



ASSIGNMENT 1

Documentation

Name: inamkrim

Reg no: 04072212031

Documentation

Introduction:

The code implements a bookstore management system to add book delete book and check the books name and price through index of that record. Import and export function also implement.it is designed to manage a bookstore's records using command-line arguments.

the functionality of each function are :

add_record(record R[], int& count):

- This function allows the user to add a new record to the bookstore's inventory.
- It prompts the user to enter the ID, name, and price of the book.
- It checks if a record with the same ID already exists to avoid duplicates.
- If not, it adds the new record to the array of records and calls save_record() to update the file.

delete_record(record R[], int& count, int id):

- This function allows the user to delete a record based on its ID.
- It searches for the record with the given ID and marks it as invalid by setting its "isvalid" flag to false.
- It then prints the details of the deleted record if found.
- At last it calls save_record() to update the file after deletion.

search_record(record R[], int count, int id):

- This function allows the user to search for a record based on its ID.
- It searches through the records for the given ID and prints the details if found and valid.
- If no record is found or if the record is marked as invalid, it notifies the user accordingly.

save_record(const record R[], int count):

- This function takes an array of records and the count of records as input.
 - It opens a binary file named "record.bin" for writing.
 - It iterates through the records, writing each record to the file in binary format.
- Finally, it closes the file

read_record(record R[], int& count):

- This function reads records from the binary file "record.bin" into the array of records.
- It opens the file for reading in binary mode.
- It reads each record from the file until the end of the file is reached.
- It updates the count of records read and then closes the file.

export_record(record R[], int count, const std::string& filename):

- This function exports the records from the array to a specified file.
- It opens the file for writing.
- It iterates through the records, writing each one to the file.
- Finally, it closes the file.

import_record(record R[], int& count, const std::string& filename):

- This function imports records from a specified file into the array.
- It opens the file for reading.
- It reads each record from the file until the end of the file is reached.
- It updates the count of records read and then closes the file.
- After importing, it calls save_record() to update the file with the imported records.

the main function where the program execution is starts.

- It initializes an array of records and a count variable.
- It checks the command-line arguments to determine the action to be performed.
- It reads records from the file at the beginning and saves records to the file at the end.
- Based on the user's command, it calls the required function to perform the desired operation.
 1. add: Add a new record.
 2. delete[id]: Delete a record with the ID.
 3. search[id] : Search for a record with the ID.
 4. import [filename]: Import records from a file.
 5. export[filename] : Export records to a file.