

# COMP8711 Assignment 1 (Zhiyun Chen)

## 1a: Entity Data Dictionary Worksheet

Entity name	description	Aliases	Occurrence	Dependent Entity
<b>Ute</b>	Represents a Ute vehicle in the firm's fleet	Vehicle	Exists once it is acquired by the firm	None
<b>Client</b>	Represents an individual or company who is doing business with the firm.	Customer	Exists once they have business with the firm.	Booking, Contract
<b>Contract</b>	Represents a Ute hiring agreement.	Hire Contract	Exists once a ute is hired.	None
<b>Booking</b>	Represents a future booking for a Ute	Reservation	Exists once a client makes a booking.	None

## 1b: Relationship Data Dictionary Worksheet

Relationship	Description	Aliases	Occurrence
<b>Hires</b>	Associates a Client with a Contract	Rents	Exists when a Client hires a Ute
<b>Contains</b>	Associates a Contract with a Ute	Includes	Exists when a Ute is included in a Contract
<b>Reserves</b>	Associates a Client with a Booking	Books	Exists when a Client makes a Booking

## 1c: Relationship-Entity Data Dictionary

<b>Hires</b>	Client: 0..*	Contract: 1
<b>Contains</b>	Contract: 1	Ute: 0..1
<b>Reserves</b>	Client: 0..*	Booking: 1

## 1d: Attributes Data Dictionary Worksheet

### Ute Table Worksheet

Field Name	Data Type	Size	Nullability
fleet_membership_number	Numeric	3	Cannot be NULL
vehicle_registration_number	String	7	Cannot be NULL
colour	String	20	Can be NULL
make	String	8	Cannot be NULL

**Client Table Worksheet**

Field Name	Data Type	Size	Nullability
client_id	Numeric	N/A	Cannot be NULL
name	Character	N/A	Cannot be NULL
address	Address	N/A	Can be NULL
contact_phone	String	14	Cannot be NULL
driver_license_number	String	12	Can be NULL

**Contract Table Worksheet**

Field Name	Data Type	Size	Nullability
contract_id	Numeric	N/A	Cannot be NULL
time_and_date	Date	N/A	Cannot be NULL
credit_card_type	String	2	Cannot be NULL
credit_card_number	String	20	Cannot be NULL
starting_kilometrage	Numeric	5	Cannot be NULL
ending_kilometrage	Numeric	5	Can be NULL
payment_date	Date	N/A	Can be NULL
payment_amount	Currency	N/A	Can be NULL

**Booking Table Worksheet**

Field Name	Data Type	Size	Nullability
booking_id	Numeric	N/A	Cannot be NULL
nominated_pick_up_depot	String	N/A	Can be NULL
starting_time_and_date	Date	N/A	Cannot be NULL
number_of_hire_days	Numeric	2	Cannot be NULL
preferred_colour	String	12	Can be NULL

## 2: Entity-Relationship Diagram (ERD)

