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**Assignment Submission Form**

This form must be filled in and completed by the student(s) submitting an assignment

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| --- |
| Name(s): Caelan Smyth |
| Programme: Computer Applications and Software Engineering (CASE) |
| Module Code: CA214 |
| Assignment Title: SSADM Project |
| Submission Date: 09/12/2018 |
| Module Coordinator: Renaat Verbruggen |

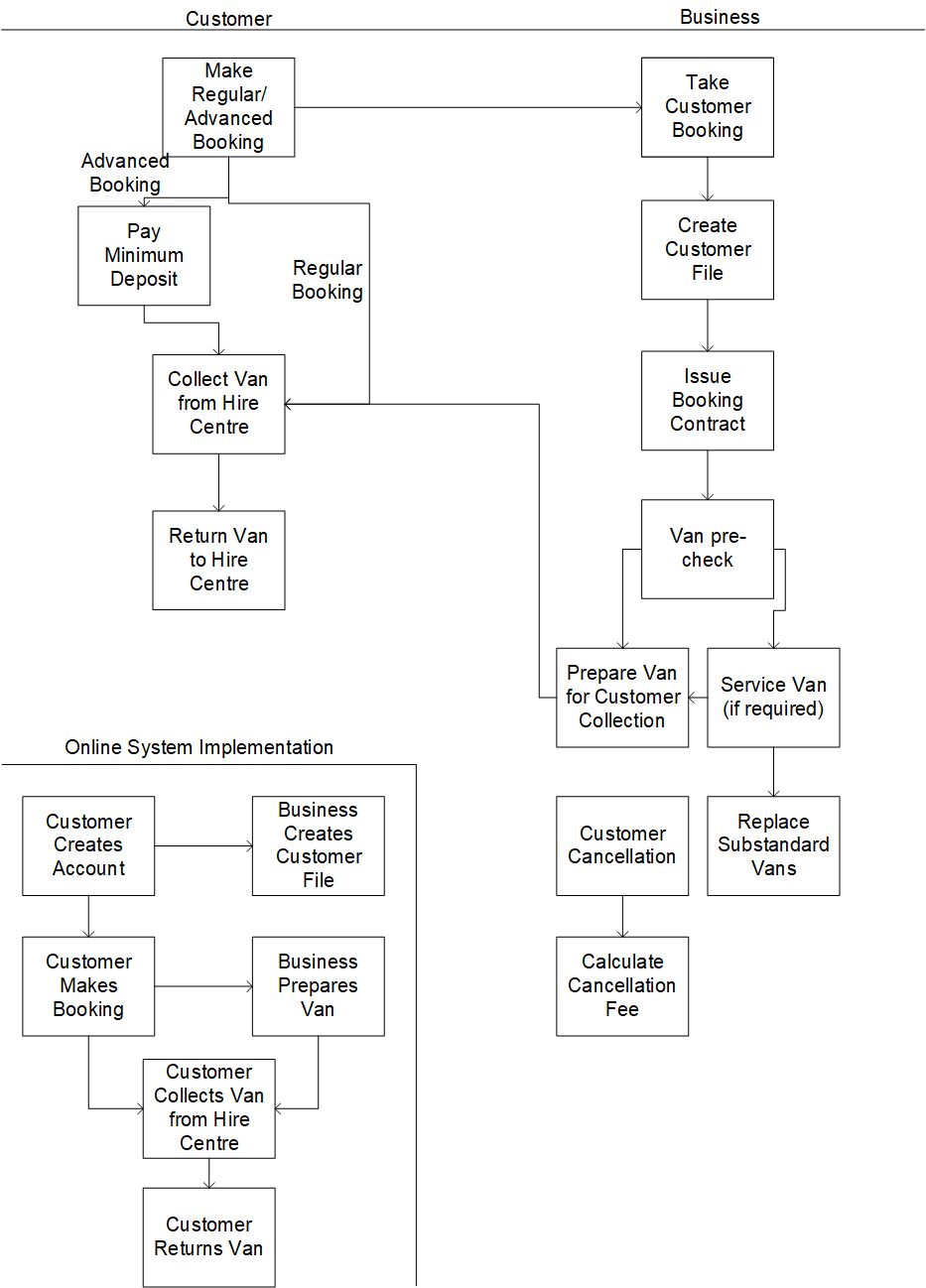
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I/We have read and understood the referencing guidelines found at

