Technical Documentation for Cars Database Software

Introduction

This technical documentation provides an overview of the Cars Database software developed by OmegaSolutions. The software is designed to access an external database named "Hire" and interact with a table named "tblCar." Users can perform various operations on car records, including viewing, adding, editing, deleting, updating, canceling amendments, and searching for records.

Connection Details

Database Connection

Database Name: Hire
Table Name: tblCar
Server: localhost
Port: 3306
User: root
Password: **********

Purpose of the Software

The primary purpose of the Cars Database software is to provide a user-friendly interface for managing car records stored in the external database. It enables users to perform the following tasks:

1. Display Individual Records

Users can view individual car records one at a time.

2. Add a New Record

Users can add a new car record to the database.

3. Delete a Record

Users can delete an existing car record from the database.

4. Edit a Record

Users can edit the details of an existing car record.

5. Update a Record

Users can save changes made to an edited car record.

6. Cancel Amendments for a Record

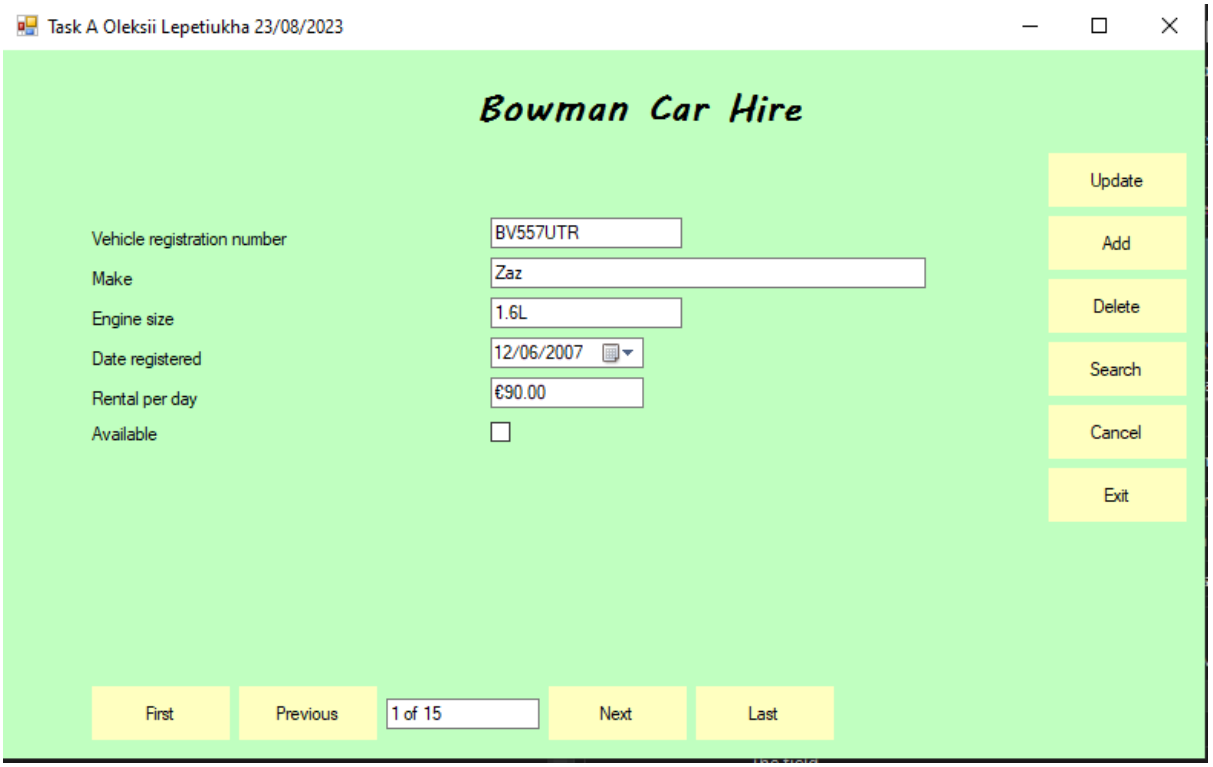
Users can cancel any unsaved changes made to an edited record.

