Abstract- Over the years paper work has been important to maintain the records of the students by the institutions and colleges. All locker related data is managed manually by Universal College Of Engineering which is very tedious. More efforts and physical space is required to keep track of paper documents, to find information and to keep details secure. Searching record is very time consuming when it comes to search manually. “Locker Management System” can be used to reduce the complexity of the work and time, easy retrieval of information. The system is developed using technologies such as HTML, CSS, PHP, MySQL and Javascript. This system deals with insertion of data, deletion and updation of data without any strain. This system is mainly developed for Institutions, Organizations & Offices which provide lockers to their staff or students to effectively maintain the records. Thus the above system will save time of the staff and increase the efficiency of work.

Keywords: Locker Management System, HTML and CSS, Database Management System, PHP and MySQL, Javascript.

I. INTRODUCTION
One of the best practices of Universal College Of Engineering is providing Locker facility to students. At the time of presentation & hand zone trainings students have to bring their laptops. Lockers provide secure storage options for students while they are in library, classrooms, or anywhere in the campus. Students can keep their assignments, files, sheets, etc in lockers.

The current Locker management system is completely manual from issuing the locker to returning the locker which is very time consuming and there is no perfect methodology to search the records. Lockers are assigned to the students in the first year by filling an acknowledgement form and returned by the students in the final year by filling the acknowledgement receipt. This assigning of lockers was very time consuming as at a time only some students were given form to fill which they would not return it on time due to which the whole process of locker issuing has to be paused until the students return the form and it would take around 1-2 months approx for each students to receive a locker. At the time of returning some students have misplaced the keys and sometimes even forget the locker numbers and staff needs to search the whole file for the data of that particular student. Locker keys are needed to be submitted in the final year at the time of final submissions. To digitalize it “Locker Management System” was implemented under Project Based Learning for college automation work.

The system is used by the college and can be accessed from anywhere in the campus. Academic year wise report is generated of issued and returned locker. The separate report of available lockers is also generated which is easy for the staff to issue it to students without searching the record of available lockers in the stack of papers.

Thus this system is the efficient way of managing the locker data of all the students of different branches and different years.

II. LITERATURE REVIEW
The following research articles are selected for review

Saurabh Walia and Satinderjit Kaur Gill proposed a straightforward interface to support student data. It tracks all the details of a student from very first day of the course which can be utilized for all reporting purpose, tracking of attendance, progress within the study, completed semesters, years, coming semester year curriculum details, fee details, project or other assignment details, final examination result and all these information will be available through a secure, online interface embedded in the college’s Student Record Management System. To outline a supportive framework with a specific end goal to make simplicity to the client, the framework is created by utilizing Xampp Server interfacing with database that is using 'PHP' language as the dialect or guideline of the framework. [1]

Kadhim H.K.Alibraheemi and Wafaa M.A. Alkhefaji worked on developing a system which provides a simple interface for maintenance of university staff and its accounting information system. The design and implementation of a comprehensive university staff information system and user interface is to replace the current paper records. The system utilizes user authentication, displaying only information necessary for an individual’s duty. [2]

Ritesh Kumar et.al, has designed the web application for managing different activities in the hostel. This system simplifies the man work easily for allocation of hostel rooms, bill payments of hostel, mess, out pass generation, complaint registration, etc. Students can register complaints through web application of hostel management. The physical work of hostel is been reduced through Hostel Management System. This system easily searches and finds vacant rooms or previous data easily. The physical work of humans is been converted to computerized system. [3]

Arvind Lal et.al, developed the attendance management system. In this system data of all students such as student's name, roll no, div, department ,semester, class of students with the detail information of parent's/guardian and as well as Teacher's data will be stored according to the subject they teach and classes they are taken one by one and stored in MySQL database. The records will be kept safe and secure and the attendance information of students of all the classes can be accessed easily. This system is an authorizing system. This system monitors attendance on every student’s course. [4]
Megha Goel et al., proposed a college monitoring system for education establishments to manage student data. A college monitoring system enables college and Institutions to manage admissions, fees etc. It generates automated reports on all aspects of data-driven decision making. This system brings information to the user’s desktop through integration across all modules. CMS has administrator controlled user privileges for multi-level system access control. [5]

