

CODE:

```
#include <iostream>

#include <fstream>

#include <string>

using namespace std;

void saveToFile(const string& filename, const string& data);

void readFromFile(const string& fileName);

void createFeatureFile(string& fileName);

int main() {

    string fileName;

    int choice;

    while (true) {

        cout << "Menu: " << endl;

        cout << "1. Create a text file" << endl;

        cout << "2. Input features and label" << endl;

        cout << "3. Show features and label" << endl;

        cout << "4. Exit" << endl;

        cout << "Enter your choice (1-4): ";

        cin >> choice;

        switch (choice) {
```

```

case 1: {

    cout << "Enter the name of the feature file (e.g., featureFile.txt): ";

    cin >> fileName;

    createFeatureFile(fileName);

    break;

}

case 2: {

    if (fileName.empty()) {

        cout << "No file available." << endl;

    }

    else {

        string data;

        cout << "Enter comma-separated training data. Press enter to get new data." <<
endl;

        cout << "Type 'exit' to exit." << endl;

        cin.ignore(); // To ignore leftover '\n' from previous input

        while (true) {

            cout << "Enter data: ";

            getline(cin, data);

            if (data == "exit") {

                break;

            }

            saveToFile(fileName, data);

```

```
    }  
    }  
    break;  
}  
case 3: {  
    if (fileName.empty()) {  
        cout << "No file available." << endl;  
    }  
    else {  
        readFromFile(fileName);  
    }  
    break;  
}  
case 4: {  
  
    cout << "Exiting program." << endl;  
    return 0;  
}  
default: {  
  
    cout << "Invalid option. Please choose a number between 1 and 4." << endl;  
}  
}  
}
```

```
void createFeatureFile(string& fileName) {  
    ofstream outFile(fileName, ios::out);  
    if (outFile) {  
        cout << "Feature file " << fileName << " created successfully." << endl;  
        outFile.close();  
    }  
    else {  
        cout << "Error creating file." << endl;  
    }  
}
```

// Function to save data to a file

```
void saveToFile(const string& filename, const string& data) {  
    ofstream outFile(filename, ios::app); // Open file in append mode  
    if (outFile) {  
        outFile << data << endl;  
        cout << "Data saved successfully." << endl;  
    }  
    else {  
        cout << "Error saving data." << endl;  
    }  
}
```

// Function to read data from a file

```
void readFromFile(const string& fileName) {  
    ifstream inFile(fileName);
```

```
if (inFile) {  
    string line;  
    while (getline(inFile, line)) {  
        cout << line << endl;  
    }  
    inFile.close();  
}  
else {  
    cout << "Error reading file." << endl;  
}  
}
```

Output Screenshot:

```
Menu:
1. Create a text file
2. Input features and label
3. Show features and label
4. Exit
Enter your choice (1-4): 1
Enter the name of the feature file (e.g., featureFile.txt): InventoryFile.txt
Feature file InventoryFile.txt created successfully.
Menu:
1. Create a text file
2. Input features and label
3. Show features and label
4. Exit
Enter your choice (1-4): 2
Enter comma-separated training data. Press enter to get new data.
Type 'exit' to exit.
Enter data: Book, Pen, Board, Chair, Computer, Pencil, Projector, Notebook, Highlighter, Marker, Eraser Gum, Student Seat exit
Data saved successfully.
Enter data: exit
Menu:
1. Create a text file
2. Input features and label
3. Show features and label
4. Exit
Enter your choice (1-4): 3
Book, Pen, Board, Chair, Computer, Pencil, Projector, Notebook, Highlighter, Marker, Eraser Gum, Student Seat exit
Menu:
1. Create a text file
2. Input features and label
3. Show features and label
4. Exit
Enter your choice (1-4): 5
Invalid option. Please choose a number between 1 and 4.
Menu:
1. Create a text file
2. Input features and label
3. Show features and label
4. Exit
Enter your choice (1-4): 4
Exiting program.

C:\Users\Acer\source\repos\lab4\x64\Debug\lab4.exe (process 5384) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```