

Informatics College Pokhara



Emerging Programming Platforms

CS5004NP

Coursework 1

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Proposal

The purpose of this project is developing an Information System which have a table with title “Car Accessories Details” for storing and displaying the car accessories item. The table contain in the system must store the inserted data and display it according to the user’s need.

❖ Aims and Objective

The main aim of this project is to create an information system model in new computerized system to store the data of Car Accessories which makes easy to access and store the data whenever it is necessary. This system is more secure than the paper-based system because the data cannot be easily lost or stolen by others. This project also aimed student to be more familiar with use of NetBeans and its content which is more important in IT sector as well as software development also

❖ Project Approach

- Research will be done on the component of NetBeans for the suitable Graphical User Interface (GUI).
- A diagram to illustrate the Binary search algorithm.
- Coding is done after making the proper GUI.
- Testing is done for proper and appropriate function of the system so that there is no errors and bugs left
- Screenshots to support the test cases and evidences on system validation.
- Finally, documentation part will be done.

❖ Project Deliveries

The project and report are the main things which holds the information about the writing portion of the task and a system which contains the table for storing and displaying the accessories of car and it’s items are the deliveries of the project. This is for creating a system for making familiar with NetBeans and its elements. The system contains the table with necessary labels, text fields, buttons, and many more for reliable use of system.

❖ Target Audience

Such project is target to both small and big organization to keep the various type of record of car accessories and item and also the student as they need the basic idea of coding in NetBeans and became more familiar with use of NetBeans in order to develop a proper Information System.

❖ List of data and features

The GUI developed under this project has the following data and features:

- a. A table for storing and displaying table data.
- b. Buttons to insert items to the table, clear table data, clear textfield values
- c. Radio button to select the Spiciness range.
- d. Combo box to select the Category of Car Accessories.
- e. Menu Bar to open file, exit program and user help files.
- f. Sorting and searching the table data.
- g. Dialog boxes to display suitable messages.

❖ Hardware and Software Installation

For this project, the required hardware is laptop and its component which are most essential for doing project. And the software required for the project are NetBeans software which is an open-source integrated development environment (IDE) for developing with Java, PHP, C++, and other programming languages. Microsoft Word 2016 is required for the reporting part of the project.

❖ Activity Description and Timeline

Plannig for coursework was done for easy finishing. The figure shows the Gantt Chart which contains the events and its duration for completing that event.

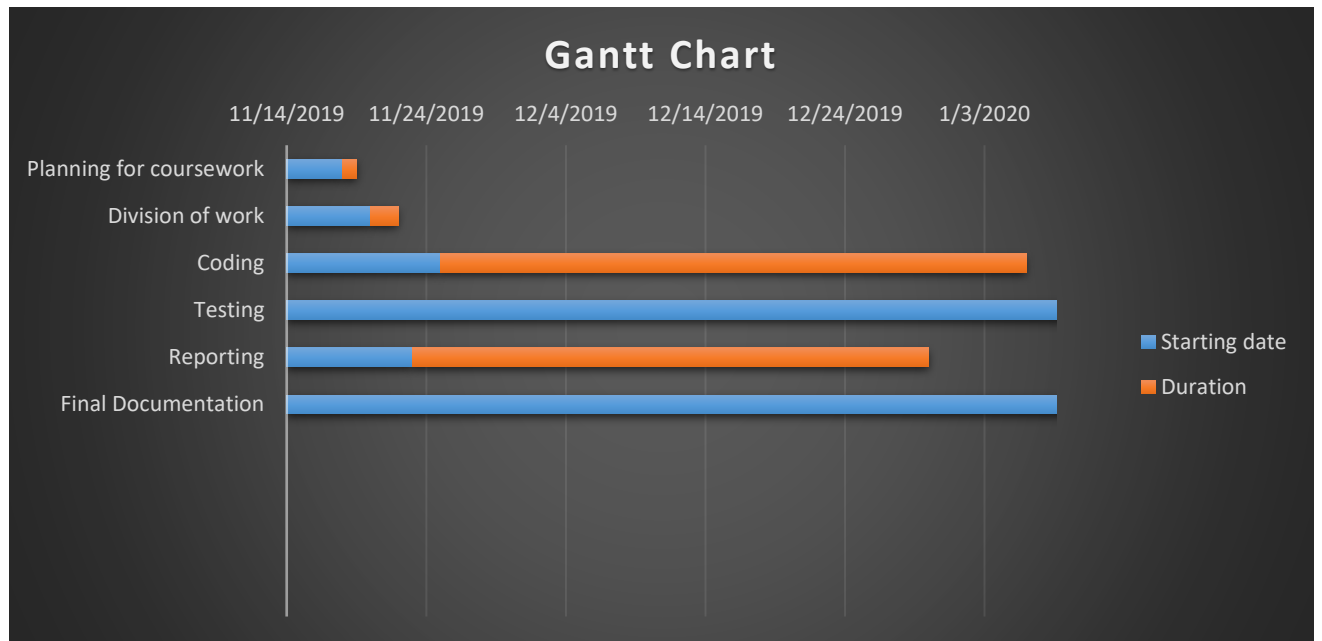


Fig: Gantt Chart

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1. Introduction

Car Accessories Details Information System is a GUI based java application. It is our first coursework of this semester which is asked to develop a information system using the NetBeans IDE. This is a group coursework in which every groups are divided into five members along with individual work which makes easier and more convenient to finish our coursework in time. This application helps staffs to add the records of selling the car accessories and displaying it and their details which reduce their time consumption and other members of the car showroom. According to our coursework, this information system includes these basic data and features: -

- Making a desktop application with the class named CAD_Info using NetBeans IDE.
- Storing the values and displaying them in the Car Accessories Details table.
- Storing the entered data and using binary search to find the data according to the price of accessories.
- The application stores the data of accessories with its rate, category, range level, price and name along with the accessories number and recommendation.

1.1 Description of NetBeans in project

NetBeans is an open-source integrated development environment (IDE) for developing with Java, PHP, C++, and other programming languages. NetBeans is also referred to as a platform of modular components used for developing Java desktop applications (Technopedia, 2019).

This is a small Graphical User Interface application helps developer to understand and make coding easier. NetBeans uses components like swing, AWT, beans and so on which is also known as modules to enable software development. It automatically checks for new updates and features while connected to internet which update new features to the software.

To get our required necessary needs or the basic functionalities for our project, NetBeans IDE was taken in our first priority. We might had been in trouble if we were supposed to ask to design the whole system in the simple text editor like

notepad or IntelliJ IDEA and then compiling it with machine. This coursework is done from NetBeans using components from the palette for GUI based application. We have used table, label, text fields, radio button, buttons, combo box, panel, menu items and so on. We first design our GUI in the design section of the NetBeans. After completing the design part, we started to code clicking on every buttons of the GUI design which makes us easier to code. The coding part and designing part was not so difficult in NetBeans.

2. Individual Task

Even though this project may have looked simple and rather easy, it was definitely not like that what we thought. This project was a rather difficult. As this project is too heavy and large, it would have been troublesome for a single individual to work on it all alone. So, we divided the tasks into smaller segments so that each and every group member would be assigned with equal effort and responsibilities. We also arranged and attended for meetings so that we could work together as a group and learn about everything in a close manner. We would like to heartily thank our module leader Mr. Sandeep Adhikari and our group members who have been a great help during our project.

The table below briefly represents the tasks that each group member has done throughout this project:

Amit Shrestha

Our group decided him to make the GUI design for Car Accessories Details Information System. After the coding part done, he did all the possible testing of the system. He also done opening of file coding for his individual task. He has done great job and fulfill his responsibilities towards this group project. He also discussed with Bibek Kshetri for designing of GUI project and with Diwash Gurung for all possible testing for error handling.

Bibek Kshetri

Our group decided to give him task for Help function in GUI project. He gave his all effort for making our project better and reliable. He also done Conclusion part of reporting and his conclusion was quite easy for understanding. He has design about us frame in GUI project, which has all information about the developers of CAD_IS.

Diwash Gurung

After coding part, he did about method description in reporting section of group project. He helped Amit Shrestha for doing all possible testing and make it better. He did Table clear function in coding part which will clear the data of table after saving the data.

Pratik Sherchan

We decided to give him binary search and sorting in coding part and he also done description of binary search in reporting part along with its flowchart and algorithm. He did comment on code also for better knowledge and understandable of code.

Sushil Kandel

We decided to give him to insert the data from user and save it in a file system. He did his all effort and efficiency for doing his task. He finalizes the documentation with necessary table of contents, figures and inserting references with coverpage.

3. Description of Methods

a. insertActionPerformed:

A class that implements the interface must contain actionPerformed () method. So, as in this insertActionPerformed () implements the interface which lets the button to execute. This method triggers the insert button which helps to insert the values from the text fields, radio buttons and combo box to the table. This button takes all the data by using getText () and isSelected () method.

b. clearActionPerformed:

This method is used to clear all the values in the text fields. For clearing the values of textfield, we use the method setText (" ").

c. logoutActionPerformed:

This method is used to get out from the working frame to the login frame. This method will lead user towards the main login frame.

d. cleartableActionPerformed:

This method is used to clear the table which is used for storing the information of car accessories.

e. saveActionPerformed:

This method is used to save the information of table in file system. We need to write some text for saving the information. For that, we must use FileWriter and BufferedWriter method. FileWriter provides the overloaded write method to write int, byte, array and String to the file whereas BufferedWriter uses internal buffer to write data into file. BufferedWriter must be used when the number of write operations is more.

f. OpenActionPerformed:

This method helps user to open any files or related files of the car accessories.

g. HelpActionPerformed:

This method will help the user for better knowledge of the application and its uses.

h. CloseActionPerformed:

This method help user to terminate the program.

i. Sort:

Sort method helps user to sort the value of arraylist in an ascending order for binary search. For binary search, the value must be in sorted manner.

j. searchActionPerformed:

This method helps user to search an integer value i.e. price of car accessories entered by user within the sorted elements of arraylist and then compares with the user's value to the mid value of arraylist. If the value is unequal, then the half of the part where the integer doesnot lie is removed and search continue on the remaining half portion until the search found.

k. getAccessoriesName:

This method is used to get all the information of the table of car accessories according to the price search by binary search.

l. availableActionPerformed:

This method is used to search the item according to the category of car accessories. The user will have easier to search the item. If their price will same, search according to the category will be done by the user for easy use.

m. AboutActionPerformed:

This method will open the dialouge box which contain all the information about the developer of the application and its version.

n. public static void main (String args []):

This is the main method for running the application which has one parameter String args []. This method can be called from outside the class also. This method is very necessary method because this method is being called by Java Runtime System.

4. Binary Search

4.1 About Binary Search

In java, binary search is a search algorithm which finds the position of the selected value after only shorting the array. Binary search does not work on an unsorted array list. At first the elements of an array list is shorted in ascending order. After shorting the elements, the mid value of the array is searched. To find the mid value, the sum of lowest key and the high key is divided by 2 (Edureka, 2020).

After searching the mid value, the key element to be searched is compared with the mid value. If the key element is greater than the mid value, only the right side if the mid value is taken. The same process is adopted for the right side of the array. The mid value for the remaining value is taken.

If the key element is smaller than the mid value, the left side of the mid value is taken. The midpoint for the remaining value is taken and compared with the key element. This process is done for the left side of the array list. This process continues until the key element is found.

In our coursework, we have shorted the price table. The price for the car accessories is shorted in the ascending order. The elements are searched using binary search. The example of the binary search is explained below.

4	9	2	9	9
---	---	---	---	---

Figure 1 Unsorted Array

Here the given figure is an unsorted array list. First the given array is sorted to ascending order.

1	2	4	6	9
---	---	---	---	---

Figure 2 Sorted Array

Figure 2 shows the array list sorted in ascending order. Now the midpoint of the sorted array is found.

1	2	4	6	9
---	---	---	---	---

Figure 3 Midpoint of the array

If figure 3 the midpoint of the array is shown. Now the midpoint is compared with the key element. If the key element is greater than midpoint only the right side is taken. And if it is smaller than the key value left side is taken. Let's suppose our key element is 2.