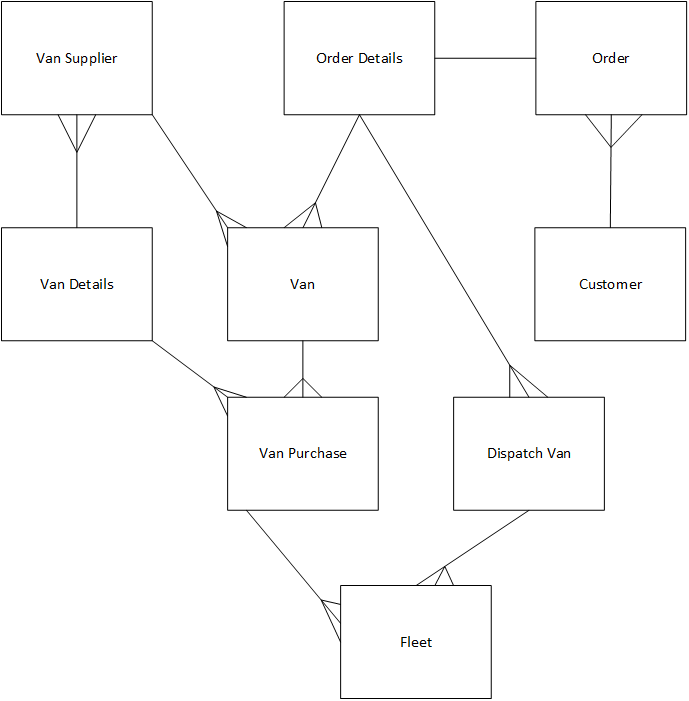
<http://www.dcu.ie/info/regulations/plagiarism.shtml>, <https://www4.dcu.ie/students/az/plagiarism>and/or recommended in the assignment guidelines.