Vishakha Shelke et al., have proposed “Efficient Project planning and tracking system “ to automate final year project work assessment. The Authors have proposed the solution using a web-based Java EE application, using Java Server Faces (JSF) as a server-side component framework, and Enterprise Java Beans. This system has removed the manual work of project progress work tracking and assessment work. Project coordinator can perform all project related activities using this portal. This portal has functionality like project group allocation, topic approval, project weekly progress assignment and tracking, assigning schedule which was initially done manually . [6]

III. EXISTING SYSTEM

The existing Locker Management System is requires more strenuous and requires more time. It takes months to give lockers to all the student of all branches and all years. All this forms are stored in files and requires more physical area for storage.

IV. PROPOSED SYSTEM

Locker Management System works as an online portal or a webpage interface. The system is admin authorized only departmental or main staff can login using username and password which is stored at the backend of the system. The architecture of the system is shown in Figure 1.System Architecture.

Following are the modules of the system:

a) Assigning Locker

Form is filled at the time of locker issuing and data is stored in MySQL database after which receipt is generated which is given to the students as an acknowledgement. The form consist of all the information such as locker owner’s name, email-id, mobile number, departments, locker no, key no, admission year, etc.

b) Searching Locker

Locker can be searched by three categories that are stream, year of studying and locker number.

c) Check the availability of lockers

As soon as the locker is returned by the students it is removed from the issued table and updated in available automatically.

d) Returning Locker

Lockers are returned in the final year at the time of final submissions. Sometimes student forget their locker number but have their keys with them this system provides them to return locker by locker key number. As soon as key number is entered the data of that student is fetched from the database. Receipt is generated which is given to the students which they need as an acknowledgement when they come to take their results.

e) Report Generation

Academic year wise report is generated of the lockers issued and returned. This report gives us the overall data of how many times locker is used and details of the students who used the lockers.

Client Side:

HTML: Hyper Text Markup Language (HTML) is a markup language for creating a webpage. HTML developed to make electronic documents (called pages) that are displayed on World Wide Web. The best part of HTML is it is supported by all browsers.

CSS: CSS stands for “Cascading Style Sheet.” Cascading style sheets are developed to format the layout of websites. CSS brings style to your websites by interacting with HTML elements. All document styles such as page layouts, colors, and fonts are all determined with CSS.

JavaScript is most ordinarily used as a client side scripting language. It is used to automate things on the client side, such as, validate form input before submitting to the server. This
system uses javascript to validate contact numbers and email-id.

Bootstrap: Bootstrap is a framework to assist you design websites faster and easier. It is an open-source framework that combines HTML, CSS, and JavaScript code to help developers build web applications. This system uses bootstrap templates for receipt.

Database Side:

PHP: PHP is a server side scripting language. PHP stands for Hypertext Pre-processor. A website programmed with PHP has pages that are password protected. It includes free and open source libraries with the core build. PHP is compatible with various web servers like Apache, Microsoft Internet Information Server (MIIS), and Netscape enterprise server [10]. This system uses Apache webserver.

MySQL: MySQL is an open-source database management system. SQL stands for “Structured Query Language” which is standard language developed to interact with databases. All the data of the system is stored in this database. At the time of filling the form the data is stored in database by insert query. As soon as locker is returned the data will be deleted from issued table using delete query and updated in availability table using update query. Searching locker is done by using search query. As the query are fired the data is retrieved from database and the report is generated.

Server Side:
Apache: Apache is most used web server software. Developed and maintained by Apache Software Foundation, Apache is an open source software available for free of charge. It establishes a connection between a server and the browsers of website visitors while delivering files back and forth between them (client-server structure). Apache is cross-platform software, therefore it works on both Unix and Windows servers.

V. RESULTS AND DISCUSSION

This section depicts the online “Locker Management System” Following are the screenshots of the system developed by us to simplify the work of the college staff. This system is convenient to use as it cost-effective and efficient.
VI. CONCLUSION

This system can be used by colleges, institutions, organization and offices which provide lockers to their staff and students. The system stores all the data in database which can be accessed anytime by the authorized person. The management of all the data will be done by the system, there is no need on arranging data manually. “Locker Management System” is deployed in the college.

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References


