



Jaypee Institute of Information Technology, Noida

Project based learning

Subject: Software Development Fundamentals-II (15B11CI211)

Synopsis

Group Members Detail:

S. No.	Batch	Roll No.	Name
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Title of Project:

DEVELOPMENT OF MERRIT LIST SOFTWARE IN C

Summary the project:

On this planet, every academic institute needs a robust software which, based on some variable parameters can display the merit list based on marks of secured by the students. So, in this project an application is developed using C language which reads the source information from a text file and calculates the total marks and their percentage and then based on the Users choice, prepares the merit list and displays the same as well as can store the same into a text file.

In this project I have used the concepts of C language which majorly deal with Linked List, Strings, numerical data and sorting process. File I/O are also used in certain operation in order to get the best results and for the program to be user friendly.

Many more existing systems use the manual and are hand run processes to prepare the merit list and declare the result. The User has to manually enter the Name, Enrollment number, and Marks in each subject, then the software is ready to calculate the percentage and merit list according to the marks. This process is very slow to give the result. Such kind of software's are easily prone to errors. When a parameter has to be added to such software, it has to be redesigned, adding more efforts. The more the students, the more tedious the work is.

To overcome the problems that the Existing systems face, this program is designed to take the input from a user defined text file and, the automated generated merit list is stored in a text file which makes the application versatile to use for the user. This makes the user easy to use the application. The program also keeps the record of number of students. Based on the data that has been entered in the text file, the application sorts the data and makes a Merit List. Since the User has to enter the data only once, it makes the application less prone to errors. When the Merit List is prepared, the User can Display it or store it in a File. When a parameter or a record has to be added to the system, minimal changes are required. Number of students is not an issue for this system. The system can be easily scaled according to the needs. The developed software can generate the subject-wise merit list. So, if there are 5 subjects you can generate the merit list on any of the subject selected through menu. Similarly, it can also generate the merit list on total marks, and also capable of arranging the student's records in alphabetical order based on first name as well as on last name. All these lists can also be directed to text files. For development top-down approach is used. The complete task has been divided into 11 functions which uses single linked list.