1	2	4	6	9
---	---	---	---	---

Figure 4 key element

Here 2 is the key element. The key element is compared with the midpoint of the array list. The key element is smaller than the midpoint so only the left side of the midpoint is taken. Again, the midpoint is taken of the left side of the midpoint.

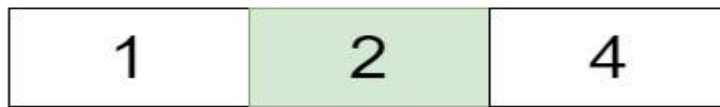


Figure 5 Midpoint of the left side

Here the key element is compared with the midpoint. As the key element itself is the midpoint, suitable output message for the element found is shown.

4.2 Algorithm and Flowchart of Binary search

Step 1: Start

Step 2: Create a variable to store the first and last value into low and high respectively.

Step 3: If low value is smaller than high value then Go to step 4 otherwise go to step 13.

Step 4: Find the mid value.

Step 5: if mid value is equal to the key value then Go to step 6 otherwise Go to Step 7.

Step 6: Print the appropriate message.

Step 7: If mid value is greater than key value then Go to Step 8 otherwise Go to step 9.

Step 8: Replace the position of low value by mid-1.

Step 9: If mid value is less than key value then Go to step 10 otherwise GO to step 11.

Step 10: Replace the position of low value by mid + 1.

Step 11: Replace the value of high by mid - 1 than Go to step 9.

Step 12: Print the appropriate message.

Step 13: End.

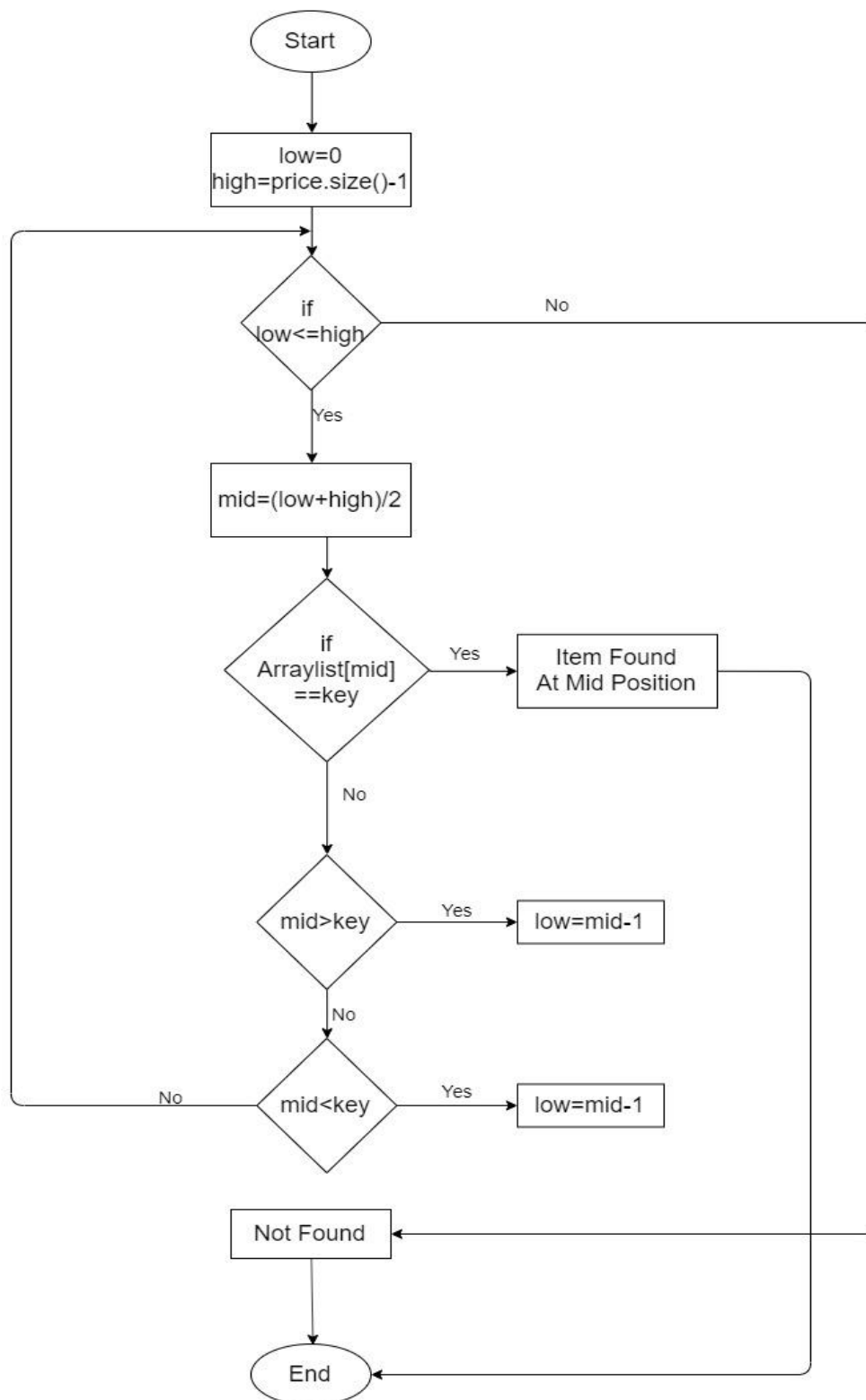


Figure 6: Binary Search Flowchart

5. Testing

Test 1

Objective	Run GUI program in NetBeans
Expected Result	GUI program must run in NetBeans
Actual Result	Program runs in NetBeans
Conclusion	Successful

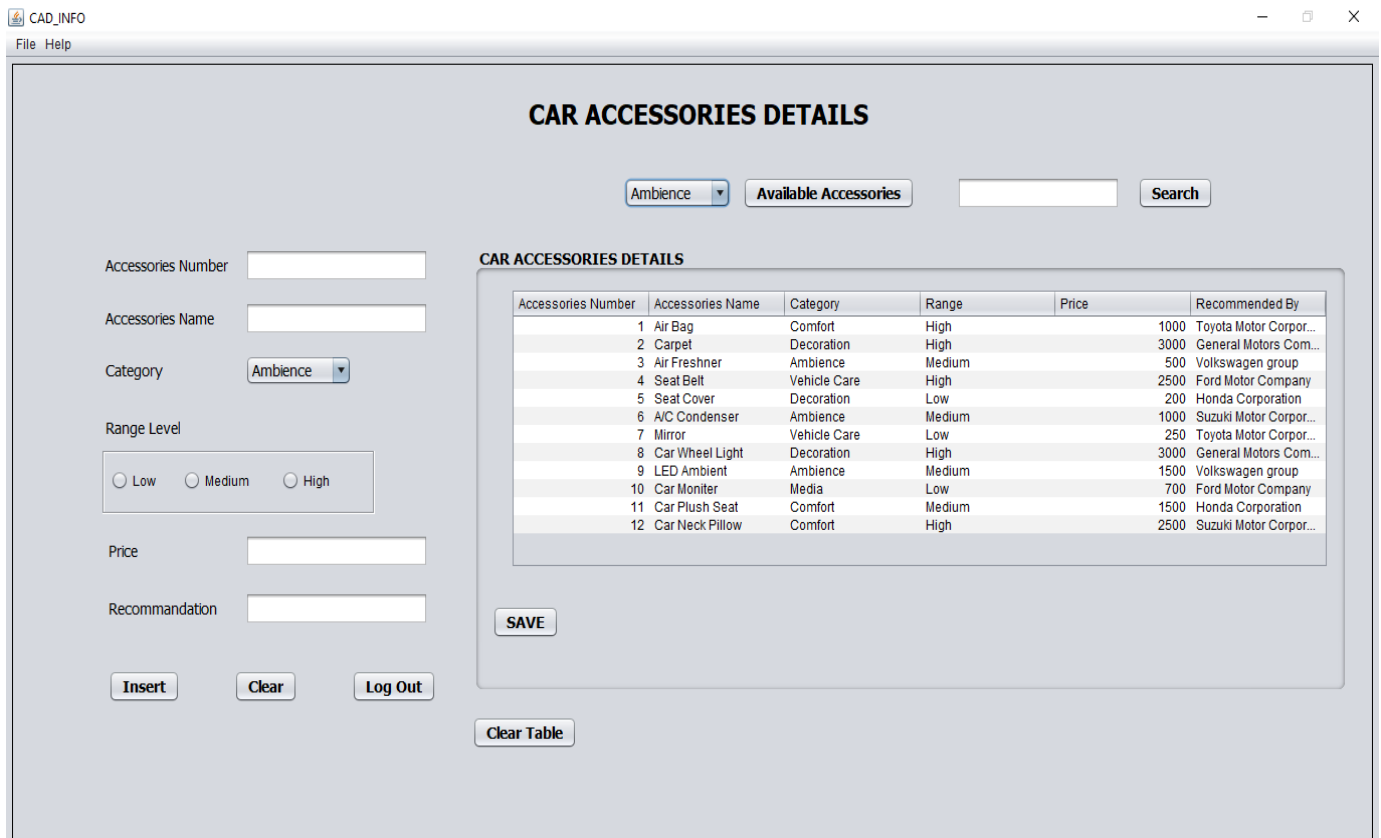


Figure 7: Opening GUI in NetBeans

Test 2

Objective	Inserting accessories details to table
Expected Result	Accessories inserted must shown in table
Actual Result	The accessories are shown in table
Conclusion	Successful

CAD_INFO

File Help

CAR ACCESSORIES DETAILS

Ambience Available Accessories Search

Accessories Number 13

Accessories Name Wheel Cover

Category Decoration

Range Level

☐ Low
 ☒ Medium
 ☐ High

Price 2500

Recommndation Toyota Motor Corporation

Insert
Clear
Log Out

CAR ACCESSORIES DETAILS

Accessories Number	Accessories Name	Category	Range	Price	Recommended By
1	Air Bag	Comfort	High	1000	Toyota Motor Corpor...
2	Carpet	Decoration	High	3000	General Motors Com...
		nce	Medium	500	Volkswagen group
		e Care	High	2500	Ford Motor Company
		ation	Low	200	Honda Corporation
		nce	Medium	1000	Suzuki Motor Corpor...
		e Care	Low	250	Toyota Motor Corpor...
		ation	High	3000	General Motors Com...
		nce	Medium	1500	Volkswagen group
			Low	700	Ford Motor Company
		rt	Medium	1500	Honda Corporation
12	Car Neck Pillow	Comfort	High	2500	Suzuki Motor Corpor...
13	Wheel Cover	Decoration	Medium	2500	Toyota Motor Corpor...