Name(s): Caelan Smyth Date: 09/12/2018

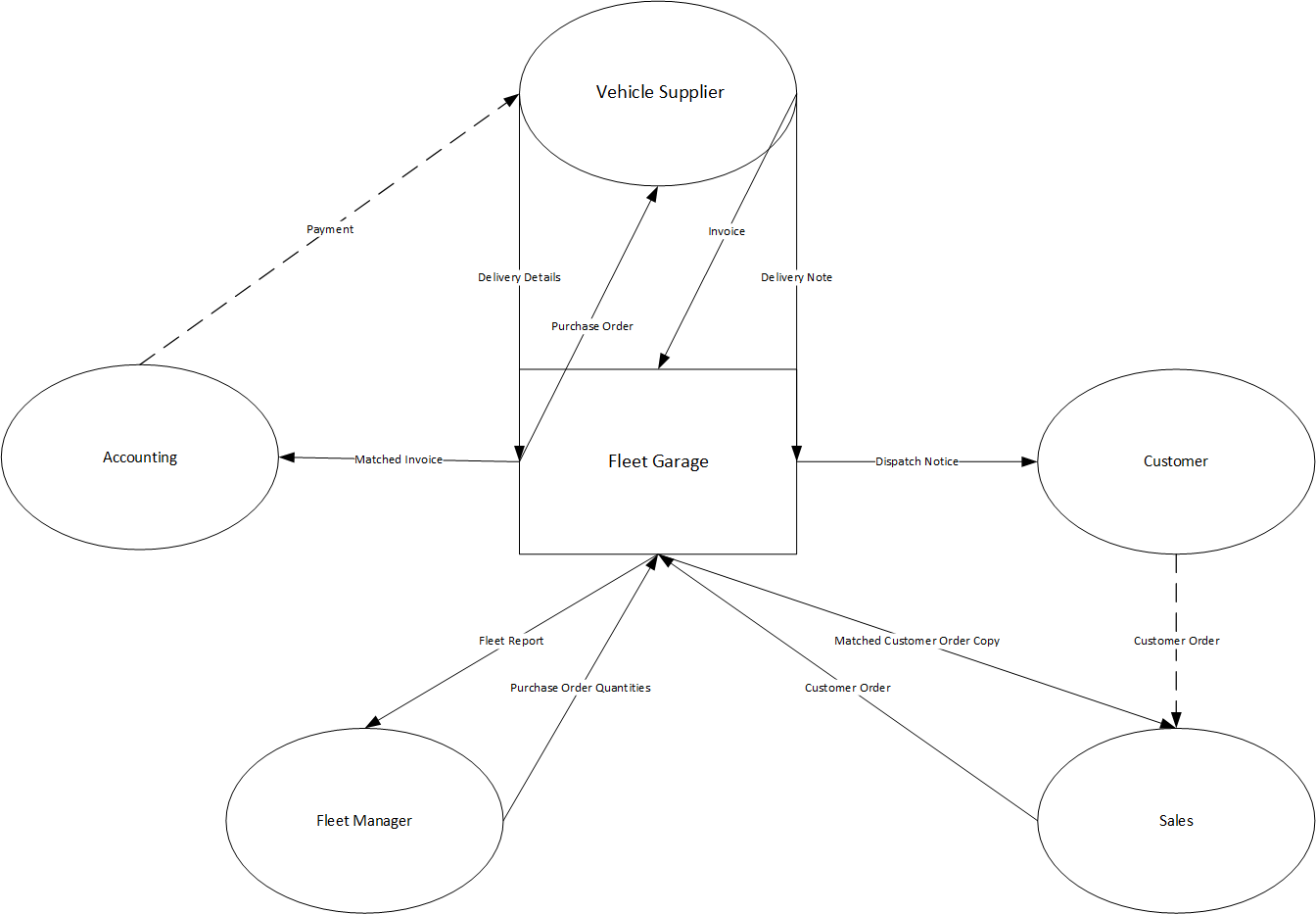
# Business Activity Model



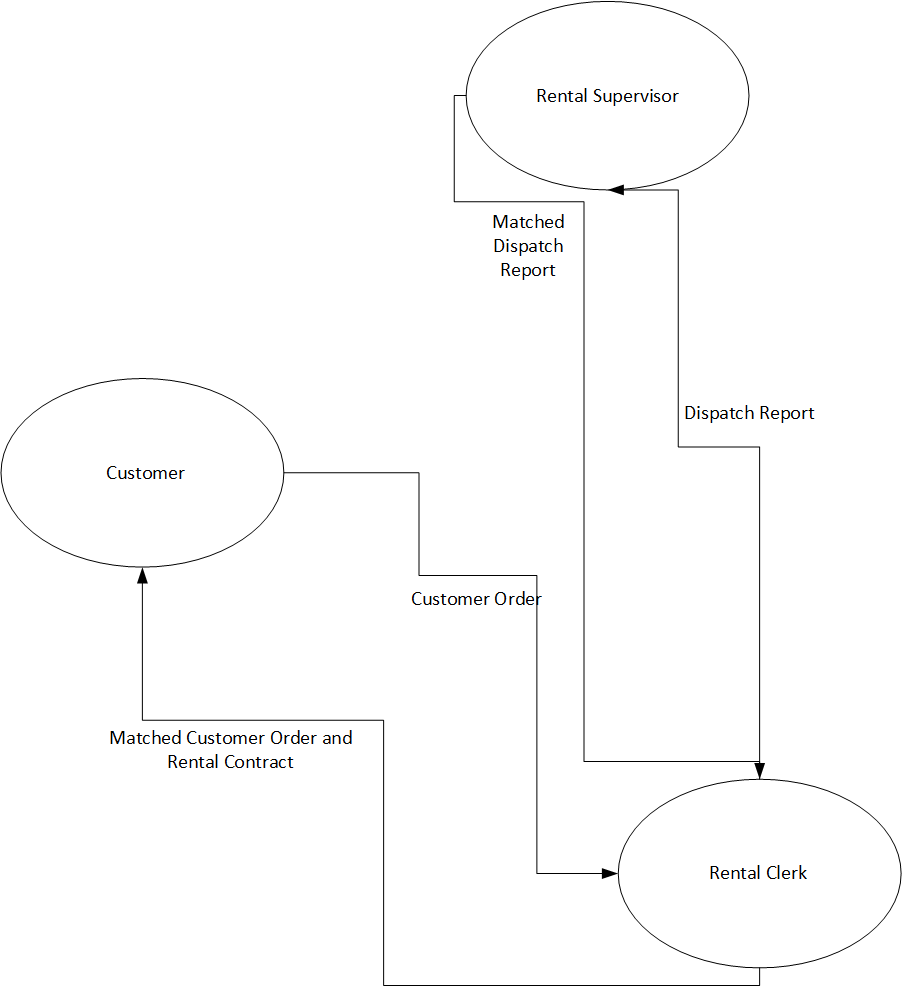
# Logical Data Model



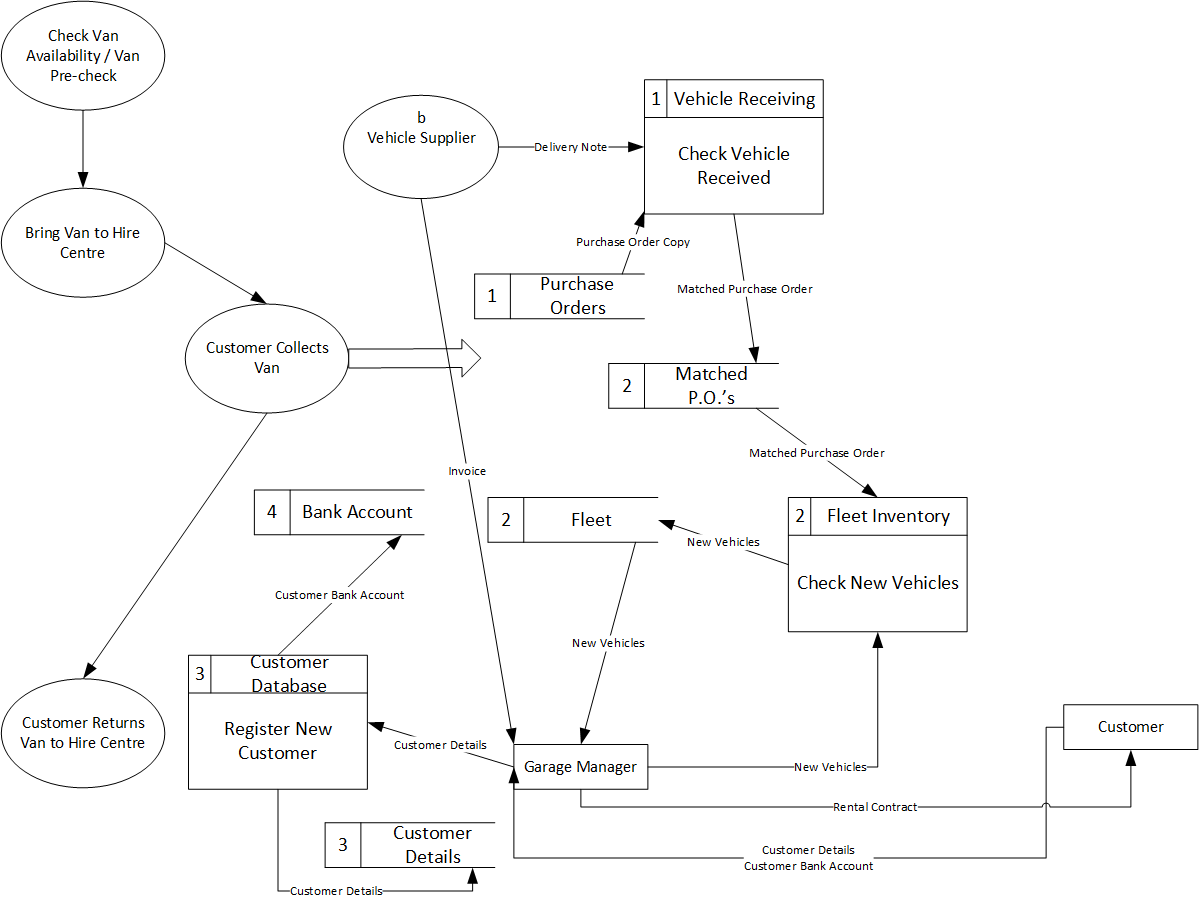
