**Abstract:-**

*Data Warehousing and Data Mining has involved and matured into a discipline of research and application over the decade vast range of applications have emerged across various domains and Data Warehousing and Data Mining tools and applications have provided much needed decision support to the organizations. It contains data of various operations starting from the stage of acquirement,stacking to subscriber transactions like issue, return, and requisition and so on.* Library data are usually hard to analyze because these data come from unconnected sources,

and the data sets can be very ample. Likewise the desire to protect user privacy has denied the

retention of data that could be used to correlated library data to non-library data. I have used

data mining to determine library use patterns and to prevent whether library use correlated to

students’ grade point average.

Purpose:-

My Purpose is to introduce transactions into libraries of concurrent data structures such transactions can be used to ensure atomicity of sequences of data structure operations. By centralizing on transactional access to a well-defined set of data structure operations, I keep a balance between a Transaction And Data Structure

I amplify this concept by designing and implementing a library supporting transactions on any number of sets (implemented as skiplists), and queues. Library transaction system offers efficient and scalable transactions.

***Keywords*:**Data Mining, Data Warehousing, Snow Flake Schema.

**Introduction**

Library management responsible with the management of resources which basically includes books, manuscripts, journals etc. and providing effective and efficient services to its users. An integrated **library system** (ILS), also known as a **library** management **system**(LMS), is an enterprise resource planning **system** for a **library**, used to track items owned, orders made, bills paid, and patrons who have borrowed

An ILS usually comprises a [relational database](https://en.wikipedia.org/wiki/Relational_database), software to interact with that database, and two [graphical user interfaces](https://en.wikipedia.org/wiki/Graphical_user_interface) (one for patrons, one for staff). Most ILSes separate software functions into discrete programs called modules, each of them integrated with a unified interface. Examples of modules might include:

Unique project features are use of Internet not only to access other library catalogs, but to have a central menu of databases with transparent transfer capabilities to whatever data-base a user chooses regardless of geographic location. Automatic online access to document delivery directly from a literature search is provided

Users will navigate easily, unaware of the underlying technical complexities. Another significant milestone is the development of a Library Management Information System (LMIS) to allow the libraries to organize data efficiently, improve their reports and complete national library association questionnaires.

keep track of the books issued and returned across the counters, journals, periodicals and manuscripts consulted by the users and so on needs additional book keeping on additional parameters and are generally not done in a typical library which operates manually. The situation becomes acute when the library does APPROPRIATE liS of resources. Most of the time, the APPROPRIATE LIS is done by looking into the availability of the stocks which may result in inefficient APPROPRIATION. Even various library management tools do not provide with such additional support. Generally, libraries are concerned with many issue and return of books and to some extent delayed returns are kept track off manually. It is obvious that the usage patterns of the library books and journals developed over the years are embedded in these transactions. If these patterns can be discovered then these can effectively influence the library operations, investment and procurement plans for the future growth of a library and so on. LIS can discover the usage trends or pattern of the resource utilization so that efficient procurement and management.

*A Data Warehouse for Mining Usage...........* of resources can be carried out. To implement such a system, a Data Warehouse is required to store the essential data generated through the operation of the library. The purpose of this warehouse is to assist a Data Mining tool which can run on top of it.

the design is done keeping in mind the automation necessary for management of books and journals stored in the stacks and then the corresponding issue and return of these items.

There is an online transaction system that stores the current information regarding every transaction of the library.The system stores the data in an operational database. Also these transactions are backed up in a Data Warehouse which stores subject oriented, time variant, non volatile data.These data are then extracted by the data mining tools for knowledge discovery. The features that are incorporated while designing this library transaction management system are:

* Keep track of the books that are issued to the members.
* Allowing users to track the books and journals in the library.
* Faster mining and retrieval of information.
* Reduced work load of employee.