SAVE

Clear Table

Task successful

i Data Successfully inserted

OK

Figure 8: Inserting data in table

Test 3

Objective	Searching accessories in table based on price
Expected Result	Accessories must be searched
Actual Result	Accessories searched found
Conclusion	Successful

CAD_INFO
File Help

CAR ACCESSORIES DETAILS

Ambience Available Accessories 200 Search

Accessories Number

Accessories Name

Category Decoration

Range Level

☐ Low
 ☒ Medium
 ☐ High

Price

Recommendation

Insert
Clear
Log Out

CAR ACCESSORIES DETAILS

Accessories Number	Accessories Name	Category	Range	Price	Recommended By
1000	Toyota Motor Corpor...		High		
3000	General Motors Com...		High		
500	Volkswagen group		Medium		
2500	Ford Motor Company		High		
200	Honda Corporation		Low		
1000	Suzuki Motor Corpor...		Medium		
250	Toyota Motor Corpor...		Low		
3000	General Motors Com...		High		
1500	Volkswagen group		Medium		
700	Ford Motor Company		Low		
1500	Honda Corporation		Medium		
2500	Suzuki Motor Corpor...		High		
2500	Toyota Motor Corpor...		Medium		

Search Found

i
 Accessories Number: 5
 Accessories Name: Seat Cover
 Category: Decoration
 Range: Low
 Recommended By: Honda Corporation

OK

SAVE

Clear Table

Figure 9: Searching accessories based on price

Test 4

Objective	Searching available accessories based on category
Expected Result	Accessories must be search by category
Actual Result	Accessories search found
Conclusion	Successful

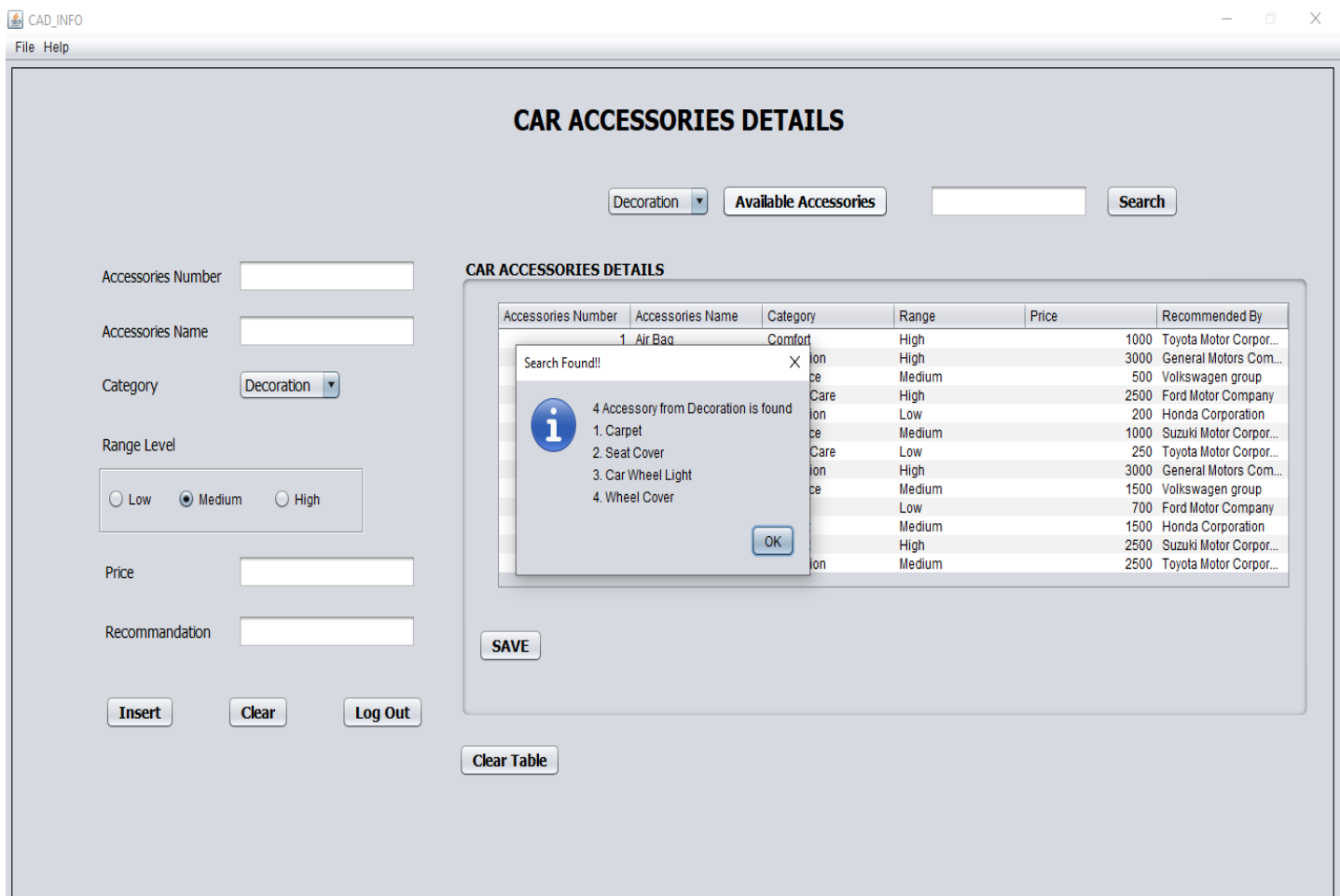


Figure 10: Searching accessories based on category

Test 5

Objective	Saving the data of table in file
Expected Result	The data of table must be saved in a file system
Actual Result	File saved inside the project
Conclusion	Successful

CAD_INFO
File Help

CAR ACCESSORIES DETAILS

Decoration

Accessories Number

Accessories Name

Category

Range Level

☐ Low ☒ Medium ☐ High

Price

Recommandation

CAR ACCESSORIES DETAILS

Accessories Number	Accessories Name	Category	Range	Price	Recommended By
1	Air Bag	Comfort	High	1000	Toyota Motor Corpor...
			High	3000	General Motors Com...
			Medium	500	Volkswagen group
			High	2500	Ford Motor Company
			Low	200	Honda Corporation
			Medium	1000	Suzuki Motor Corpor...
			Low	250	Toyota Motor Corpor...
			High	3000	General Motors Com...
			Medium	1500	Volkswagen group
			Low	700	Ford Motor Company
11	Car Plush Seat	Comfort	Medium	1500	Honda Corporation
12	Car Neck Pillow	Comfort	High	2500	Suzuki Motor Corpor...
13	Wheel Cover	Decoration	Medium	2500	Toyota Motor Corpor...

Figure 11: Confirmation for saving data

CAR ACCESSORIES DETAILS

Decoration Available Accessories Search

Accessories Number
Accessories Name
Category Decoration
Range Level
Low Medium High
Price
Recommendation

Insert Clear Log Out

CAR ACCESSORIES DETAILS

Accessories Number	Accessories Name	Category	Range	Price	Recommended By
1	Air Bag	Comfort	High	1000	Toyota Motor Corpor...
			High	3000	General Motors Com...
			Medium	500	Volkswagen group
			High	2500	Ford Motor Company
			Low	200	Honda Corporation
			Medium	1000	Suzuki Motor Corpor...
			Low	250	Toyota Motor Corpor...
			High	3000	General Motors Com...
			Medium	1500	Volkswagen group
			Low	700	Ford Motor Company
11	Car Plush Seat	Comfort	Medium	1500	Honda Corporation
12	Car Neck Pillow	Comfort	High	2500	Suzuki Motor Corpor...
13	Wheel Cover	Decoration	Medium	2500	Toyota Motor Corpor...

SAVE

Clear Table

Figure 12: Entering file name for saving data

CAR ACCESSORIES DETAILS

Decoration Available Accessories Search

Accessories Number
Accessories Name
Category Decoration
Range Level
Low Medium High
Price
Recommendation

Insert Clear Log Out

CAR ACCESSORIES DETAILS

Accessories Number	Accessories Name	Category	Range	Price	Recommended By
1	Air Bag	Comfort	High	1000	Toyota Motor Corpor...
			High	3000	General Motors Com...
			Medium	500	Volkswagen group
			High	2500	Ford Motor Company
			Low	200	Honda Corporation
			Medium	1000	Suzuki Motor Corpor...
			Low	250	Toyota Motor Corpor...
			High	3000	General Motors Com...
			Medium	1500	Volkswagen group
			Low	700	Ford Motor Company
11	Car Plush Seat	Comfort	Medium	1500	Honda Corporation
12	Car Neck Pillow	Comfort	High	2500	Suzuki Motor Corpor...
13	Wheel Cover	Decoration	Medium	2500	Toyota Motor Corpor...

SAVE

Clear Table

Figure 13: Giving file name

CAD_INFO

File Help

CAR ACCESSORIES DETAILS

Decoration ▼ Available Accessories Search

Accessories Number
 Accessories Name
 Category Decoration ▼
 Range Level
☐ Low ☒ Medium ☐ High
 Price
 Recommendation

CAR ACCESSORIES DETAILS

Accessories Number	Accessories Name	Category	Range	Price	Recommended By
1	Air Bag	Comfort	High	1000	Toyota Motor Corpor...
2	Carpet	Decoration	High	3000	General Motors Com...
		nce	Medium	500	Volkswagen group
		e Care	High	2500	Ford Motor Company
		ation	Low	200	Honda Corporation
		nce	Medium	1000	Suzuki Motor Corpor...
		e Care	Low	250	Toyota Motor Corpor...
		ation	High	3000	General Motors Com...
		nce	Medium	1500	Volkswagen group
		rt	Low	700	Ford Motor Company
		rt	Medium	1500	Honda Corporation
12	Car Neck Pillow	Comfort	High	2500	Suzuki Motor Corpor...
13	Wheel Cover	Decoration	Medium	2500	Toyota Motor Corpor...

Task successful

Data Successfully saved

OK

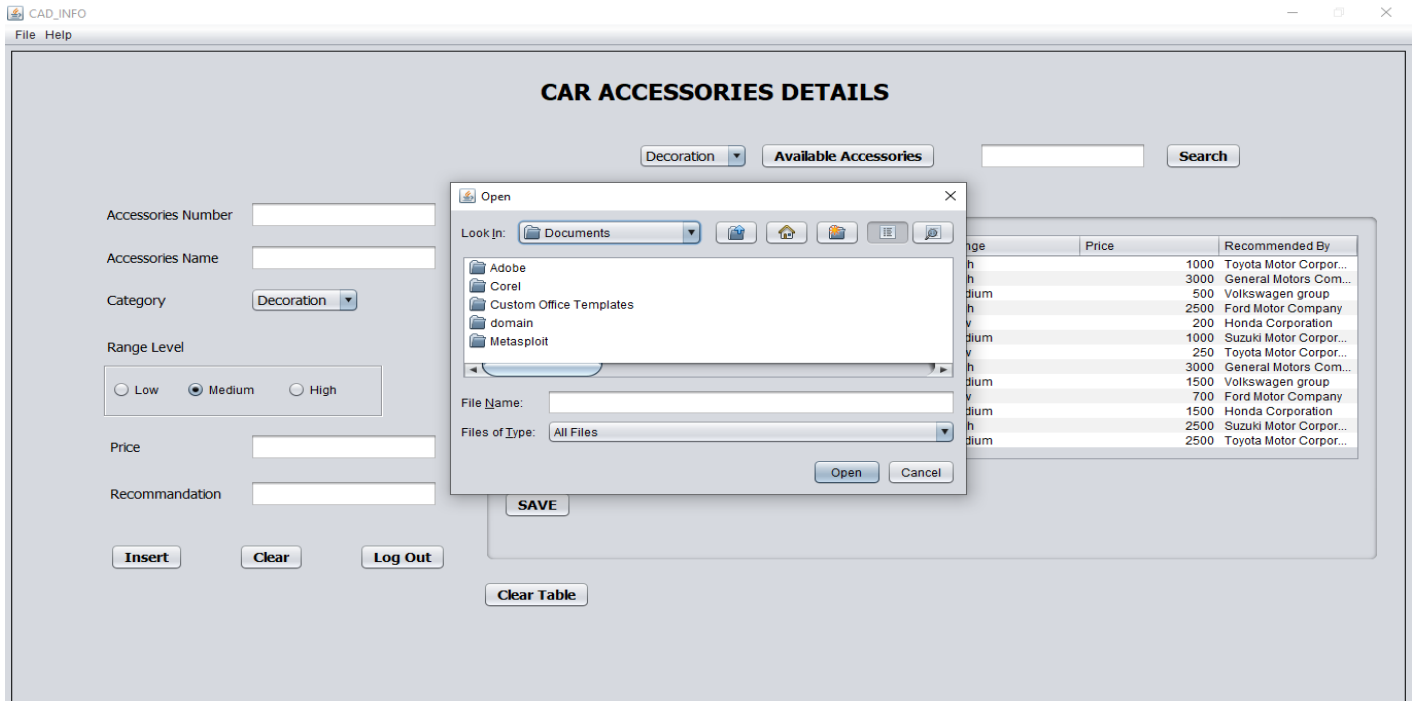
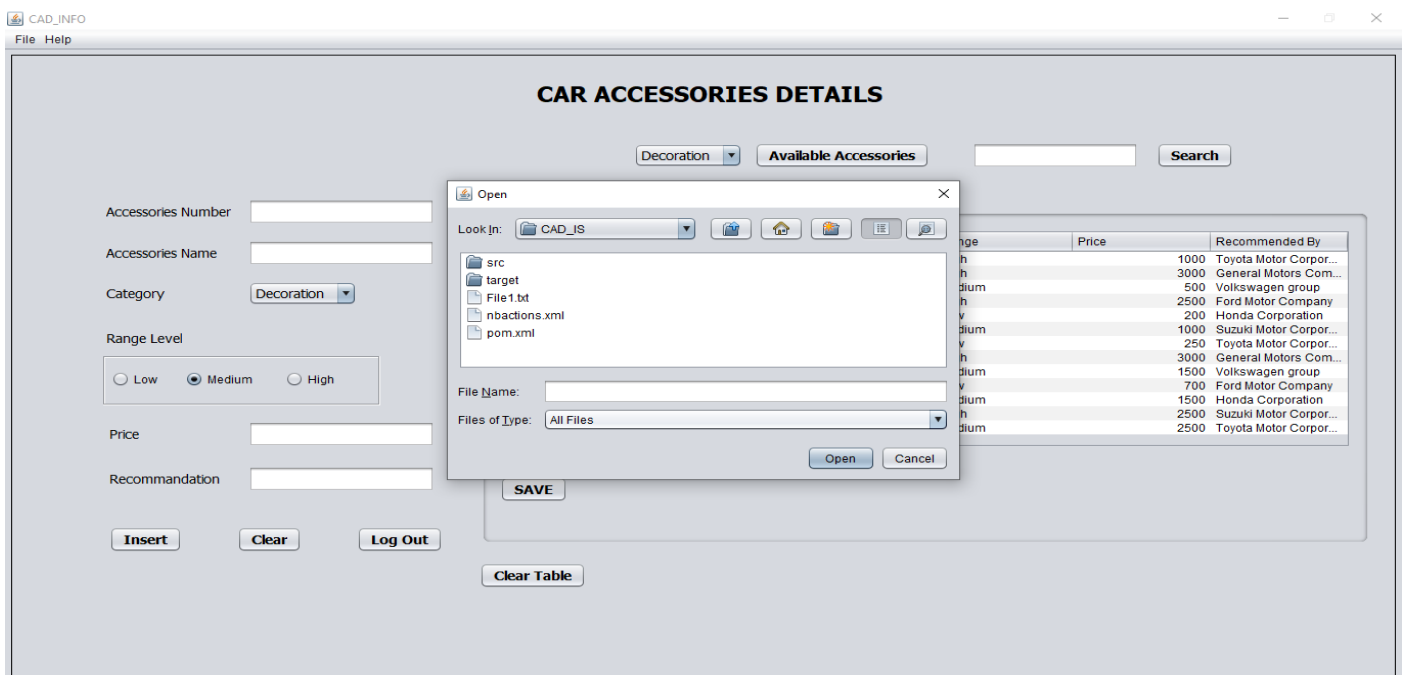
SAVE

