Avery Tan, Canopus Tong, Nathan Nguyen
Design Report Project 1 CMPUT 291

The database contains 7 module python files:
    -main.py
    -utilities.py
    -Auto_Transaction.py
    -Licence_Registration.py
    -Vehicle_Registration.py
    -Violation_Record.py
    -Search_Functions.py

main.py
    This module is the python file that is run
    from the command shell! It imports all
    functions from every other module. It
    authenticates the user and then brings up
    the databases menus that users can navigate.
    The menus allow the user to access all the
    database features. It starts with the main
    menu where the 4 database insert features
    can be accessed along with the search menu.
    In the search menu, users can use the 3
    database search features or return to the
    main menu. The user closes the program
    through the main menu.

    The main function of significance is the
    "applications" function which runs our
    main menu and the "SearchEngine" function
    which runs our search engine menu.

utilities.py
    utilities was used to test the database
    system and contains functions for table
    creation as well as importing test data
    into those tables so that our team could
    test all features of the database system.
    This functions are disabled(not called)
    in the final version

of the system.

The function "Create_all_the_tables"
defines our tables and the function
"Populate" populates them with test data.

Auto_Transaction.py
This module contains all functions
required to complete and verify an
auto transaction. The function,
AutoTransaction(curs,connection)
is called from the main menu and
allows users to enter a new auto
transaction. Ensures that sellers
exist in our system or returns an
error message. It also registers
the new owner if his details are
not present in the system. It also
ensures that the vehicle exists
in our system and that the seller
is a primary owner of that vehicle.

The main function of interest is the
"AutoTransaction" function which
runs the feature.

Licence_Registration.py
This module contains the function
LicenceRegistration(curs,connection)
necessary to complete and verify a
new licence registration. This
function is called from our main.py
module in the main menu. This feature
forces users to enter details of a new
person if that person does not yet
exist in the system. It also prevents
a person who already has a licence
from registering another one.

The main function of interest is

"LicenceRegistration" which runs
the feature

Vehicle_Registration.py
This module contains all functions
required to complete a new vehicle
registration. This function is called
from our main.py module in the main
menu. It ensures that users cannot
enter a non-unique vehicle_id and
forces users to enter details of a
new person if that person does not
exist in the system.

The main function of interest is
"VehicleRegistration" which
runs the feature.

Violation_Record.py
This module contains the single function
ViolationRecord(curs,connection) which
allows users to enter a new violation
record. This module is called from the
main.py module in the main menu.

This feature asserts that the person
being fined as well as the vehicle
being fined exist in our system and
allows users to automatically fine the
primary owner of the vehicle or to
manually enter in the details of the
individual being fined.

The main function of interest is
"ViolationRecord" which runs the feature.

Search_Functions
This module contains our 3 search
functions that allow users to use them.

They are called from the main.py module in the search menu.

The function "Search1" runs the following feature.
It allows users to get details of a driver from entering his licence number or name

The function "Search2" runs the following feature.
It allows users to get violation records of drivers from entering their licence number or sin numbers

The function "Search3" runs the following feature.
it allows users to get the full vehicle history of a vehicle by entering the vehicle id.