given to customers over 18 years of age	
Assumption 4	The online insurance needs some driving history of customer	
Assumption 5	The online insurance needs to know type of car customer drives	
Assumption 6	The online insurance needs to know about insurance history of customer	

Table 1.1

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# **Entity Types**

All of the entity types that we feel are relevant in our CDM are illustrated in Table 1.2, below.

<b>Entity Type</b>	Related to Entities	`Relationship
QUOTE	APPLICATION	one to one
APPLICATION	INSURANCE POLICY CUSTOMER	one to many one to many
CUSTOMER	MEMBERSHIP PREMIUM CLAIMS VEHICLE	many to many one to many one to many one to one, one to many
INSURANCE POLICY	VEHICLE INSURANCE DEPARTMENT TERM AND CONDITION NOK	one to many many to many one to many
PREMIUM	RECEIPT	one to many
CLAIMS	SETTLEMENT	one to one
VEHICLE INSURANCE DEPARTMENT	DEPARTMENT SERVICE	one to one, one to many one to many
DEPARTMENT	OFFICE COMPANY	many to many one to many
COMPANY	STAFF	many to many

Table 1.2

# **Graphical presentation of CDM**

The Conceptual Data Model that will be used as a starting point in designing our online car insurance database system can be seen in Figure 1.3 (with entities relationships).