Clear Table

Figure 14: Data saved message

Test 6

Objective	Opening file from menu
Expected Result	A file must be open from menu
Actual Result	File Open
Conclusion	Successful

*Figure 15: Opening file**Figure 16: Opening the saved file*

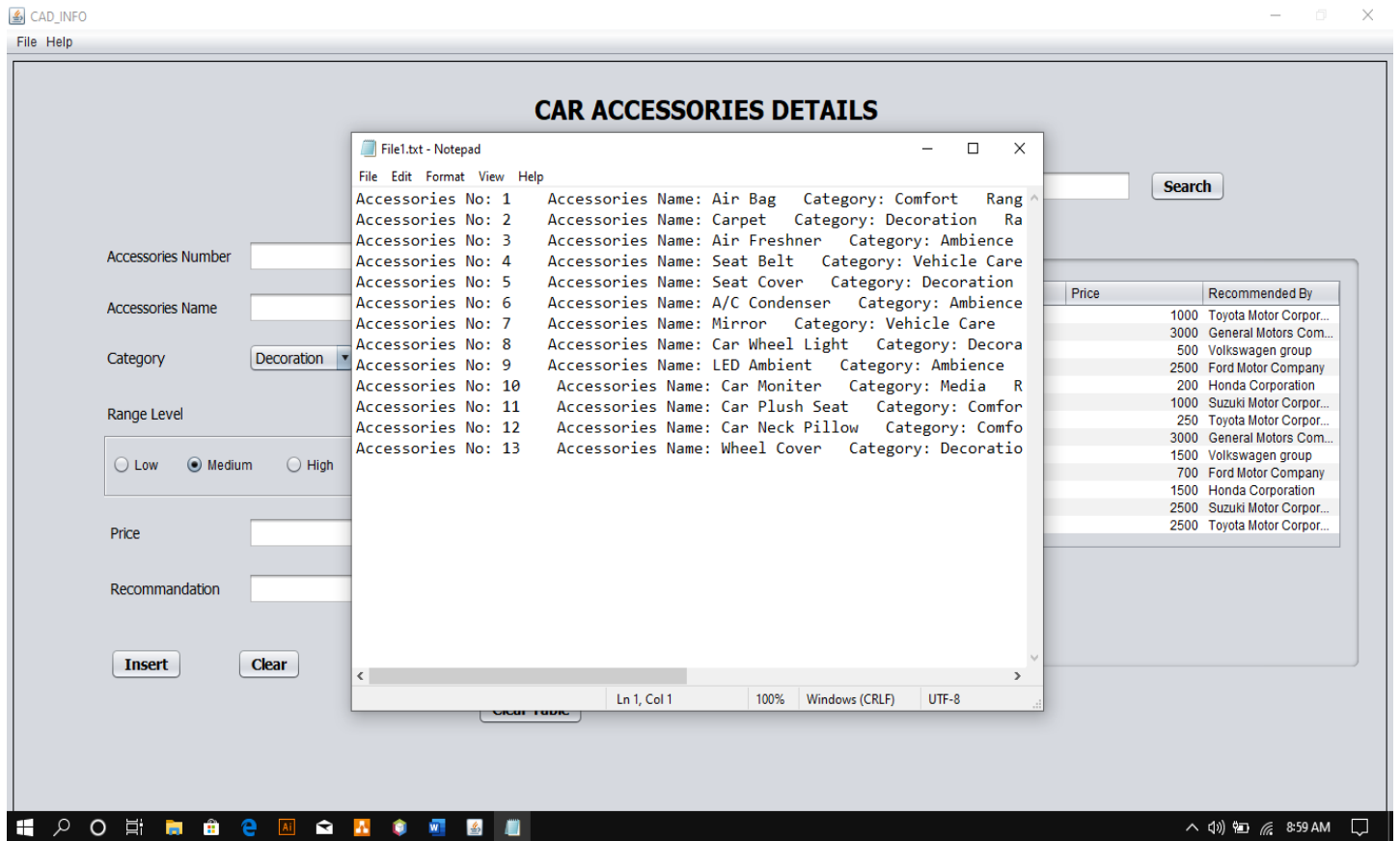


Figure 17: Opening the saved file in text

Test 7

Objective	Clearing the data of table
Expected Result	Accessories inserted in table must be clear
Actual Result	Table cleared
Conclusion	Successful

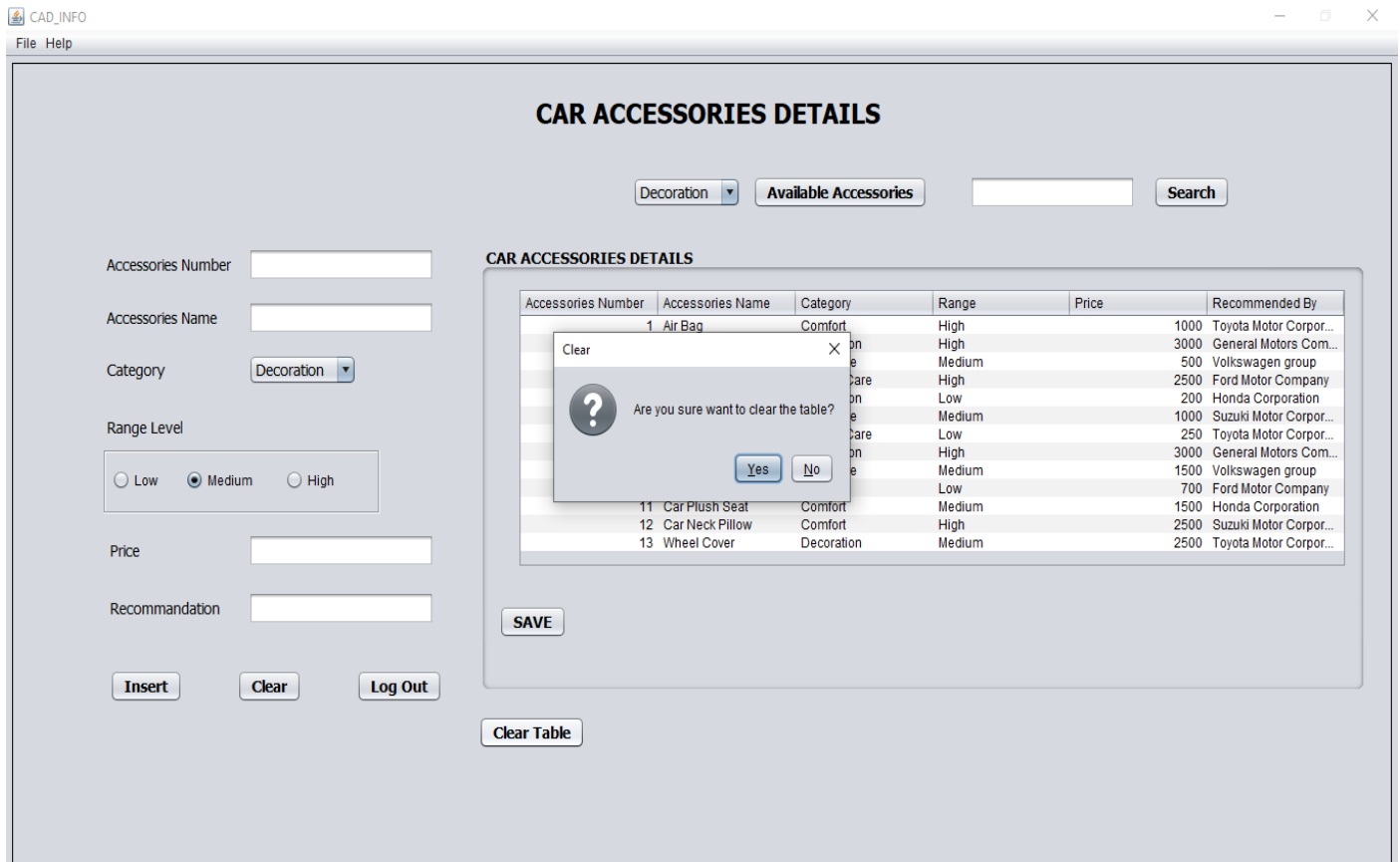


Figure 18: Confirmation for clearing data of table

CAD_INFO File Help

CAR ACCESSORIES DETAILS

Decoration

Accessories Number

Accessories Name

Category

Range Level

☐ Low ☒ Medium ☐ High

Price

Recommendation

CAR ACCESSORIES DETAILS

Accessories Number	Accessories Name	Category	Range	Price	Recommended By
--------------------	------------------	----------	-------	-------	----------------

Task successful


 Table Successfully cleared

Figure 19: Table Cleared

Test 8

Objective	Checking error message
Action	Inserting unsuitable value or no values
Expected Result	Proper error message should be displayed if inappropriate values are inserted
Actual Result	Error message occurs
Conclusion	Successful

The screenshot shows a web application titled "CAD_INFO" with a menu bar containing "File" and "Help". The main content area is titled "CAR ACCESSORIES DETAILS". At the top right, there is a search bar with a dropdown menu set to "Decoration", a button labeled "Available Accessories", and a "Search" button. On the left side, there are input fields for "Accessories Number" (containing "One"), "Accessories Name" (containing "Seat Cover"), and "Category" (set to "Decoration"). Below these are radio buttons for "Range Level" (Low, Medium, High), with "Medium" selected. There is also a "Price" field (containing "2345") and a "Recommendation" field (containing "Toyota"). At the bottom left are buttons for "Insert", "Clear", and "Log Out". On the right side, there is a table titled "CAR ACCESSORIES DETAILS" with columns: "Accessories Number", "Accessories Name", "Category", "Range", "Price", and "Recommended By". A modal dialog box titled "Task Denied" is displayed in the center of the table, showing a yellow warning icon and the text "Please enter correct input" with an "OK" button. Below the table is a "SAVE" button, and at the very bottom is a "Clear Table" button.

