

University Management System of Mewar University

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Abstract - In the present era of competitive and challenging world of education, the institutions, colleges and university have focus on to improve their education quality as well as information of their work accomplished by them. Now in the information technology world the internet is the most important platform to find the all type of information by the student, parents or all other peoples. Many universities use a web based information system in order to display their regular updates & information i.e. website. Now in current time to handle the dynamic web based information system is more challenging because its implementation is more complex, time consuming and higher in cost. The main aim of this research paper is that to reduce the drawbacks of present CMS which has been using by many institutions along with Mewar University which they use to manage their web based information and features. We will implement a web based information system that provide all end user facility, it is much secure of current system and also its responsive on all different type of devices. We will also propose a practical framework for regular and timely updates of all relevant information and it will be targeted to a common CMS used to manage institutions as well as Mewar University content management system.

Key Words: Web, Information system, Dynamic, Internet, Responsive.

1. INTRODUCTION

As we know, universities have various departments and centers to manage learning and their courses. In comparison with schools and colleges, universities also have a greater and huge student and faculty strength; in order to effectively run and manage an establishment, a dynamic website or web based system is needed. This system connects university with all departments and students and all the information can be accessed through web, which is integrated with everyday informational notices, updates, events as well as learning activities. A transparent and user friendly solution that empowers students while at the same time, minimizes the efforts of teachers to ease up admission process, examination process, result management, research paper information as well as announcements and along with these, it also provides updates on campus activities. Hence, manual errors can be minimized and a teacher student link can be established via the dynamic website in an efficient manner. The University Management System provides admin rights to the head of the institution wherein the functioning of all sections and divisions can be monitored on one admin dashboard. The World Wide Web (WWW) has promptly become the dominant Internet tool, which is combining hypertext and multimedia in order to provide a network of

multidisciplinary resources. It is crucial to make sure that all parts of a web site should be useful. A user comes to a website expecting to be able to perform a specific task, or read a particular section of information. When we are about to design a web site we'd definitely want to make sure that the user can find that resource quickly and easily as soon as possible. If users or visitors can't find the information quickly then they may leave our site, and they might proceed to another website where they can easily find the resource[1]. There are a set and combination of design principles that may be called aesthetic principles which include significant concerns such as balance, harmony and unity[2]. As a matter of fact, "Balance, unity, and harmony are basically three primary properties contains multiple attributes that designers manipulate in order to create a unique and aesthetic user experience. When these properties are manipulated in such a way that these effects satisfy and serve people's natural (and conflicting) cravings for order, surprise, novelty as well as predictability then designers are creating aesthetically pleasing and satisfactory objects or experiences." Consequently, some general principles derived from multimedia designs which include and consist of simplicity, consistency as well as clarity of design. In fact "Keep it simple; be clear; and be consistent - these three rules of advice are the major foundations of any good layout or design[3]. We will be designing Mewar University website by considering and keeping these design principles in mind.

2. LITERATURE REVIEW

Dr. S. Ahmet Mentesh, Dr. Aykut H. Turan, "ASSESSING THE USABILITY OF UNIVERSITY WEBSITES: AN EMPIRICAL STUDY ON NAMIK KEMAL UNIVERSITY", Web sites are becoming key components of an organization's survival in the globalized competition. University web sites are no exception. The study aims to measure the usability of the Namik Kemal University (NKU) web site via the five assumed factors of usability: attractiveness, controllability, helpfulness, efficiency and learn ability [5], Ersin Caglar, S. Ahmet Mentesh, "The usability of university websites - a study on European University of Lefke", The aim of this study was to evaluate the website of EUL from the usability perspective [6], S.R. Bharamagoudar, Geeta R.B., S.G. Totad, "Web Based Student Information Management System", Student Information Management System (SIMS) provides a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. The creation and management of accurate, up-to-date information regarding a students' academic career is critically important in the university as well as colleges [7], Dr. Shobha. A. Menon, Mrs. Rimi Moitra, "A comparative study of state and private university