# Top Level Context Diagram



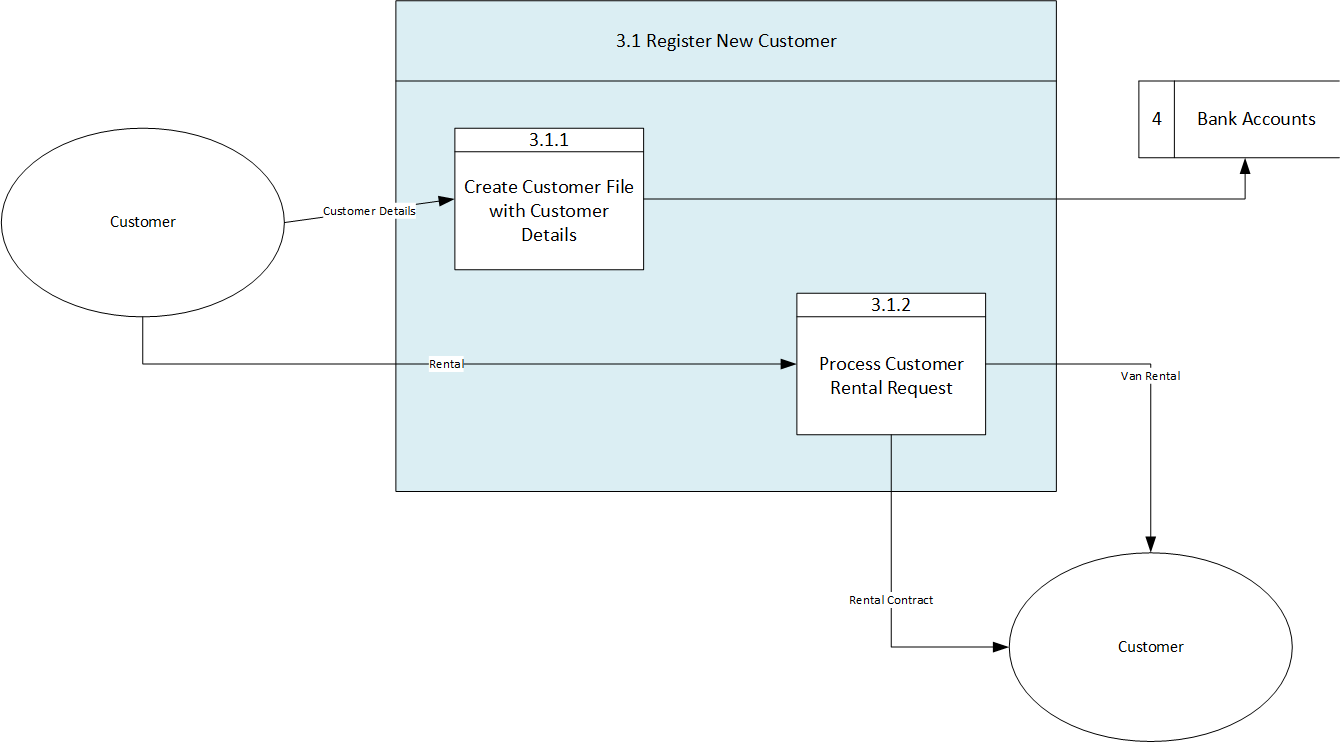
# Document Flow Diagram

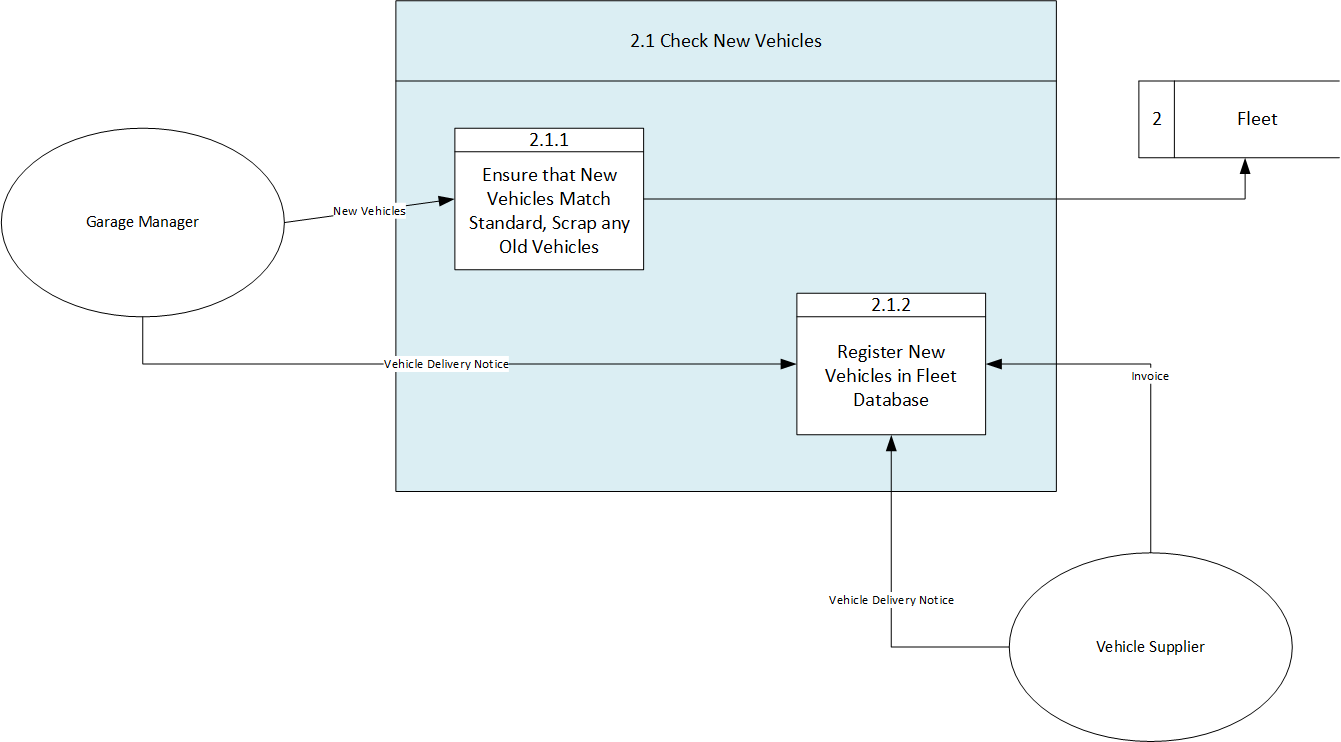


# Data Flow Diagram – Level 1

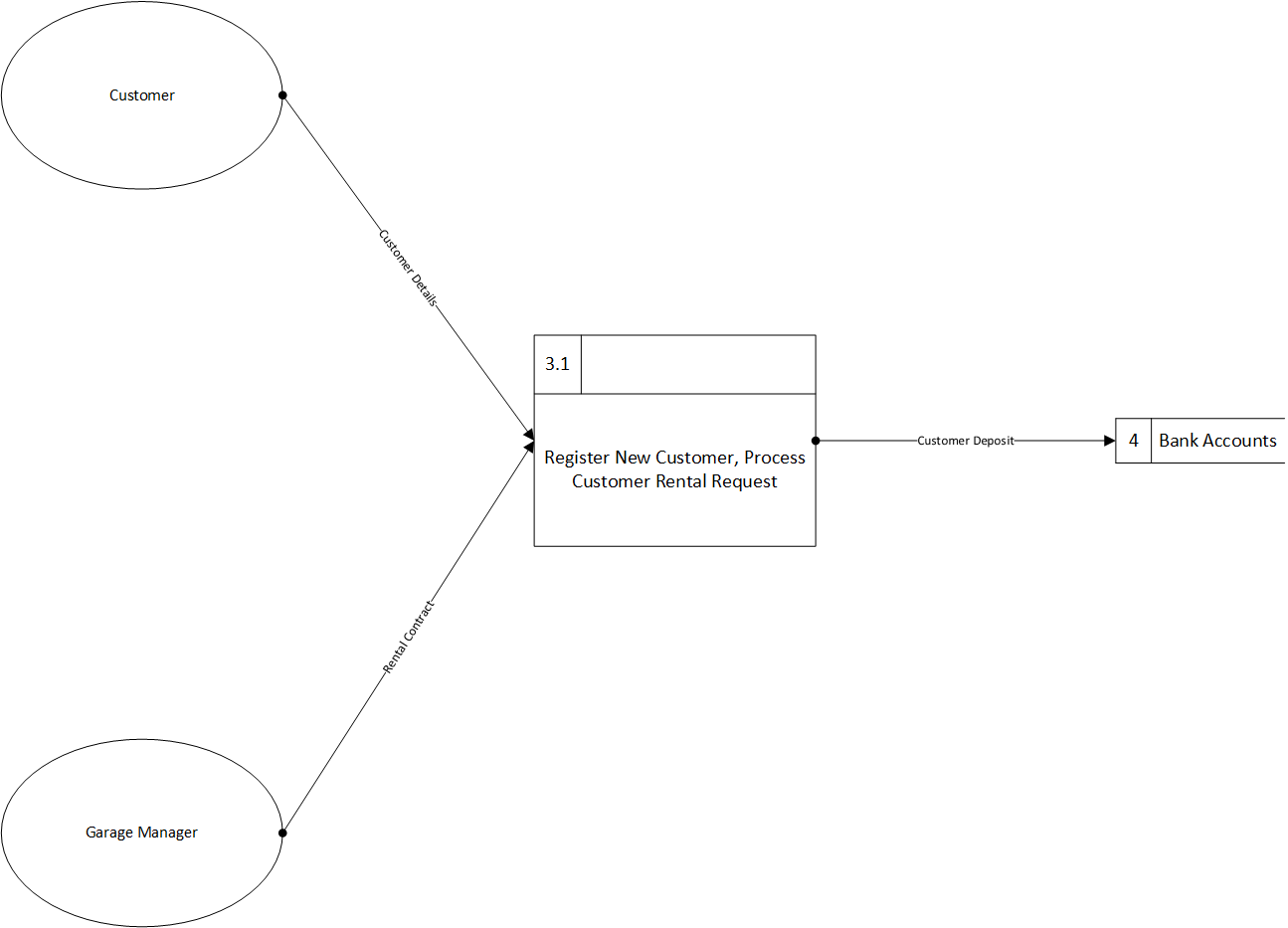