Figure 20: Proper message for error handling while entering incorrect accessories number

The screenshot shows the 'CAR ACCESSORIES DETAILS' window. On the left, there are input fields for 'Accessories Number' (15), 'Accessories Name' (Seat Cover), 'Category' (Decoration), 'Range Level' (Medium selected), 'Price' (Two Thousand), and 'Recommendation' (Toyota). At the bottom left are buttons for 'Insert', 'Clear', and 'Log Out'. On the right, there is a table with columns: Accessories Number, Accessories Name, Category, Range, Price, and Recommended By. A 'Task Denied' dialog box is displayed in the center of the table area, showing a yellow warning icon and the text 'Please enter correct input' with an 'OK' button. Above the table is a 'SAVE' button and a 'Clear Table' button. At the top right of the window are a 'Decoration' dropdown, an 'Available Accessories' button, a search input field, and a 'Search' button.

Figure 21: Proper message for error handling while entering incorrect price

The screenshot shows the 'CAR ACCESSORIES DETAILS' window. On the left, there are input fields for 'Accessories Number' (14), 'Accessories Name' (empty), 'Category' (Decoration), 'Range Level' (Medium selected), 'Price' (2500), and 'Recommendation' (Toyota). At the bottom left are buttons for 'Insert', 'Clear', and 'Log Out'. On the right, there is a table with columns: Accessories Number, Accessories Name, Category, Range, Price, and Recommended By. A 'Task Denied' dialog box is displayed in the center of the table area, showing a yellow warning icon and the text 'Please complete the field' with an 'OK' button. Above the table is a 'SAVE' button and a 'Clear Table' button. At the top right of the window are a 'Decoration' dropdown, an 'Available Accessories' button, a search input field, and a 'Search' button.

Figure 22: Proper message for error handling while leaving the textfield

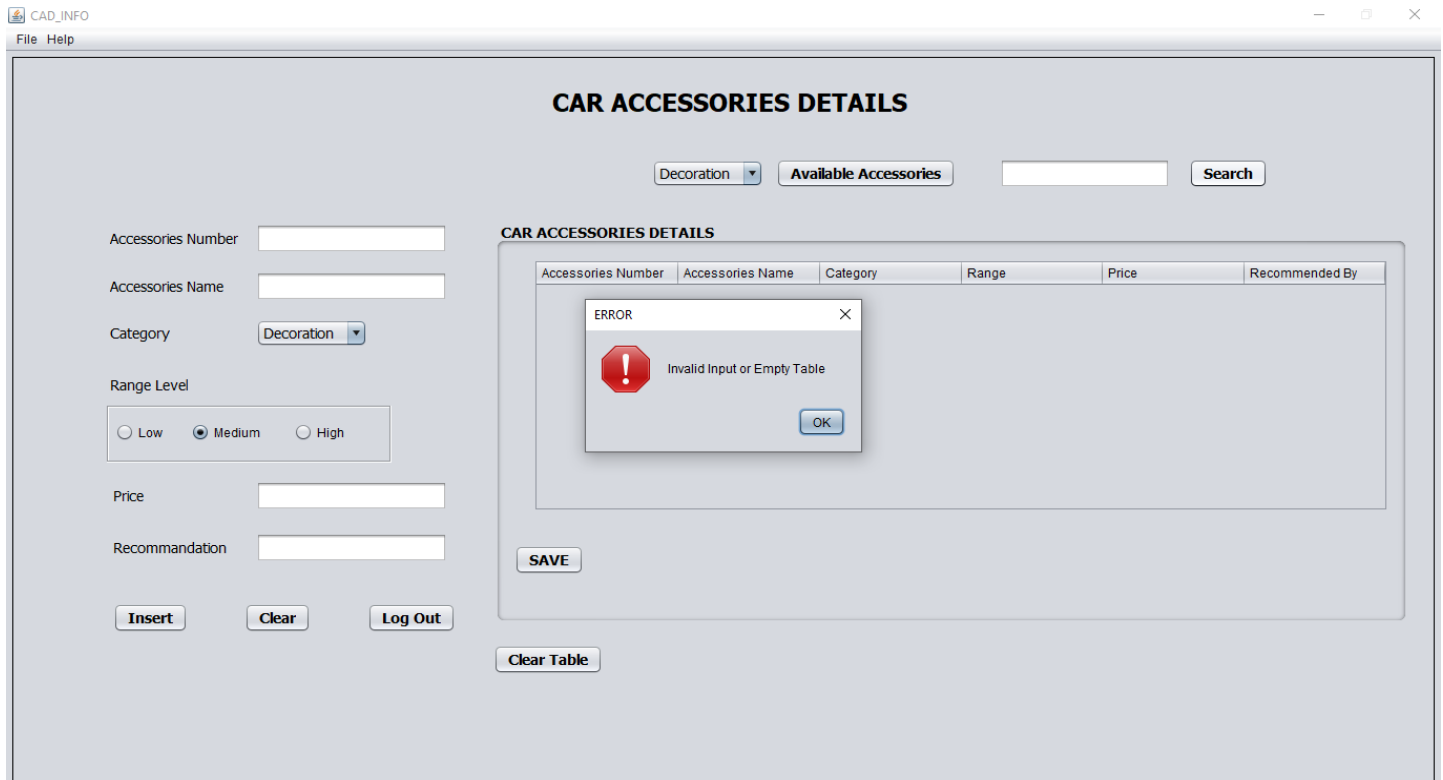


Figure 23: Error handling for searching in empty table with empty textfield of search

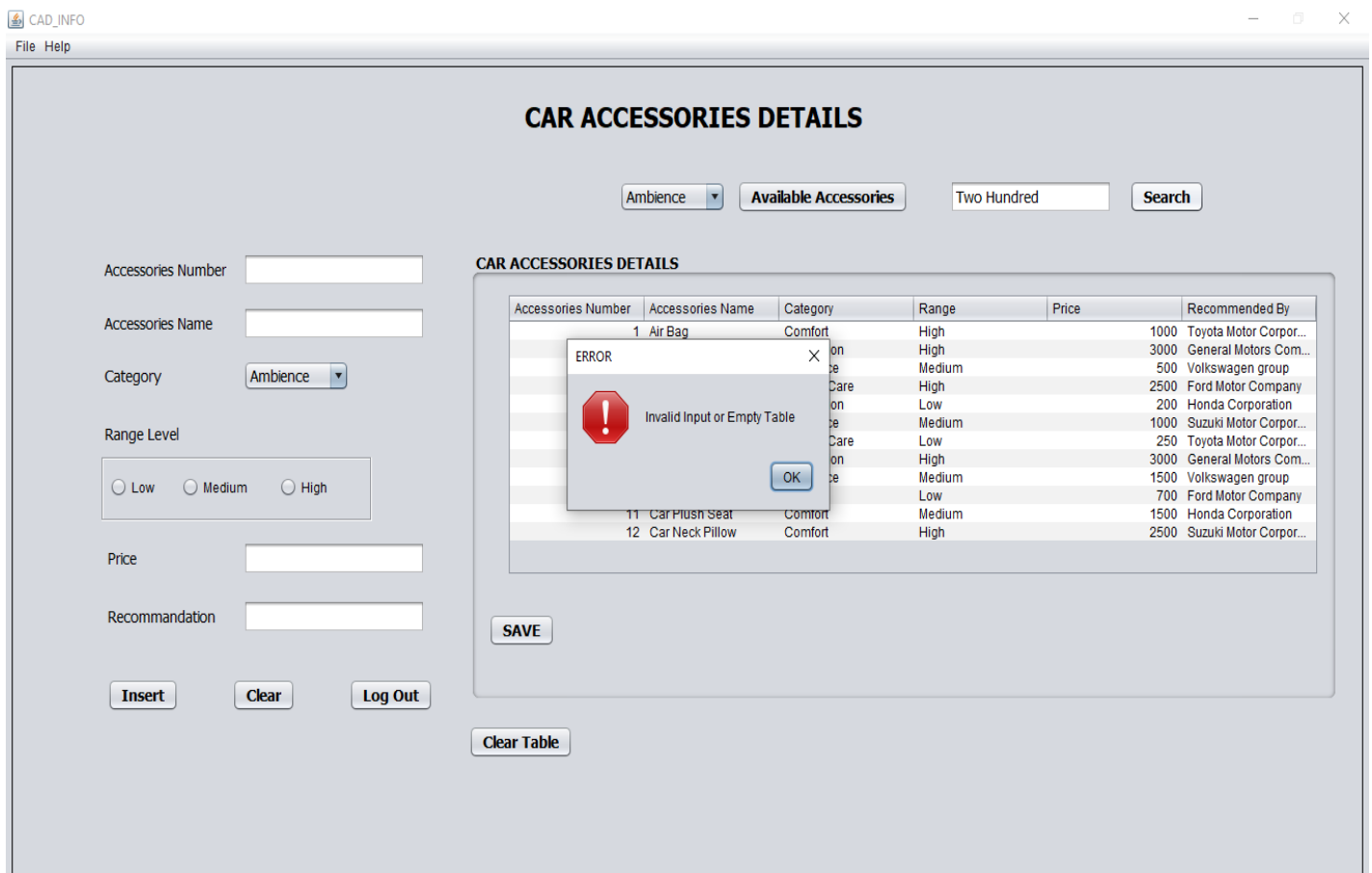


Figure 24: Error handling for entering improper value for searching

6. Conclusion

This coursework is a group work which is all about developing a GUI program using NetBeans. Despite of several issues and obstacles we successfully completed this project through lots of researches and with the help from our module leader Mr. Sandeep Adhikari. Also, we took references from books, websites as well as lecture slides so that we could get more knowledge about the requirements of this project. Though, we faced lots of errors in the beginning while doing this project but later we were able to handle it. We also had other modules projects at the same time so, it was bit difficult to finish the task at the same time. But with the equal effort and dedication from our fellow group mates we were able to continue this project at a much subtle pace without having any worries. The main objectives of this coursework were to make students familiar with the NetBeans application, the way of coding in it and GUI components. The project was to develop a Menu Information System. Software application like NetBeans for programming and Microsoft Word for documentation was used to build this program. All the tasks were divided into several categories and handed to the group members for effectively solving them.

We first started this project with simple designing. Later we developed a simple GUI program named Menu Information System. Even after developing the program, we faced lots of errors in the program. Though we completed the development work quickly, more errors occurred to make the program even more complicated. So, we had to go through each and every line of the codes carefully. We also used the concept of exception handling to catch the errors and minimize it as much as possible. We also faced problems while using binary search to search items because of the error in the sorting method but we were able to tackle that problem successfully.

To conclude, more or less we could state it was an extraordinary experience to work on such project. This project educates us how to work in a team and complete the project under the specified time. We all group member learned a lot during this coursework. With this degree of experience will it comes to real world application of such project we could state we are prepared for it. At last, we succeed building up our project as required in the coursework.

References

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Available at: <https://www.edureka.co/blog/binary-search-in-java/#WhatIsBinarySearchinJava?>

Technopedia, 2019. *Defination of NetBeans*. [Online]

Available at: <https://www.techopedia.com/definition/24735/netbeans>
[Accessed 02 December 2019].