websites in Maharashtra."E-marketing is a critical component of commerce today and has penetrated deep into every field, from the marketing of tangible goods to the marketing of intangible services like education. One of the most important tools of internet marketing is the creation of a website [8], Purvi Sankhe, Hardik Punamiya, Vatsal Prasad, Raj Shrivastav, "Android Application for College Management System", Application is based on an existing system called Moodle (acronym for Modular Object Oriented Dynamic Learning Environment), which is a free software e-learning platform. It is also called Learning Management System, or Virtual Learning Environment [9], Lalit Mohan Joshi, "A Research Paper on College Management System", aimed at developing an Online Intranet College Management System (CMS) that is of importance to either an educational institution or a college [10], Prof. Sagar Rajebhosale, at el, "SMART CAMPUS – An Academic Web Portal with Android Application", The SMART CAMPUS is a mobile as well as web application. The main objective is to develop an application that provides a smart and easy way for the execution of several academic operations to provide students with information regarding complaints, any placement activities, general notices, and important notices regarding all departments [11], Ms. A. V. Sinhasane at el, "College Department Management System", College Department Management System is essential for an institution or to a college or to a university, which utilizes computer, also which reduces manpower. Main objective of this study is an important step towards streamlining this effort is to develop a framework and identify necessary properties that a secure and trusted online department working system must satisfy to reduce discovery redundancy [12].

3. PROBLEM STATEMENT

We will design and develop a new web based information system for Mewar University as per web design principles, this system will provide latest services to end users as per the national and international level and it will be both dynamic as well as responsive. We will remove all flaws which are present in Mewar university website by comparing this web site with other world class universities web systems. Mewar University website has lack of various crucial features as well as there are some services or features which could be built in a more efficient manner i.e. website is not responsive, login logout system has less validation fields than required, the university website doesn't have any section which gives some insight of research papers submitted by both teachers and students on various topics. There is no visitor counter as well as there is no social media links (either on header or footer part) are available in current running website. Along with the drawbacks we have mentioned there are few more drawbacks present which are written below:

- Student should not have rights to create event.
- Student should not have rights to activate voting.
- Feedback should not be limited up to feedback of guest lecturers conducted in department and subject feedback.
- Notices should be created or published by admin instead just viewing it and those

notice/announcements could be further viewed by both students as well as admin too.

- The university website doesn't have any Journal Independent section which gives some insight of research papers submitted by both teachers and students on various topics.
- There should have a page or link which provide info of interview questions asked by various companies during interview.
- There is no facility to upload assignments questions by teachers.
- There is no facility to download assignments questions as well as upload assignments answers (screenshots of answers) by students.

3.1 Objectives

- Provide event creating as well as approving rights to admin.
- Provide activate voting rights to admin instead students.
- Expand Feedback criteria so it will not be limited up to feedback of guest lecturers conducted in department and subject feedback.
- Notices will be created or published by admin instead just viewing it.
- To implement visitor counter and social media links on header section.
- To implement bootstrap in order to make the viewport responsive.
- To develop login and logout system which is more secure than current system
- To develop research paper sections (Journal Independent) for both students and teachers.
- To develop Page or link which provide info of interview questions asked by various companies during interview.
- Provide facility to upload assignments questions by teachers.
- Provide Facility to upload assignments answers & download assignments questions by students.

4. PROPOSED SYSTEM

The proposed system which we have designed has been considered with the aim to meet efficiency, modernization as well as reliability. It will provide efficiency for better user interaction as well as information presentation. It is modern enough for responsive view port and to make system device independent for commendable readability and reliability. We have refined user login and session handling by means of various validations. In the proposed system, we are ensuring that all information access rights should be divided into various modules and according to respective designations. The admin will have all types of access, while on the other hand, teachers and students have limited rights to access information. along with the logical and distinguished information access, we will add various miscellaneous yet crucial features in system which will play a vital role to improve system completely. The user interface or UI/UX will

be neat, well organized as well as will follow all the design principles efficiently in order to give users a smooth browsing experience.

