

Chapter V

Database Design

This section covers the design and structure of the database for the proposed system and a graphical representation of the transactions of the system.

A. Data Dictionary

Car

This table contains information about the van to be rented.

Field Names	Field Content	Data Type	Field Size
CarID	Unique Car ID for each Van	Text	255
PlateNo	Plate Number of each Van	Text	255
RegNo	Registration Number of each Van	Text	255
Type	Type of vehicle to be rented	Text	255
Trip	Sequence of the van's trip	text	255
DateManu	Manufactured date of the van	Date/Time	Short date
Model	Car model of the van	Text	255
Make	Brand of the van	Text	255
Speed	Speed of the van	Text	255
Condition	Condition of the van	Text	255
Avail Status	Availability Status of the Van	text	255

Primary Key: CardID

Candidate Key: None

Logs

This table contains log information of every user.

Field Name	Field Content	Data Type	Field Size
LogID	Unique ID for each log	AutoNumber	Long Integer
Username	Identification for each user	Text	255
CompName	Complete name of the user	Text	255
TimeIn	Time the user logged in	Date/Time	Long Time
TimeOut	Time the user logged out	Date/Time	Long Time
LogDate	The date of daily log in and log out	Date/Time	Short Date

Primary Key: LogID

Candidate Key: UserName

Role

This table contains information of every role.

Field Name	Field Content	Data Type	Field Size
RoleID	ID for each role	Text	255
RoleName	Designation of the user	Text	255

Primary Key: RoleName

Candidate Key: None

Make

This table contains the make/brand of the van.

Field Name	Field Content	Data Type	Field Size
ID	Unique number for each brand	AutoNumber	Long integer
Brand	Brand of the Van	Text	255

Primary Key: Brand

Candidate Key: None

Trip

This table contains information about the sequence trip of the van.

Field Name	Field Content	Data Type	Field Size
ID	Unique ID For each trip	AutoNumber	Long Integer
Trip	Number of sequence of the trip	Text	255

Primary Key: Trip

Candidate Key: None

Client

This table contains information about the client or the renter of the van.

Field Name	Field Content	Data Type	Field Size
ClientID	Unique Client ID for each client	Text	255
FName	First Name of the client	Text	255
MName	Middle Name of the client	Text	255
LName	Last Name of the client	Text	255
Address	Address of the client	Memo	
DOB	Date of Birth of the client	Date/Time	
Gender	Gender of the client	Text	255
Occup	Occupation of the client	Text	255
PhoneNo	Phone Number of the client	Text	255
Email	Email of Client	Text	255
License	License of Client	text	255
DateReg	Date of every registration of each client	Text	255

Primary Key: ClientID

Candidate Key: None

Driver

This table contains information about the driver.

Field Name	Field Content	Data Type	Field size
DriverID	Unique ID for each driver	Text	255
DriverName	Name of the driver	Text	255
Address	Address of the driver	Memo	
BDate	Birth Date of the driver	Date/Time	
PhoneNo	Phone Number of the driver	Text	255
License	License of the driver	Text	255
DateReg	Date of registration	Date/Time	
CStatus	Civil Status of the driver	Text	255
TIN	TIN	Text	255
SSS	SSS	Text	255
PlateNo	Plate Number in the assigned van	Text	255
Type	Type of the van	Text	255
Make	Brand of the van	Text	255
Trip	Sequence of the driver to route	Text	255

Primary Key: DriverID

Candidate Key: DriverName

Order_Transaction

This table contains information about rented transactions.

Field Name	Field Content	Data Type	Field size
OrderID	Order ID	AutoNumber	Long integer
CarID	Car ID	Text	255
ReceiptNo	Receipt Number	Text	255
RateApplied	Rate applied per rent	Currency	Standard
TaxRate	Rate Of Tax	Currency	Standard
TaxAmount	Amount of Tax	Currency	Standard
SubTotal	SubTotal	Currency	Standard
Total	Amount to be paid by the client	Currency	Standard
TransNo	Transaction Number	Text	255

Primary Key: None

Candidate Key: None

Return_Car

This table contains information about returned van.

Field Name	Field Content	Data Type	Field size
ReturnID	Return ID	AutoNumber	Long Integer
ClientName	Name of the client	Text	255
DriverName	Name of the driver	Text	255
PlateNo	Plate Number of the van	Text	255
Model	Model of returned van	Text	255
Make	Brand of the van	Text	255
DateReturned	Date when they returned the van	Text	255

Primary Key: ReturnID

Candidate Key: None

Purchase_Order:

This table contains information about the van to be returned.

Field Name	Field Content	Data Type	Field size
PID	Purchased ID	AutoNumber	Long Integer
ClientID	Client's ID	Text	255
DriverID	Driver's ID	Text	255
ClientName	Name of the client	Text	255
DriverName	Name of the driver of the van	Text	255
DateFrom	Date when the van rented	Date/Time	
DateTo	Date to be returned	Date/Time	
NoDay	Number of Days it was rented	Text	255
Trip to	Route of the Van	Text	255
ProcessedBy	Personnel who processed the transaction	Text	255

Primary Key: PID

Candidate Key: None

User

This table contains information about the users.

Field Name	Field Content	Data Type	Field size
UserID	Unique number for each log	Text	255
Username	Unique identification for each user	Text	255
Password	Password	Text	255
Confirm	Confirmation	Text	255
Role	Designation of the user	Text	255
CompName	Complete name of the user	Text	255
Email	Email of the user	Text	255
DateReg	Date Registration of the user	Date/Time	

Primary Key: CompName

Candidate Key: UserName

Rent_Car

This table contains information all about rented van.

Field Name	Field Content	Data Type	Field size
RentID	Rent ID	AutoNumber	Long Integer
ClientID	ID of every Client	Text	255
CarID	ID of the van	Text	255
DriverID	Unique ID for each driver	Text	255
PlateNo	Plate Number of the van	Text	255
Model	Car Model of the van	Text	255
Condition	Condition of the van	Text	255
Make	Brand of the van	Text	255
TankLevel	Fuel Tank Level of the Van	Text	255
DateRented	Date when it is rented	Date/Time	
Status	Status of the van	Text	255

Primary Key: ClientID

Candidate Key: None

B. Relational Database