Appendix

CAD_Info.java

```
package com.mycompany.cad_is;

import java.io.BufferedReader;

import java.io.BufferedWriter;

import java.io.File;

import java.io.FileNotFoundException;

import java.io.FileOutputStream;

import java.io.FileReader;

import java.io.FileWriter;

import java.io.IOException;

import java.util.ArrayList;

import java.util.logging.Level;

import java.util.logging.Logger;

import javax.swing.JFileChooser;

import javax.swing.JFrame;

import javax.swing.JOptionPane;

import javax.swing.JPanel;

import javax.swing.table.DefaultTableModel;


/**
 *
 * @author user
 */

public class CAD_Info extends javax.swing.JFrame {
```

```
/**  
  
 * Creates new form CAD_Info  
  
 */  
  
    ArrayList<String> Categorydetail=new ArrayList<String>(); //making arraylist of  
category for storing the category data  
  
    ArrayList<Integer>AccessoriesID = new ArrayList<Integer>(); //making arraylist  
of accessories id  
  
    public CAD_Info() {  
  
        initComponents();  
  
        setExtendedState(JFrame.MAXIMIZED_BOTH);  
  
        this.setResizable(false); //this will fix the size of the application  
    }  
  
/**  
  
 * This method is called from within the constructor to initialize the form.  
 * WARNING: Do NOT modify this code. The content of this method is always  
 * regenerated by the Form Editor.  
  
 */  
  
    @SuppressWarnings("unchecked")  
    // <editor-fold defaultstate="collapsed" desc="Generated Code">  
    private void initComponents() {  
  
        buttonGroup1 = new javax.swing.ButtonGroup();  
  
        buttonGroup2 = new javax.swing.ButtonGroup();  
  
        buttonGroup3 = new javax.swing.ButtonGroup();  
  
        buttonGroup4 = new javax.swing.ButtonGroup();  
  
        jMenuItem1 = new javax.swing.JMenuItem();
```

```
about = new javax.swing.JDialog();

jLabel4 = new javax.swing.JLabel();

jPanel4 = new javax.swing.JPanel();

jLabel7 = new javax.swing.JLabel();

jLabel8 = new javax.swing.JLabel();

jLabel9 = new javax.swing.JLabel();

jLabel10 = new javax.swing.JLabel();

jLabel11 = new javax.swing.JLabel();

jLabel12 = new javax.swing.JLabel();

jLabel13 = new javax.swing.JLabel();

jLabel14 = new javax.swing.JLabel();

jLabel15 = new javax.swing.JLabel();

jLabel16 = new javax.swing.JLabel();

jPanel2 = new javax.swing.JPanel();

jLabel1 = new javax.swing.JLabel();

textsearch = new javax.swing.JTextField();

search = new javax.swing.JButton();

jPanel1 = new javax.swing.JPanel();

jScrollPane1 = new javax.swing.JScrollPane();

jTable1 = new javax.swing.JTable();

save = new javax.swing.JButton();

jLabel2 = new javax.swing.JLabel();

jLabel3 = new javax.swing.JLabel();

jLabel5 = new javax.swing.JLabel();

jLabel6 = new javax.swing.JLabel();

category = new javax.swing.JComboBox<>();
```

```
jPanel3 = new javax.swing.JPanel();

jRadioButton1 = new javax.swing.JRadioButton();

jRadioButton2 = new javax.swing.JRadioButton();

jRadioButton3 = new javax.swing.JRadioButton();

range = new javax.swing.JLabel();

no = new javax.swing.JTextField();

price = new javax.swing.JTextField();

name = new javax.swing.JTextField();

insert = new javax.swing.JButton();

logout = new javax.swing.JButton();

clear = new javax.swing.JButton();

cleartable = new javax.swing.JButton();

re = new javax.swing.JLabel();

rec = new javax.swing.JTextField();

available = new javax.swing.JButton();

category1 = new javax.swing.JComboBox<>();

jMenuBar1 = new javax.swing.JMenuBar();

Open = new javax.swing.JMenu();

open = new javax.swing.JMenuItem();

Close = new javax.swing.JMenuItem();

jMenu2 = new javax.swing.JMenu();

Help = new javax.swing.JMenuItem();

About = new javax.swing.JMenuItem();

jMenuItem1.setText("jMenuItem1");

about.setTitle("About");

about.setBackground(new java.awt.Color(153, 0, 153));
```

```
about.setBounds(new java.awt.Rectangle(500, 250, 0, 0));

about.setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));

about.setMinimumSize(new java.awt.Dimension(500, 400));

about.setResizable(false);

about.setSize(new java.awt.Dimension(0, 0));

jLabel4.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N

jLabel4.setForeground(new java.awt.Color(0, 153, 204));

jLabel4.setText("ABOUT US");

jPanel4.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));

jLabel7.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N

jLabel7.setForeground(new java.awt.Color(51, 51, 0));

jLabel7.setText("The Car Accessories Detail is a software which store the ");

jLabel8.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N

jLabel8.setForeground(new java.awt.Color(51, 51, 0));

jLabel8.setText("records of car accessories along with their price. The user");

jLabel9.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N

jLabel9.setForeground(new java.awt.Color(51, 51, 0));

jLabel9.setText("can handle the records easily by using this software.");

jLabel10.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N

jLabel10.setForeground(new java.awt.Color(204, 0, 102));

jLabel10.setText("Version: 1.0.0.0");

jLabel11.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N

jLabel11.setForeground(new java.awt.Color(204, 0, 102));

jLabel11.setText("Developed By:");

jLabel12.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
```

```
jLabel12.setForeground(new java.awt.Color(204, 0, 102));

jLabel12.setText("Amit Shrestha");

jLabel13.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jLabel13.setForeground(new java.awt.Color(204, 0, 102));

jLabel13.setText("Bibek Kshetri");

jLabel14.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jLabel14.setForeground(new java.awt.Color(204, 0, 102));

jLabel14.setText("Diwash Gurung");

jLabel15.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jLabel15.setForeground(new java.awt.Color(204, 0, 102));

jLabel15.setText("Pratik Sherchan");

jLabel16.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jLabel16.setForeground(new java.awt.Color(204, 0, 102));

jLabel16.setText("Sushil Kandel");

javax.swing.GroupLayout jPanel4Layout = new
javax.swing.GroupLayout(jPanel4);

jPanel4.setLayout(jPanel4Layout);

jPanel4Layout.setHorizontalGroup(

jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

    .addComponent(jLabel9, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

    .addComponent(jLabel7, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

    .addGroup(jPanel4Layout.createSequentialGroup().createSequentialGroup())

    .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)
```

```
.addComponent(jLabel10, javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
  
.addComponent(jLabel11, javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
  
.addComponent(jLabel8, javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
  
.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,  
jPanel4Layout.createSequentialGroup())  
  
.addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,  
Short.MAX_VALUE)  
  
.addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.T  
RILING)  
  
.addComponent(jLabel13,  
javax.swing.GroupLayout.PREFERRED_SIZE, 301,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addComponent(jLabel12,  
javax.swing.GroupLayout.PREFERRED_SIZE, 301,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addComponent(jLabel14,  
javax.swing.GroupLayout.PREFERRED_SIZE, 301,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addComponent(jLabel15,  
javax.swing.GroupLayout.PREFERRED_SIZE, 301,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addComponent(jLabel16,  
javax.swing.GroupLayout.PREFERRED_SIZE, 301,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
  
.addGap(13, 13, 13)))  
  
.addContainerGap()  
  
);
```

```
jPanel4Layout.setVerticalGroup(  
  
jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
    .addGroup(jPanel4Layout.createSequentialGroup()  
        .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE,  
14, javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
    .addComponent(jLabel8)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
    .addComponent(jLabel9)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
    .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE,  
37, javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
    .addComponent(jLabel11, javax.swing.GroupLayout.PREFERRED_SIZE,  
34, javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)  
    .addComponent(jLabel12)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
    .addComponent(jLabel13)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
    .addComponent(jLabel14)
```



```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jLabel15)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jLabel16)
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
);

javax.swing.GroupLayout aboutLayout = new
javax.swing.GroupLayout(about.getContentPane());
about.getContentPane().setLayout(aboutLayout);
aboutLayout.setHorizontalGroup(

aboutLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(aboutLayout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jPanel4, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addContainerGap())
    .addGroup(aboutLayout.createSequentialGroup()
        .addGap(127, 127, 127)
        .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE,
139, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(131, Short.MAX_VALUE))
);
aboutLayout.setVerticalGroup(
```

```
aboutLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

    .addGroup(aboutLayout.createSequentialGroup()

        .addContainerGap()

        .addComponent(jLabel4)

        .addGap(18, 18, 18)

        .addComponent(jPanel4, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

    );
```

```
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

setTitle("CAD_INFO");

setBackground(new java.awt.Color(51, 0, 51));

setForeground(new java.awt.Color(0, 0, 0));

setIconImages(null);
```

```
jPanel2.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));
```

```
jLabel1.setBackground(new java.awt.Color(204, 204, 255));

jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N

jLabel1.setText("CAR ACCESSORIES DETAILS");
```

```
textsearch.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
```

```
search.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
search.setText("Search");
search.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        searchActionPerformed(evt);
    }
});
```

```
jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "CAR
ACCESSORIES DETAILS",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new
java.awt.Font("Tahoma", 1, 14))); // NOI18N
```

```
jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        { new Integer(1), "Air Bag", "Comfort", "High", new Integer(1000), "Toyota
Motor Corporation"},
        { new Integer(2), "Carpet", "Decoration", "High", new Integer(3000),
"General Motors Company"},
        { new Integer(3), "Air Freshner", "Ambience", "Medium", new Integer(500),
"Volkswagen group"},
        { new Integer(4), "Seat Belt", "Vehicle Care", "High", new Integer(2500),
"Ford Motor Company"},
        { new Integer(5), "Seat Cover", "Decoration", "Low", new Integer(200),
"Honda Corporation"},
        { new Integer(6), "A/C Condenser", "Ambience", "Medium", new
Integer(1000), "Suzuki Motor Corporation"},
```

```

        { new Integer(7), "Mirror", "Vehicle Care", "Low", new Integer(250),
"Toyota Motor Corporation"},

        { new Integer(8), "Car Wheel Light", "Decoration", "High", new
Integer(3000), "General Motors Company"},

        { new Integer(9), "LED Ambient", "Ambience", "Medium", new
Integer(1500), "Volkswagen group"},

        { new Integer(10), "Car Monitor", "Media", "Low", new Integer(700), "Ford
Motor Company"},

        { new Integer(11), "Car Plush Seat", "Comfort", "Medium", new
Integer(1500), "Honda Corporation"},

        { new Integer(12), "Car Neck Pillow", "Comfort", "High", new
Integer(2500), "Suzuki Motor Corporation"}

    },

    new String [] {

        "Accessories Number", "Accessories Name", "Category", "Range", "Price",
"Recommended By"

    }

) {

    Class[] types = new Class [] {

        java.lang.Integer.class, java.lang.String.class, java.lang.String.class,
java.lang.String.class, java.lang.Integer.class, java.lang.String.class

    };

    public Class getColumnClass(int columnIndex) {

        return types [columnIndex];

    }

};

jScrollPane1.setViewportViewView(jTable1);

```

```
if (jTable1.getColumnModel().getColumnCount() > 0) {  
    jTable1.getColumnModel().getColumn(0).setResizable(false);  
    jTable1.getColumnModel().getColumn(1).setResizable(false);  
    jTable1.getColumnModel().getColumn(2).setResizable(false);  
    jTable1.getColumnModel().getColumn(3).setResizable(false);  
    jTable1.getColumnModel().getColumn(4).setResizable(false);  
    jTable1.getColumnModel().getColumn(5).setResizable(false);  
}
```

```
save.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N  
save.setText("SAVE");  
save.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        saveActionPerformed(evt);  
    }  
});
```

```
javax.swing.GroupLayout jPanel1Layout = new  
javax.swing.GroupLayout(jPanel1);  
jPanel1.setLayout(jPanel1Layout);  
jPanel1Layout.setHorizontalGroup(  
  
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
    .addGroup(jPanel1Layout.createSequentialGroup()  
        .add(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
            .add(container1)  
            .add(save)  
        )  
    )  
);
```

```
.addContainerGap(772, Short.MAX_VALUE))

.addGroup(jPanel1Layout.createSequentialGroup())

.addGap(24, 24, 24)

.addComponent(jScrollPane1)

.addContainerGap())

);

jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel1Layout.createSequentialGroup())

.addContainerGap()

.addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 248,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGap(33, 33, 33)

.addComponent(save)

.addContainerGap(37, Short.MAX_VALUE))

);

jLabel2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
jLabel2.setText("Accessories Number");

jLabel3.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
jLabel3.setText("Accessories Name");

jLabel5.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
jLabel5.setText("Price");
```

```

jLabel6.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N

jLabel6.setText("Category");

category.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N

category.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"Ambience", "Comfort", "Media", "Decoration", "Vehicle Care" }));

jPanel3.setBorder(javax.swing.BorderFactory.createEtchedBorder());

buttonGroup1.add(jRadioButton1);

jRadioButton1.setText("Low");

buttonGroup1.add(jRadioButton2);

jRadioButton2.setText("Medium");

buttonGroup1.add(jRadioButton3);

jRadioButton3.setText("High");

javax.swing.GroupLayout jPanel3Layout = new
javax.swing.GroupLayout(jPanel3);

jPanel3.setLayout(jPanel3Layout);

jPanel3Layout.setHorizontalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel3Layout.createSequentialGroup()

.addContainerGap()

.addContainerGap(10)