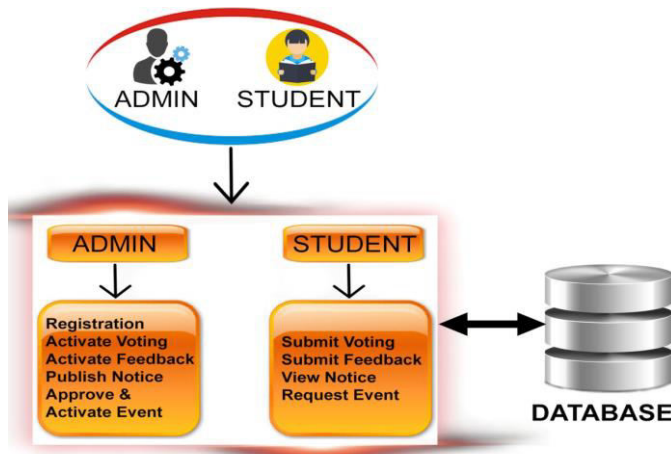


Fig -1: Proposed system architecture

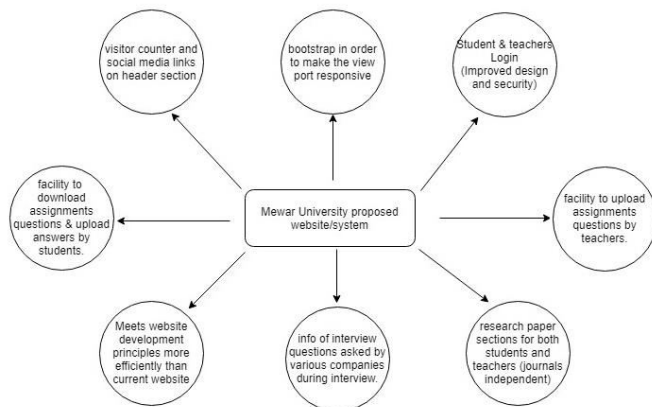
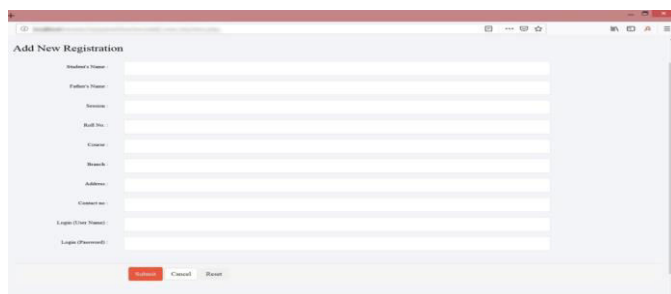


Fig -2: Proposed system functionalities

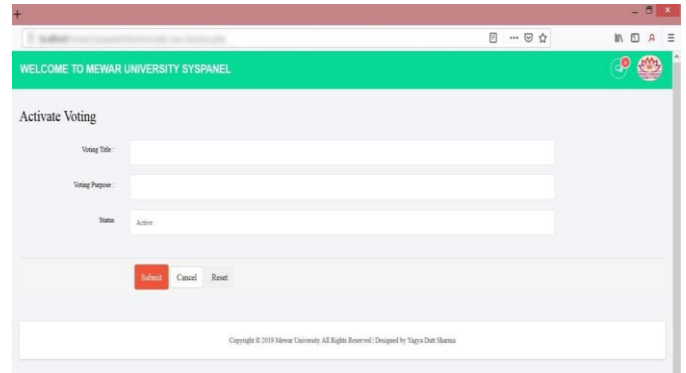
5. IMPLEMENTATION

5.1 Admin Module



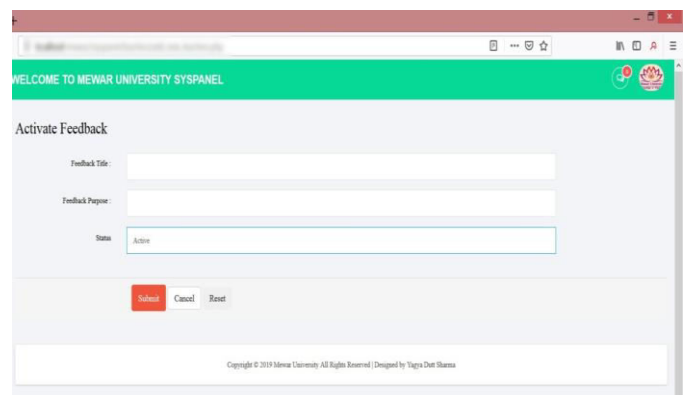
The screenshot shows a web form titled "Add New Registration". It includes input fields for "Student's Name", "Father's Name", "Roll No.", "Email", "Phone No.", "Address", "City", "State", "Country", "Zip Code", "Date of Birth", "Gender", "Blood Group", "Religion", "Marital Status", "Occupation", "Education", "Experience", "Skills", "Languages", "Interests", "Hobbies", "Sports", "Games", "Music", "Dance", "Art", "Craft", "Writing", "Reading", "Travel", "Food", "Drinks", "Pets", "Animals", "Plants", "Flowers", "Fruits", "Vegetables", "Grains", "Legumes", "Nuts", "Seeds", "Spices", "Herbs", "Mushrooms", "Fungi", "Bacteria", "Virus", "Parasite", "Protozoa", "Invertebrate", "Vertebrate", "Mammal", "Bird", "Reptile", "Amphibian", "Fish", "Insect", "Mollusk", "Arachnid", "Crustacean", "Mollusk", "Annelid", "Cnidarian", "Mollusk", "Echinoderm", "Chordate", "Mammal", "Bird", "Reptile", "Amphibian", "Fish", "Insect", "Mollusk", "Arachnid", "Crustacean", "Mollusk", "Annelid", "Cnidarian", "Mollusk", "Echinoderm", "Chordate". At the bottom, there are "Submit", "Cancel", and "Reset" buttons.