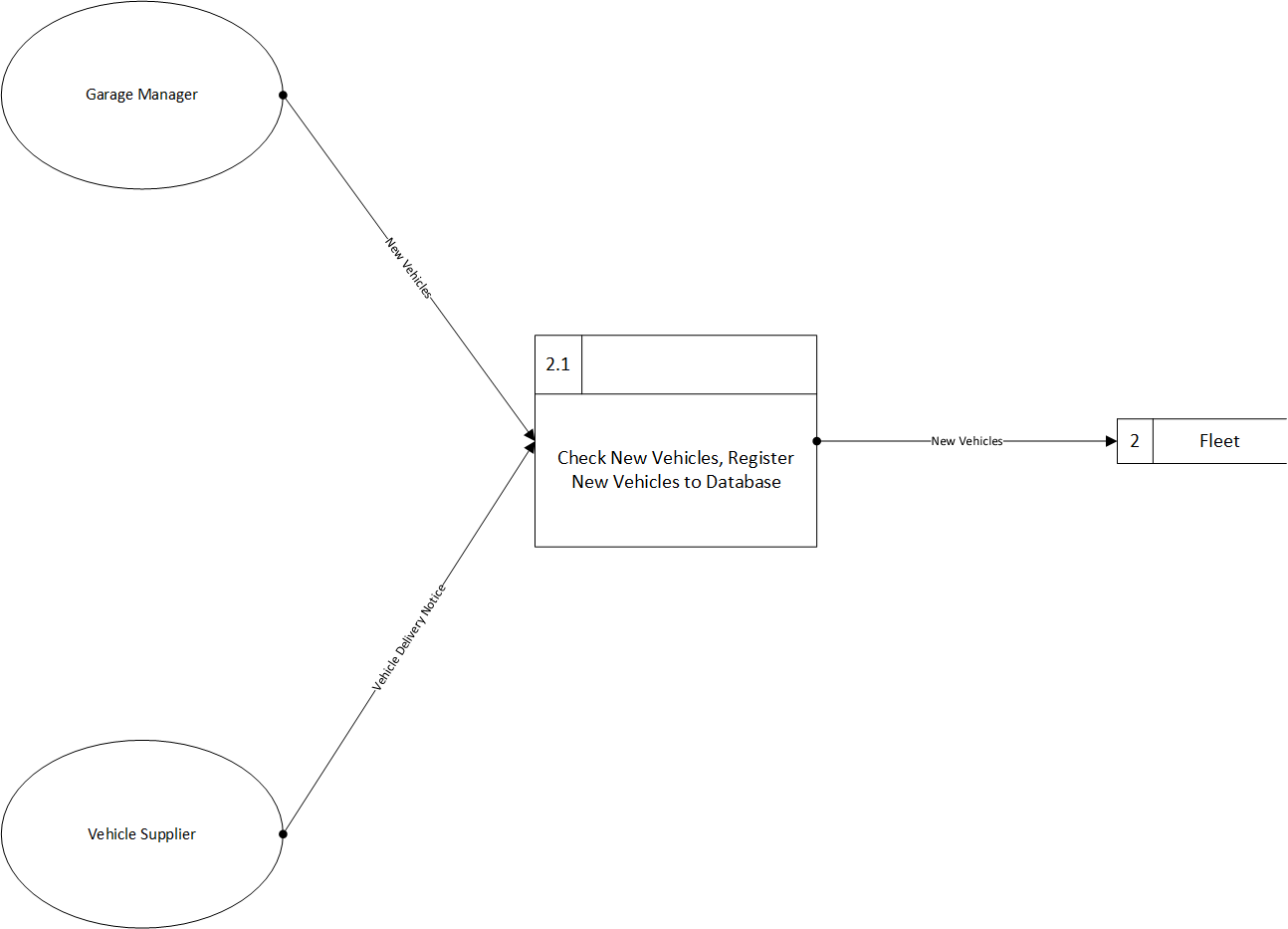
# Data Flow Diagram – Level 2





# Logical Data Flow Diagrams





# Function Definition

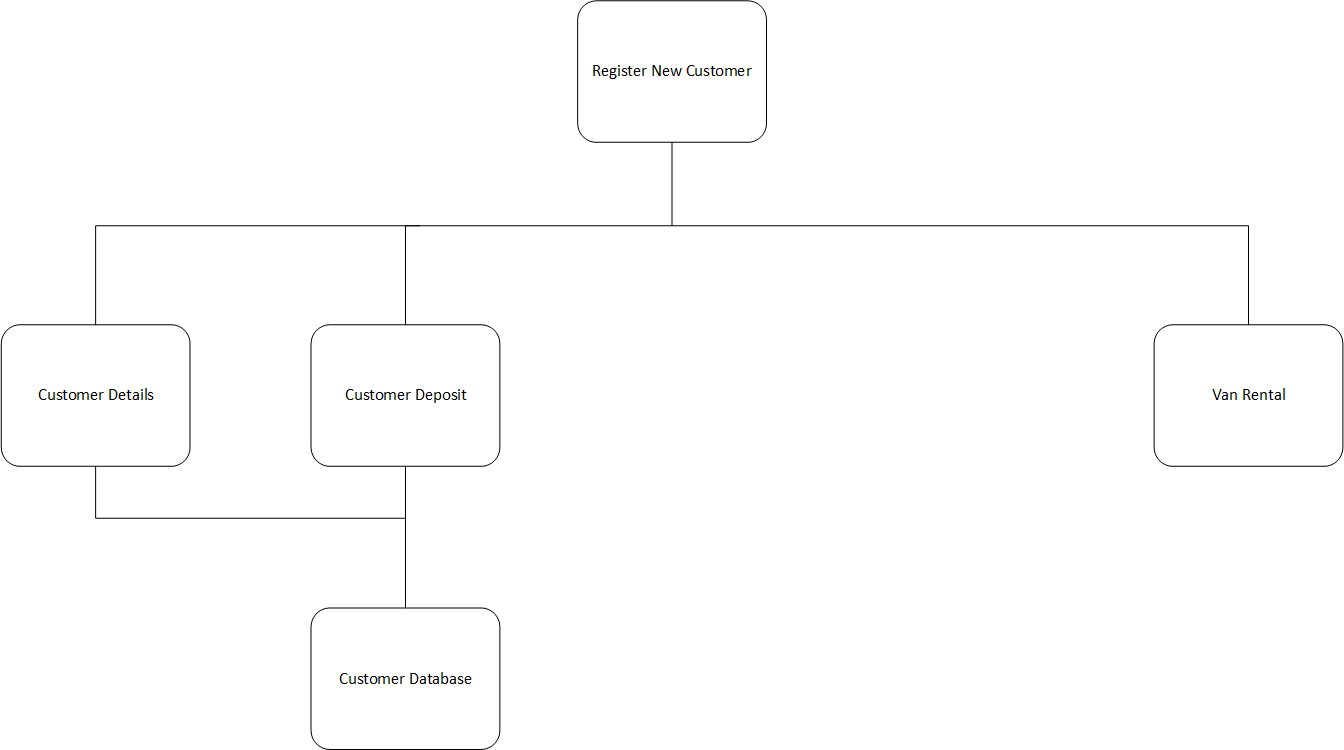
## Register New Customer – DFD Level 1

This function is used to get customer details and store them in a database. This database will allow the business to more easily reference customer details if need be. The database will contain entries for name, address, contact details and rental history. This database will also enable repeat customers to more easily make bookings as the business will be able to reference this customer’s entry in the database rather than having to make a new entry.