```

```
.addComponent(jRadioButton1)

.addGap(27, 27, 27)

.addComponent(jRadioButton2)

.addGap(32, 32, 32)

.addComponent(jRadioButton3)

.addContainerGap(43, Short.MAX_VALUE))

);

jPanel3Layout.setVerticalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel3Layout.createSequentialGroup())

.addGap(15, 15, 15)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)

.addComponent(jRadioButton1)

.addComponent(jRadioButton2)

.addComponent(jRadioButton3))

.addContainerGap(19, Short.MAX_VALUE))

);

range.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
range.setText("Range Level");

no.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
no.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {
```



```
        noActionPerformed(evt);
    }
});

no.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyTyped(java.awt.event.KeyEvent evt) {
        noKeyTyped(evt);
    }
});

price.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N

name.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N

insert.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
insert.setText("Insert");
insert.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        insertActionPerformed(evt);
    }
});

logout.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
logout.setText("Log Out");
logout.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        logoutActionPerformed(evt);
    }
});
```

```
    }  
});
```

```
clear.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N  
clear.setText("Clear");  
clear.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        clearActionPerformed(evt);  
    }  
});
```

```
cleartable.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N  
cleartable.setText("Clear Table");  
cleartable.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        cleartableActionPerformed(evt);  
    }  
});
```

```
re.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N  
re.setText("Recommandation");
```

```
rec.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N  
rec.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        recActionPerformed(evt);  
    }  
});
```

$$\} \\ \}));$$

```
available.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
available.setText("Available Accessories");

available.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        availableActionPerformed(evt);
    }
});
```

```
category1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
category1.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"Ambience", "Comfort", "Media", "Decoration", "Vehicle Care" }));
```

```
javax.swing.GroupLayout jPanel2Layout = new  
javax.swing.GroupLayout(jPanel2);
```

```
jPanel2.setLayout(jPanel2Layout);
```

jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())
```

```
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())

.addComponent(category1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addComponent(available)

.addGap(42, 42, 42)

.addComponent(textsearch,
javax.swing.GroupLayout.PREFERRED_SIZE, 162,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGap(18, 18, 18))

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())

.addComponent(jLabel1)

.addGap(268, 268, 268)))

.addComponent(search)

.addGap(158, 158, 158))

.addGroup(jPanel2Layout.createSequentialGroup())

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)

.addGroup(jPanel2Layout.createSequentialGroup())

.addGap(89, 89, 89)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)
```

```
.addComponent(jPanel3,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(jPanel2Layout.createSequentialGroup())

.addGap(6, 6, 6)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)

.addComponent(jLabel5,
javax.swing.GroupLayout.PREFERRED_SIZE, 81,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(re)

.addComponent(insert))))))

.addGroup(jPanel2Layout.createSequentialGroup())

.addGap(92, 92, 92)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)

.addGroup(jPanel2Layout.createSequentialGroup())

.addGap(0, 0, Short.MAX_VALUE)

.addComponent(clear)

.addGap(54, 54, 54)

.addComponent(login))

.addGroup(jPanel2Layout.createSequentialGroup())

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)

.addComponent(range)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING))
```

```
.addGroup(jPanel2Layout.createSequentialGroup())
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING))
```

```
.addComponent(jLabel6,  
    javax.swing.GroupLayout.PREFERRED_SIZE, 133,  
    javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addComponent(jLabel3,  
    javax.swing.GroupLayout.PREFERRED_SIZE, 133,  
    javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addComponent(jLabel2,  
    javax.swing.GroupLayout.PREFERRED_SIZE, 133,  
    javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING))
```

```
.addComponent(no,  
    javax.swing.GroupLayout.PREFERRED_SIZE, 182,  
    javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addComponent(name,  
    javax.swing.GroupLayout.PREFERRED_SIZE, 182,  
    javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addComponent(category,  
    javax.swing.GroupLayout.PREFERRED_SIZE,  
    javax.swing.GroupLayout.DEFAULT_SIZE,  
    javax.swing.GroupLayout.PREFERRED_SIZE)))
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addComponent(rec,  
        javax.swing.GroupLayout.PREFERRED_SIZE, 182,  
        javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
    .addComponent(price,  
        javax.swing.GroupLayout.PREFERRED_SIZE, 182,  
        javax.swing.GroupLayout.PREFERRED_SIZE))))
```

```
    .addGap(0, 8, Short.MAX_VALUE))))
```

```
    .addGap(36, 36, 36)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addComponent(cleartable)
```

```
    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,  
        javax.swing.GroupLayout.DEFAULT_SIZE,  
        javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
    .addContainerGap(24, Short.MAX_VALUE))
```

```
);
```

```
jPanel2Layout.setVerticalGroup(
```

```
jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel2Layout.createSequentialGroup())
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel2Layout.createSequentialGroup())
```

```
        .addGap(29, 29, 29)
```

```
        .addComponent(jLabel1))
```

```
.addGroup(jPanel2Layout.createSequentialGroup())

.addGap(99, 99, 99)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)

.addComponent(search)

.addComponent(textsearch,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(category1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(available))))

.addGap(35, 35, 35)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)

.addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(jPanel2Layout.createSequentialGroup())

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)

.addComponent(jLabel2)

.addComponent(no, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(18, 18, 18)
```



```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.  
BASELINE)
```

```
    .addComponent(jLabel3)
```

```
    .addComponent(name,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
    .addGap(18, 18, 18)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.  
BASELINE)
```

```
    .addComponent(jLabel6)
```

```
    .addComponent(category,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
    .addGap(29, 29, 29)
```

```
    .addComponent(range)
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
```

```
    .addComponent(jPanel3,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
    .addGap(18, 18, 18)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.  
BASELINE)
```

```
    .addComponent(jLabel5)
```

```
.addComponent(price,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(22, 22, 22)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)

.addComponent(re)

.addComponent(rec,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(40, 40, 40)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)

.addComponent(clear)

.addComponent(logout)

.addComponent(insert))))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addComponent(clearable)

.addContainerGap(105, Short.MAX_VALUE))

);

Open.setText("File");
```

```
open.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_O, java.awt.event.InputEvent.CTRL_MASK));
```

```
    open.setText("Open");
```

```
    open.addActionListener(new java.awt.event.ActionListener() {  
        public void actionPerformed(java.awt.event.ActionEvent evt) {  
            openActionPerformed(evt);  
        }  
    });
```

```
    Open.add(open);
```

```
Close.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_C, java.awt.event.InputEvent.CTRL_MASK));
```

```
    Close.setText("Close");
```

```
    Close.addActionListener(new java.awt.event.ActionListener() {  
        public void actionPerformed(java.awt.event.ActionEvent evt) {  
            CloseActionPerformed(evt);  
        }  
    });
```

```
    Open.add(Close);
```

```
    Open.add(Close);
```

```
jMenuBar1.add(Open);
```

```
jMenu2.setText("Help");
```

```
Help.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_H, java.awt.event.InputEvent.CTRL_MASK));
```

```
    Help.setText("Help File");
```

```
    Help.addActionListener(new java.awt.event.ActionListener() {
```

```
        public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
            HelpActionPerformed(evt);
```

```
        }
```

```
    });
```

```
    jMenu2.add(Help);
```

```
About.setText("About");
```

```
About.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        AboutActionPerformed(evt);
```

```
    }
```

```
});
```

```
jMenu2.add(About);
```

```
jMenuBar1.add(jMenu2);
```

```
setJMenuBar(jMenuBar1);
```

```
javax.swing.GroupLayout layout = new  
javax.swing.GroupLayout(getContentPane());
```

```
getContentPane().setLayout(layout);
```

```
layout.setHorizontalGroup(
```

```
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(layout.createSequentialGroup()

                .addContainerGap()

                .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                .addContainerGap())

        );

        layout.setVerticalGroup(

            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()

                    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)

                    .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

                    .addGap(246, 246, 246))

        );

        pack();
    } // </editor-fold>
```

```
private void insertActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    try{

        int id = Integer.parseInt(no.getText());
```

```
int rowCount = jTable1.getRowCount();

for(int i=0; i<rowCount;i++){

    AccessoriesID.add(Integer.parseInt(jTable1.getValueAt(i,0).toString()));

}

if(AccessoriesID.contains(id)){

    JOptionPane.showMessageDialog(this,"Accessories ID already
exist","Task Denied",JOptionPane.WARNING_MESSAGE);

}

else if(no.getText().equals("") || name.getText().equals("") ||
price.getText().equals(""))|| rec.getText().equals("")){

    //if the textfield is empty, this will pass the warning message for taskfield
empty.

    JFrame f = new JFrame();

    JOptionPane.showMessageDialog(f,"Please complete the field","Task
Denied",JOptionPane.WARNING_MESSAGE);

}else{

    int s1 = Integer.parseInt(no.getText());

    String s2 = name.getText().toString();

    String s3 = category.getSelectedItem().toString();

    String s4 = "";

    int s5 = Integer.parseInt(price.getText());

    String s6 = rec.getText().toString();

    // extracting the data of textfield in table

    //extracting the data of jRadiobutton in table
```

```
if(jRadioButton1.isSelected()){  
    s4 = jRadioButton1.getText().toString();  
}else if(jRadioButton2.isSelected()){  
    s4 = jRadioButton2.getText().toString();  
}else if(jRadioButton3.isSelected()){  
    s4 = jRadioButton3.getText().toString();  
}
```

```
Categorydetail.add(s3); //adding the category in arraylist Categorydetail
```

```
DefaultTableModel table = (DefaultTableModel)jTable1.getModel();  
//making default table  
  
jTable1.setModel(table);  
  
Object row[] = {s1,s2,s3,s4,s5,s6};  
  
table.addRow(row); //storing the data of textfield in row of table  
  
JFrame f = new JFrame();  
  
JOptionPane.showMessageDialog(f, "Data Successfully inserted", "Task  
successful", JOptionPane.INFORMATION_MESSAGE);  
  
//popping the information message for successfull insertion of data  
  
no.setText("");  
  
name.setText("");  
  
rec.setText("");
```

```
        price.setText("");

        //this will clear the textfield of accessories number, name,
        recommendation and price

    }

    }catch(NumberFormatException e){

        JFrame f = new JFrame();

        JOptionPane.showMessageDialog(f, "Please enter correct input", "Task
        Denied",JOptionPane.WARNING_MESSAGE);

    }catch(Exception ef){

        JFrame f = new JFrame();

        JOptionPane.showMessageDialog(f, "Something went wrong!!!", "Task
        Denied",JOptionPane.WARNING_MESSAGE);

    }

}

private void noActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

}

private void recActionPerformed(java.awt.event.ActionEvent evt) {
```



```
// TODO add your handling code here:

}

private void clearActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    int p = JOptionPane.showConfirmDialog(null,"Are you sure want to clear the
textfield?","Close",JOptionPane.YES_NO_OPTION);

    if(p==0){

        no.setText("");

        name.setText("");

        rec.setText("");

        price.setText("");

    }

    //clearing the textfield

}

private void logoutActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    int p = JOptionPane.showConfirmDialog(null,"Do you want to
logout?","Close",JOptionPane.YES_NO_OPTION);

    if(p==0){

        LogIn welcome = new LogIn();

        welcome.setVisible(true);

        dispose();