Fig -3: Student Registration



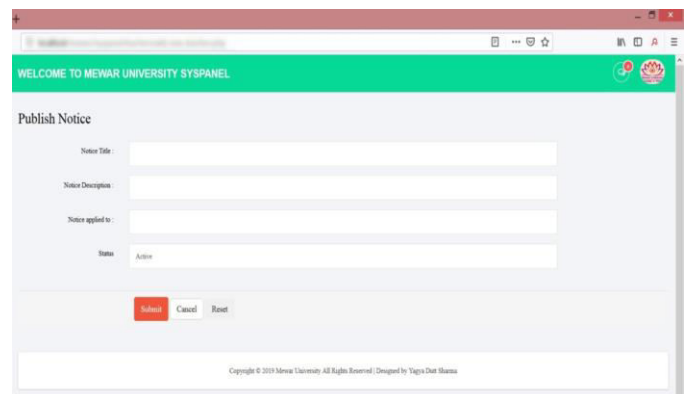
The screenshot shows a web form titled "Activate Voting". It includes input fields for "Voting Title", "Voting Purpose", and "Status" (set to "Active"). At the bottom, there are "Submit", "Cancel", and "Reset" buttons. A copyright notice at the bottom reads: "Copyright © 2019 Mewar University All Rights Reserved | Designed by Tanya Datt Sharma".

Fig -4: Activate Voting



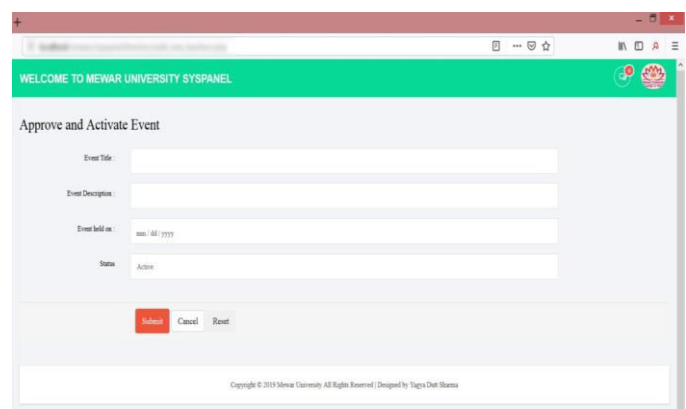
The screenshot shows a web form titled "Activate Feedback". It includes input fields for "Feedback Title", "Feedback Purpose", and "Status" (set to "Active"). At the bottom, there are "Submit", "Cancel", and "Reset" buttons. A copyright notice at the bottom reads: "Copyright © 2019 Mewar University All Rights Reserved | Designed by Tanya Datt Sharma".

Fig -5: Activate Feedback



The screenshot shows a web form titled "Publish Notice". It includes input fields for "Notice Title", "Notice Description", "Notice applied to", and "Status" (set to "Active"). At the bottom, there are "Submit", "Cancel", and "Reset" buttons. A copyright notice at the bottom reads: "Copyright © 2019 Mewar University All Rights Reserved | Designed by Tanya Datt Sharma".

Fig -6: Publish Notice



The screenshot shows a web form titled "Approve and Activate Event". It includes input fields for "Event Title", "Event Description", "Event held on" (with a date picker), and "Status" (set to "Active"). At the bottom, there are "Submit", "Cancel", and "Reset" buttons. A copyright notice at the bottom reads: "Copyright © 2019 Mewar University All Rights Reserved | Designed by Tanya Datt Sharma".