7. Search Records

Users can search for car records based on specific criteria.

Software Components

Main Form (frmCars)

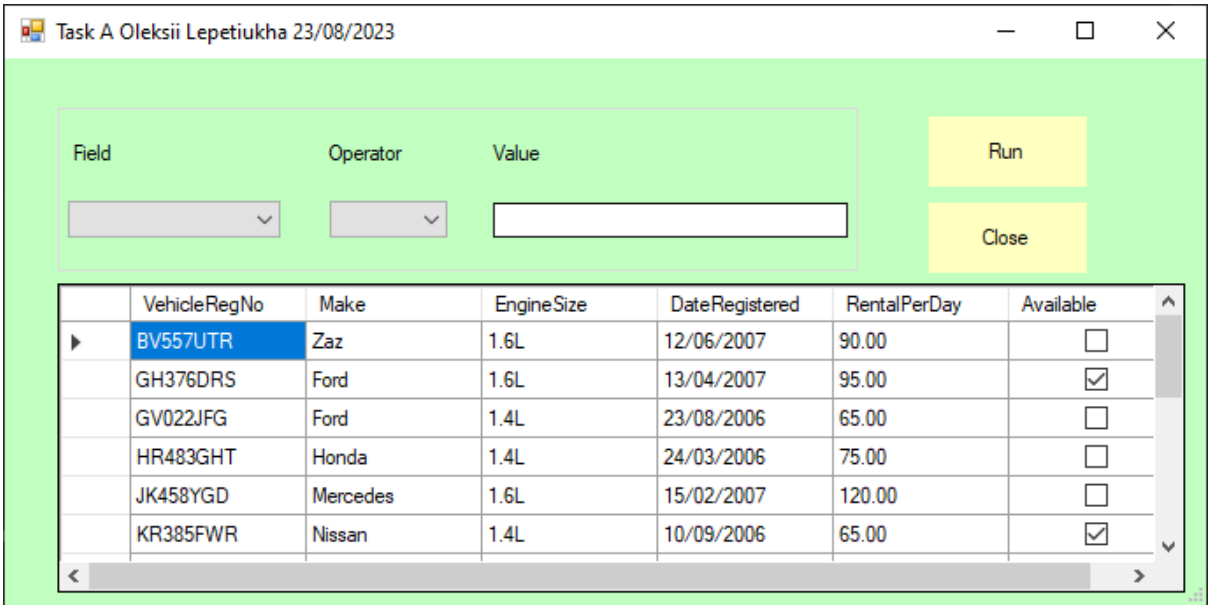


- This form serves as the main interface for interacting with car records.
- It displays car details, allows navigation between records, and provides buttons for various operations.

Key Elements:

- Labels for heading and record count.
- Controls for displaying car details (e.g., textboxes, date picker, checkbox).
- Navigation controls (first, previous, next, last).
- Buttons for Update, Add, Delete, Search, Cancel, and Exit.
- Tooltip control for assisting users.
- Error handling to prevent runtime errors.
- Integration with the database using MySQL.

Search Form (frmSearch)



- This form is used to specify search criteria and display matching records.

Key Elements:

- Group box containing combo boxes for field and operator selection.
- Textbox for data entry.
- DataGridView to display search results.
- Buttons for running the search and closing the form.
- Error handling for search criteria.

Additional Components

- DataBinding Class: Responsible for loading data from the database into DataGridView controls.
- SQLConstants Class: Stores constants related to database connection and queries.
- Validation Class: Provides control validation methods to ensure data integrity.

Usage Instructions

1. Launch the Cars Database software.
2. Use the main form (frmCars) to navigate and interact with car records.
3. To add, edit, delete, or update records, use the respective buttons.
4. Click the Search button to open the search form (frmSearch).
5. In the search form, select field, operator, and provide a value to search for records.
6. Click the Run button to execute the search.
7. Close the search form to return to the main form.

Conclusion

The Cars Database software provides a user-friendly interface for managing car records in the external "Hire" database. It allows users to perform various operations and search for records based on specific criteria. The software is designed to ensure data integrity and provide a seamless user experience.