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CAMPUS ACTIVITY: AN EFECTIVE MANAGEMENT SYSTEM

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Abstract: The purpose of this project is to provide a web application for the colleges. The intended user of the application are college students, college staff. Now a days the student and the staff in college faces so many problem related to the Campus Activities such as Manage Arts, Sports, Library activities. The web application solves all these problems related to the college activities. This web application satisfy all the information to the college students. This project also include services for college staff such as staff directory. Once the app is deployed the only requirement is data updating.

Keywords: Software, College

INTRODUCTION

The purpose of this project is to provide a web application for the colleges. The intended user of the application are college students, college staff. Now a days the student and the staff in college faces so many problem related to the Campus Activities such as Manage Arts, Sports, Library activities. The web application solves all these problems related to the college activities. This web application satisfy all the information to the college students. This project also include services for college staff such as staff directory. Once the app is deployed the only requirement is data updating.

This web application used for managing the campus activities. In a college all the campus activities. In a college all the campus activities are done in manual. That is all is written in papers by hand. And it must publish to know to its users. So this manual process consumes so many time and also it causes errors.

This web application makes all the campus activities such as Student registration, Arts management, Sports management, Library management and etc, computerized. By using this application we will get fast and easier management of these activities and it avoids the chances of errors.

Existing System

So many colleges and educational institutions uses web application for managing college activities. But the problem is, this applications only capable of doing one or two functions. Some have Student Registration. Some manages Arts and Sports etc. For the Library management they uses some well defined desktop applications. So we can conclude that for varies activities varies technologies are used. Because of this varies technologies, co-ordination of information collected from these varies technologies are default. We can summarize that for managing all the college activities the institution needs a number of desktop applications and web applications.

Proposed System

In our project, all these services are explained above are embedded in to a single web application. This project includes student registration, Arts managements, sports managements, Library managements. And this also provides some information to the students. That includes, Syllabus, Lab manuals, Seminar topics and varies documents related to the admission and exam. By including all these activities in to a single web application we have the following advantages;

1. All functions perform in a single web application.
2. Easy coordination of all the information.
3. Maintenance and controlling become easy.
4. Duplication of data can be avoided and etc.

FEASIBILITY STUDY

The overall scope of the feasibility study was to provide sufficient information to allow a decision to be made as to whether the Campus Activity Management project should proceed and so on, its relative priority in the context of the other existing Campus activity systems.

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Operational Feasibility

Operational feasibility assesses the extent to which the required software performs a series of steps to solve business problems and user requirements. This feasibility is dependent on human resources (software development team) and involves visualizing whether the software will operate after it is developed and be operative once it is installed. Operational feasibility also performs the following tasks.

- Determines whether the problems anticipated in user requirements are of high priority
- Determines whether the solution suggested by the software development team is acceptable
- Analyzes whether users will adapt to a new software
- Determines whether the organization is satisfied by the alternative solutions proposed by the software development team.

Technical Feasibility

Technical feasibility assesses the current resources (such as hardware and software) and technology, which are required to accomplish user requirements in the software within the allocated time and budget. For this, the software development team ascertains whether the current resources and technology can be upgraded or added in the software to accomplish specified user requirements. Technical feasibility also performs the following tasks.

- Analyzes the technical skills and capabilities of the software development team members
- Determines whether the relevant technology is stable and established
- Ascertains that the technology chosen for software development has a large number of users so that they can be consulted when problems arise or improvements are required.

Economical Feasibility

Economic feasibility determines whether the required software is capable of generating financial gains for an organization. It involves the cost incurred on the software development team, estimated cost of hardware and software, cost of performing feasibility study, and so on. For this, it is essential to consider expenses made on purchases (such as hardware purchase) and activities required to carry out software development. In addition, it is necessary to consider the benefits that can be achieved by developing the software. Software is said to be economically feasible if it focuses on the issues listed below.

- Cost incurred on software development to produce long-term gains for an organization
- Cost required to conduct full software investigation (such as requirements elicitation and requirements analysis)
- Cost of hardware, software, development team, and training.

HARDWARE REQUIREMENTS

Computer

Most current computers and laptops have high enough specification to be used to create a website. The most important specification to check on the computer would be the size of the RAM, which should be over 2GB, though more is better. This will ensure that the computer runs quickly and smoothly, even with heavy programs such as website editors or photos editor.

Processing power (Processor)

The power of CPU is a fundamental system requirement for any software. Most software running on x86 architecture define processing power as the model and the clock speed of the CPU. Many other features of a CPU that influence its speed and power , like bus speed, cache, and MIPS are often ignored. For our project 1.00 Gigahertz Intel Processor. need for the smooth running of the IDEs.

Memory (RAM)

All the software runs on the RAM of the computer. So memory is another important requirement. Not only the IDEs but all the software including operating system is working on the RAM. So we needs at least 2 GB or more RAM space. For the smooth running of the software. And also to increase the speed of working.

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Secondary storage (Hard Disk)

We know that the all primary memory including RAM are volatile memory so that the data stored in the RAM lost when the power gone. So that we need a permanent storage for storing data permanently. And all the software including IDEs are also installed in Hard Disk. So for doing this project we needs at least 32GB of Hard Disk space.

Other Peripherals

So in this project we creating a web based project so that reason we must need a network interface to access the system to internet. If we using a wi – fi fo accessing internet we need a wi – fi router for receiving wi – fi range.

Hardware	Requirements
Hard Disk	32 GB space or higher
RAM	2 GB
Processor	1.00 Gigahertz Processor.