Fig -7: Approve and Activate Event

5.2 Student Module

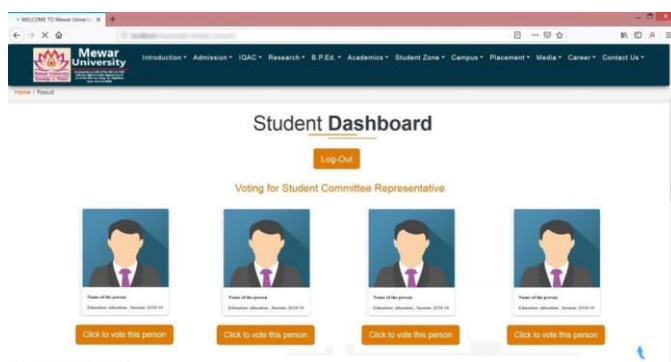


Fig -8: Submit Voting

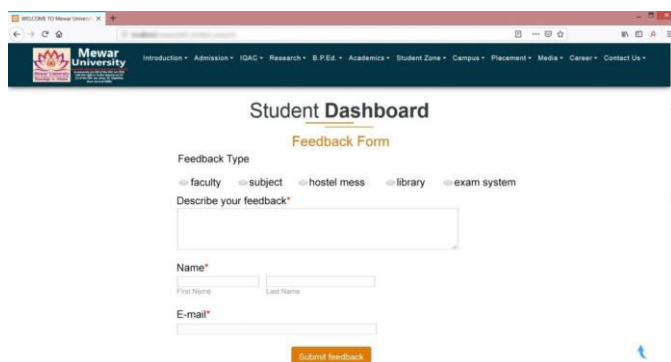


Fig -9: Submit Feedback

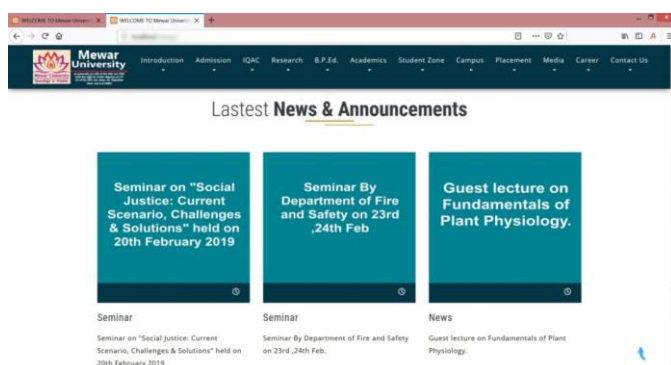


Fig -10: View Notice

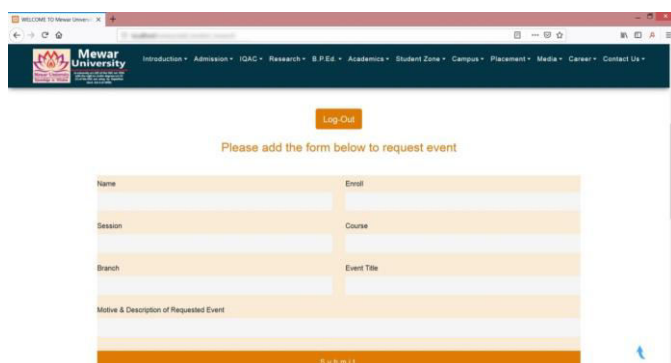


Fig -11: Request Event

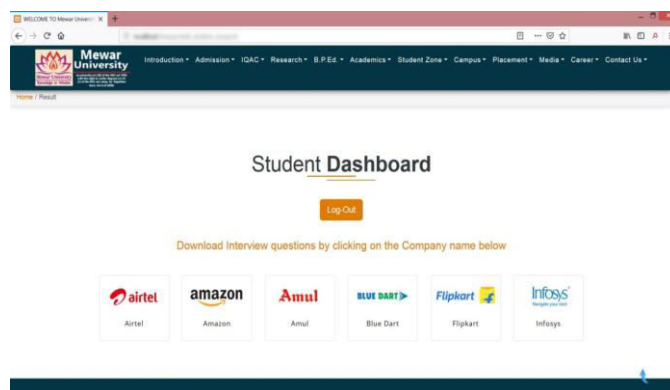


Fig -12: Interview Questions asked by companies

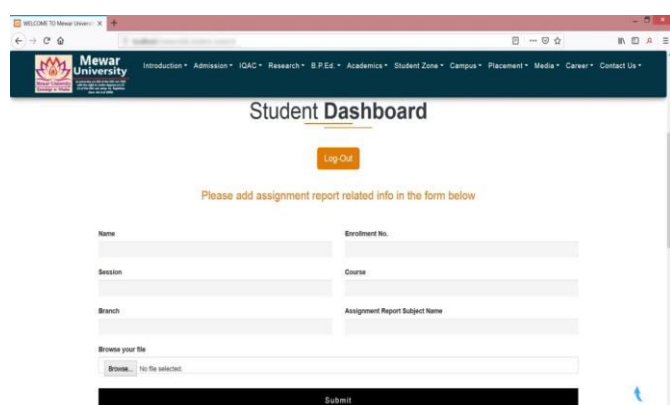


Fig -13: Upload assignments answers

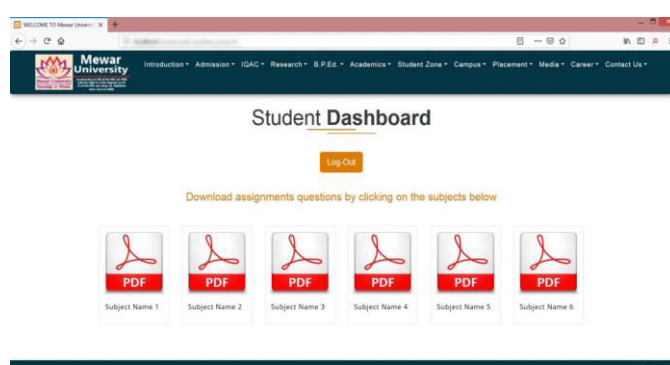


Fig -14: Download assignments questions

5.3 Teacher Module

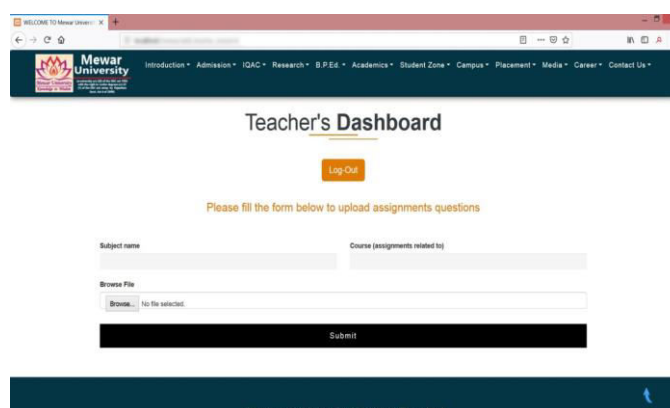


Fig -15: Uploading assignments questions by teachers

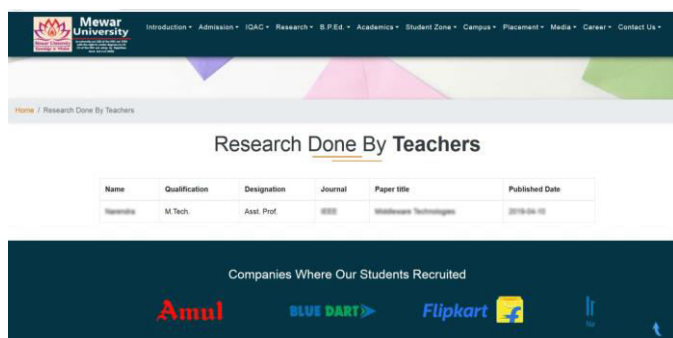


Fig -16: Information of papers accomplished by teachers

6. RESULT ANALYSIS

We have completely implemented three module named "ADMIN MODULE", "STUDENT MODULE" and "TEACHER MODULE". In the "ADMIN MODULE", we have preserved all the core and fundamental rights in the favor of system admin, only admin can change, delete or update major information and system features. In the "STUDENT MODULE", we have provide only necessary and appropriate rights to students & in the "TEACHER MODULE", teachers have privileges to upload various assignments questions, interview questions as well as add their research paper related info.

7. CONCLUSIONS

Now Mewar University website is completely adaptive to different screen dimensions by means of bootstrap and the content is now visible on all devices and resolutions at ease. All major and noticeable flaws from Mewar university website has been removed after comparing it with other world class universities web based systems. This web based system will play an efficient role to connect all faculties, students and system admin, in order to manage and view salient information and updates.

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