## Check Van Availability/Van Pre-Check – DFD Level 1

This function is used to ensure that the vans that are being hired out to customers are available and in good condition. This will ensure that customers are not receiving faulty vans, and that customers’ needs will be satisfied with the appropriate van for their requirements. This will also allow the business the opportunity to update their fleet with newer models if they find any vans that do not satisfy their standards.

# I/O Diagram



# Process Descriptions

## Prepare Van for Customer Collection

Check the customer’s deposit and what type of van they are looking for.

Carry out van pre-check.

If the van is valid

Deliver it to the hire centre.

Issue booking contract to customer.

Else

If there is no van available to the customer’s specifications

Offer them a different kind of van.

If the customer has not paid their advanced booking deposit

Remind them to pay the deposit.

If the van is not in serviceable condition

Scrap the van/Replace it with another van.

Alert customer that the van is ready for collection from hire centre.

## Take Customer Booking

Process customer’s deposit.

Create customer’s file.

Send deposit to company bank account.

If customer deposit is valid

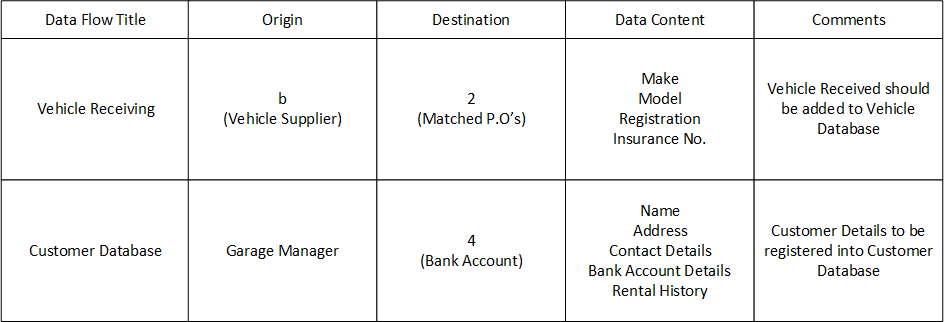
Issue booking contract.

Else

Retry deposit charge.

Prepare van for customer collection.

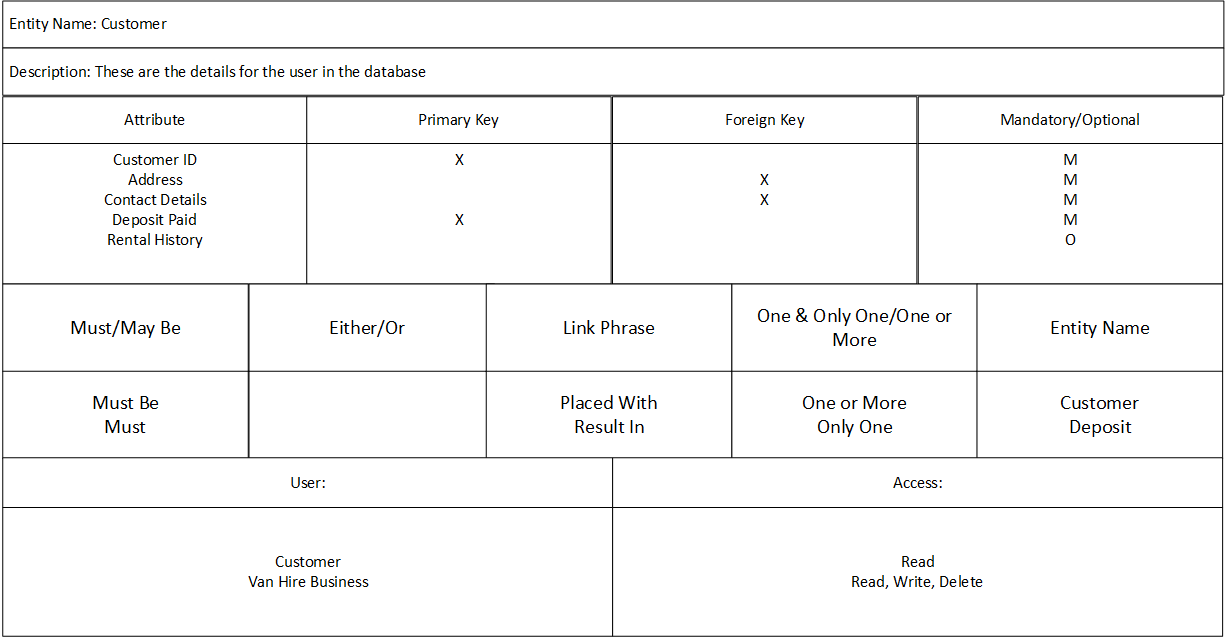
# Data Flow



# External Entity Description

|  |  |  |
| --- | --- | --- |
| ID | Name | Description |
| b | Vehicle Supplier | The trader from which the garage purchases their vans for the rental service. |

# Entity Description



# Data Store