HARDWARE REQUIREMENTS

Operating System (OS)

Without OS the computer does not work. For this project we can adopt any OS such as Windows or Linux. Only condition is that, in case of windows it must be windows 7 or higher. In case of Linux it must be ubuntu 12.04 or Linux mint 17.01.

Eclipse

For the development of the project we use the Eclipse as IDE. So by using Eclipse it is easy to create a dynamic web application. Eclipse java mars 2.0 is used.

Browsers

For running as well as for testing we need all the latest web browsers. It includes Google Chrome 23, Opera 16, Safari 8.0 , Firefox 23 etc. They must be latest for ensuring the compatibility of the web application in different browsers.

Server

At the time of creation of this application we use Local host. For making our system as local host we need a server. For this purpose we use the WAMP server or the XAMPP server

Software	Requirements
Operating System	Any OS
IDE	Eclipse java mars 2.0
Browsers	Opera 16, Chrome 23, Safari 8.0 Firefox 23 or higher
Server	WampServer 2.5 / Xampp server

TECHNOLOGIES USED

HTML – Basic and Advanced

Hyper Text Markup Language (HTML) is the standard markup language for creating web pages and web applications. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document. HTML elements are the building blocks of HTML pages

CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and user interfaces written in HTML and

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XHTML. CSS is designed primarily to enable the separation of document content from document presentation, including aspects such as the layout, colors, and fonts.

Bootstrap

Bootstrap is a free and open-source front-end web framework for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions. Unlike many web frameworks, it concerns itself with front-end development only.

Javascript

JavaScript is a high-level, dynamic, untyped, and interpreted programming language. It has been standardized in the ECMA Script language specification. Alongside HTML and CSS, it is one of the three core technologies of World Wide Web content production; the majority of websites employ it and it is supported by all modern Web browsers without plug-ins. JavaScript is prototype-based with first-class functions, making it a multi-paradigm language, supporting object-oriented, imperative, and functional programming styles. It has an API for working with text, arrays, dates and regular expressions, but does not include any I/O, such as networking, storage, or graphics facilities, relying for these upon the host environment in which it is embedded.

Ajax

Ajax (also AJAX short for asynchronous JavaScript and XML) is a set of web development techniques using many web technologies on the client-side to create asynchronous Web applications. With Ajax, web applications can send data to and retrieve from a server asynchronously (in the background) without interfering with the display and behavior of the existing page. Ajax is not a technology, but a group of technologies.

Jquery

jQuery is a cross-platform JavaScript library designed to simplify the client-side scripting of HTML.JQuery is the most popular JavaScript library in use today, with installation on 65% of the top 10 million highest-trafficked sites on the Web. jQuery is free, open-source software licensed under the MIT License. jQuery's syntax is designed to make it easier to navigate a document, select DOM elements, create animations, handle events, and develop Ajax applications. jQuery also provides capabilities for developers to create plug-ins on top of the JavaScript library. This enables developers to create abstractions for low-level interaction and animation, advanced effects and high-level, theme able widgets. The modular approach to the jQuery library allows the creation of powerful dynamic web pages and Web applications

MySQL

MySQL (officially pronounced as "My S-Q-L",) is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Wideners' daughter, and "SQL", the abbreviation for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. For proprietary use, several paid editions are available, and offer additional functionality.

Java

Java is a general-purpose computer programming language that is concurrent, class-based, object-oriented, and specifically designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere" (WORA), meaning that compiled Java code can run on all platforms that support Java without the need for recompilation. Java applications are typically compiled to bytecode that can run on any Java virtual machine (JVM) regardless of computer architecture. As of 2016, Java is one of the most popular programming languages in use, particularly for client-server web applications, with a reported 9 million developers. Java was originally developed by James Gosling at Sun Microsystems (which has since been acquired by Oracle Corporation) and released in 1995 as a core component of Sun Microsystems' Java platform. The language derives much of its syntax from C and C++, but it has fewer low-level facilities than either of them.

Angular js

AngularJS (commonly referred to as "Angular" or "Angular.js") is a complete JavaScript-based open-source front-end

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web application framework mainly maintained by Google and by a community of individuals and corporations to address many of the challenges encountered in developing single-page applications. The JavaScript components complement Apache Cordova, the framework used for developing cross-platform mobile apps.

PHP

PHP is a powerful server-side scripting language for creating dynamic and interactive websites.PHP is the widely-used, free, and efficient alternative to competitors such as Microsoft's ASP. PHP is perfectly suited for Web development and can be embedded directly into the HTML code.

DATABASE

MySQL 5 Database

MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed, and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons.

- MySQL is released under an open-source license. So you have nothing to pay to use it.
- MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- MySQL uses a standard form of the well-known SQL data language.
- MySQL works on many operating systems and with many languages including.
- MySQL works very quickly and works well even with large data sets.
- MySQL is very friendly to PHP, the most appreciated language for web development.
- MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).

- MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

SUMMARY AND CONCLUSION

This web application used for managing the campus activities in a college all the campus activities are done in manual. That is all is written in papers by hand. And it must publish to know to its users. So this manual process consumes so many time and also it causes errors. By this using this application we can remove all these problems. This application makes so many campus works easier. This not only helps the staffs it also helps the students.

For the development of this project we mainly use modern web designing technologies. That technologies includes HTML, CSS, Bootstrap, JavaScript, jQuery, PHP, Angular js and etc.

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