    }

}
```

```
    }

}

private void cleartableActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    try{

        int p = JOptionPane.showConfirmDialog(null,"Are you sure want to clear the
table?","Clear",JOptionPane.YES_NO_OPTION);

        if(p==0){

            DefaultTableModel dm = (DefaultTableModel)jTable1.getModel();

            dm.getDataVector().removeAllElements(); //it will remove all the data of table

            dm.fireTableDataChanged(); // notifies the JTable that the model has
changed

            textsearch.setText("");

            JFrame f = new JFrame();

            JOptionPane.showMessageDialog(f, "Table Successfully cleared", "Task
successful", JOptionPane.INFORMATION_MESSAGE);

        }

    }catch(Exception e){

        JFrame f = new JFrame();

        JOptionPane.showMessageDialog(f, "Something went wrong!!!","Task
Denied",JOptionPane.WARNING_MESSAGE);

    }

}
```

```
private void saveActionPerformed(java.awt.event.ActionEvent evt) {  
  
    // TODO add your handling code here:  
  
    int p = JOptionPane.showConfirmDialog(null,"Are you sure want to save the  
data?","Save",JOptionPane.YES_NO_OPTION);  
  
    if(p==0){  
  
        String filename = JOptionPane.showInputDialog("Enter file name:"); //Asking  
user to give file name  
  
        File file = new File(filename);  
  
        try{  
  
            FileOutputStream s = new FileOutputStream(file,true);  
  
            if(p==0){  
  
                FileWriter fw = new FileWriter(file);  
  
                BufferedWriter bw = new BufferedWriter(fw);  
  
                for(int i = 0; i < jTable1.getRowCount();i++){  
  
                    bw.write( "Accessories No: " + jTable1.getValueAt(i,0).toString()+ " " +  
                        "Accessories Name: " + jTable1.getValueAt(i,1).toString()+ " " +  
                        "Category: " + jTable1.getValueAt(i,2).toString()+ " " +  
                        "Range: " + jTable1.getValueAt(i,3).toString()+ " " +  
                        "Price: " + jTable1.getValueAt(i,4).toString()+ " " +
```

```
                "Recommended By: " + jTable1.getValueAt(i,5).toString());
//writing data in file

                bw.newLine();

                //writing in file using buffered writer and filewriter
            }

            bw.close();

            fw.close();

            //closing buffered writer and filewriter

            JFrame f = new JFrame();

            JOptionPane.showMessageDialog(f, "Data Successfully saved", "Task
successful", JOptionPane.INFORMATION_MESSAGE);

            //displaying proper message
        }

        }catch(IOException e){

            Logger.getLogger(CAD_Info.class.getName()).log(Level.SEVERE,null,e);

        }

    }

}
```

```
private void openActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
  
    JFileChooser filechooser = new JFileChooser();  
  
    if(filechooser.showOpenDialog(null)==JFileChooser.APPROVE_OPTION){  
//choosing file from dialouge box  
        File file = filechooser.getSelectedFile(); //selecting the file  
        String FileName = file.getAbsolutePath();  
        Runtime open = Runtime.getRuntime(); //opening the file while running the  
project  
        try{  
            Runtime.getRuntime().exec("rundll32 url.dll, FileProtocolHandler " +  
FileName ); //this will open the file while running the project  
  
        }catch(FileNotFoundException ex){  
  
Logger.getLogger(CAD_Info.class.getName()).log(Level.SEVERE,null,ex);  
        }catch(IOException ex){  
  
Logger.getLogger(CAD_Info.class.getName()).log(Level.SEVERE,null,ex);  
        }  
        }else{  
            JOptionPane.showMessageDialog(this,"Task  
Cancel","Message",JOptionPane.WARNING_MESSAGE);  
        }  
    }  
}
```

```
}

private void HelpActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    try{

        Runtime.getRuntime().exec("rundll32 url.dll,FileProtocolHandler "+
"C:\\Users\\user\\Documents\\NetBeansProjects\\CAD_IS\\src\\main\\java\\com\\myc
ompany\\cad_is\\File saved\\help.doc");

        //opening the help document by giving its location

    }catch(Exception e){

        JOptionPane.showMessageDialog(null,"error");

    }

}

private void CloseActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    int p = JOptionPane.showConfirmDialog(null,"Are you sure want to close the
system?", "Close",JOptionPane.YES_NO_OPTION);

    if(p==0){

        System.exit(0);

    }

}
```

```
    }

    //closing the application
}

private void noKeyTyped(java.awt.event.KeyEvent evt) {

    // TODO add your handling code here:

}

public void sort(int [] a){//passing array list as parameters

    for(int i=0;i<a.length;i++){

        int minVal = minimumValue(a,i);

        swap(a,minVal,i);

    }

    for(int i=0;i<a.length;i++){

        System.out.println(a[i]);

    }

}

public int minimumValue(int [] a, int form){

    int minVal = form;

    for(int i = form +1;i<a.length;i++){

        if(a[i]<a[minVal]){
```

```
        minVal = i;
    }
}

return minVal;
}

public void swap(int [] a,int i,int j){

    int temp= a[i];

    a[i] = a[j];

    a[j] = temp;

}
```

```
private void searchActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    int rowcount = jTable1.getRowCount();//get the row count of the table

    int [] a = new int [rowcount];//store the row count in array

    for (int i = 0; i<rowcount;i++){

        a[i]= Integer.parseInt(jTable1.getValueAt(i,4).toString());//extraces the value
at index no. 4 of the table

    }

    sort(a);//call the sort function

    int low = 0;
```



```
int high = (a.length-1);

try{

int price = Integer.parseInt(textsearch.getText());

BinarySearch bi = new BinarySearch();

int index = bi.binarySearch(a,low,high,price);

if(index==-1){

    JOptionPane.showMessageDialog(null,

        "Search Not Found",

        "Task Denied",

        JOptionPane.WARNING_MESSAGE);

}else{

    getAccessoriesName(price);

}

}catch(ArrayIndexOutOfBoundsException ei){

    JOptionPane.showMessageDialog(null,"Something Wrong!!!","Task

Denied",JOptionPane.ERROR_MESSAGE);

}

}catch(Exception ex) {

    JOptionPane.showMessageDialog(null, "Invalid Input or Empty Table",

"ERROR",

        JOptionPane.ERROR_MESSAGE);

}
```

```

    }

}

private void getAccessoriesName(int price){

    String pr = String.valueOf(price);

    for(int i=0;i<jTable1.getRowCount();i++){

        String t = jTable1.getValueAt(i,4).toString();

        if(t.equals(pr)){

            JOptionPane.showMessageDialog(null,"Accessories Number: "
+ jTable1.getValueAt(i,0).toString() + "\n" + "Accessories Name: " +
jTable1.getValueAt(i,1).toString()+"\n"+

            "Category: " + jTable1.getValueAt(i,2).toString() + "\n" + "Range: " +
jTable1.getValueAt(i,3).toString() + "\n" + "Recommended By: " +

            jTable1.getValueAt(i,5).toString()+"\n","Search Found",

            JOptionPane.INFORMATION_MESSAGE );

            break;

        }

    }

}

private void availableActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    //code for the search item by category

    //if the table is not empty

```

```
if (jTable1.getRowCount() != 0) {

    String categorySearch = (String) category1.getSelectedItem();

    int searchIndex = 2;//index where the category is present

    int rows = jTable1.getRowCount();

    int datarows = 0;

    int n = 1;

    for (int i = 0; i < rows; i++) {

        if ((jTable1.getValueAt(i, searchIndex)) == null) {

            break;

        }

        datarows++;

    }

    String displayAccessories = "";

    for (int i = 0; i < datarows; i++) {

        if (((String) jTable1.getValueAt(i, searchIndex)).equals(categorySearch)) {

            int accessoriesNameIndex = 1;//index for accessoriesName

            //if the category is found the accessories is added in the
displayAccessories

            displayAccessories += n + ". " + ((String) jTable1.getValueAt(i,
accessoriesNameIndex)) + "\n";

            n++;

        }

    }

    if (!"".equals(displayAccessories)) {
```

```
//message is displayed if the searched category is available in the table

JOptionPane.showMessageDialog(this, (n-1)+" Accessory from "+
categorySearch+ " is found \n"+ displayAccessories, "Search Found!!",
JOptionPane.INFORMATION_MESSAGE);

    } else {

        //message is displayed if the searched category is not available in the table

        JOptionPane.showMessageDialog(this, "Accessories From " +
categorySearch + " Category is not Available!!", "Search Not Found",
JOptionPane.WARNING_MESSAGE);

    }

    } else {

        //message is displayed if the table is empty

        JOptionPane.showMessageDialog(this, "The Table is Empty!!!", "Message!!!",
JOptionPane.WARNING_MESSAGE);

    }

}

private void AboutActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    about.setVisible(true);

}
```

```
/**
```

```
* @param args the command line arguments

*/

public static void main(String args[]) {

    /* Set the Nimbus look and feel */

    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code
(optional) ">

    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look
and feel.

    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

    */

    try {

        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {

            if ("Nimbus".equals(info.getName())) {

                javax.swing.UIManager.setLookAndFeel(info.getClassName());

                break;

            }

        }

    } catch (ClassNotFoundException ex) {

        java.util.logging.Logger.getLogger(CAD_Info.class.getName()).log(java.util.logging.L
evel.SEVERE, null, ex);

    } catch (InstantiationException ex) {

        java.util.logging.Logger.getLogger(CAD_Info.class.getName()).log(java.util.logging.L
evel.SEVERE, null, ex);

    } catch (IllegalAccessException ex) {
```

```
java.util.logging.Logger.getLogger(CAD_Info.class.getName()).log(java.util.logging.L  
evel.SEVERE, null, ex);
```

```
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(CAD_Info.class.getName()).log(java.util.logging.L  
evel.SEVERE, null, ex);
```

```
    }
```

```
//</editor-fold>
```

```
/* Create and display the form */
```

```
java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
```

```
        new CAD_Info().setVisible(true);
```

```
    }
```

```
});
```

```
}
```

```
// Variables declaration - do not modify
```

```
private javax.swing.JMenuItem About;
```

```
private javax.swing.JMenuItem Close;
```

```
private javax.swing.JMenuItem Help;
```

```
private javax.swing.JMenu Open;
```

```
private javax.swing.JDialog about;
```

```
private javax.swing.JButton available;
```

```
private javax.swing.ButtonGroup buttonGroup1;
```

```
private javax.swing.ButtonGroup buttonGroup2;
```

```
private javax.swing.ButtonGroup buttonGroup3;

private javax.swing.ButtonGroup buttonGroup4;

private javax.swing.JComboBox<String> category;

private javax.swing.JComboBox<String> category1;

private javax.swing.JButton clear;

private javax.swing.JButton cleartable;

private javax.swing.JButton insert;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel10;

private javax.swing.JLabel jLabel11;

private javax.swing.JLabel jLabel12;

private javax.swing.JLabel jLabel13;

private javax.swing.JLabel jLabel14;

private javax.swing.JLabel jLabel15;

private javax.swing.JLabel jLabel16;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JLabel jLabel4;

private javax.swing.JLabel jLabel5;

private javax.swing.JLabel jLabel6;

private javax.swing.JLabel jLabel7;

private javax.swing.JLabel jLabel8;

private javax.swing.JLabel jLabel9;

private javax.swing.JMenu jMenuItem2;

private javax.swing.JMenuBar jMenuItemBar1;

private javax.swing.JMenuItem jMenuItem1;
```

```
private javax.swing.JPanel jPanel1;  
private javax.swing.JPanel jPanel2;  
private javax.swing.JPanel jPanel3;  
private javax.swing.JPanel jPanel4;  
private javax.swing.JRadioButton jButton1;  
private javax.swing.JRadioButton jButton2;  
private javax.swing.JRadioButton jButton3;  
private javax.swing.JScrollPane jScrollPane1;  
private javax.swing.JTable jTable1;  
private javax.swing.JButton logout;  
private javax.swing.JTextField name;  
private javax.swing.JTextField no;  
private javax.swing.JMenuItem open;  
private javax.swing.JTextField price;  
private javax.swing.JLabel range;  
private javax.swing.JLabel re;  
private javax.swing.JTextField rec;  
private javax.swing.JButton save;  
private javax.swing.JButton search;  
private javax.swing.JTextField textsearch;  
  
// End of variables declaration  
  
}
```