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assignment 1

Documentation

# 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.