COLLEGE WEBSITE CREATION

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Abstract

The website has been developed for our college in an effort to make it as attractive and dynamic as possible. Compared to the existing site a database has been added to our project. The first page provides several links. The home page contains several information about the site like campus, management, facilities, infrastructure etc. User login module helps the user to login to the site. For that the must type the username and password correctly. The login provision in this page helps the already registered user to directly access the site and these is a link for registration to a user who is new to this site. Member registration module helps the new user to register into the site. The information entered by the users is added into the table registration. In the login link a recruiters can login using the appropriate username and password, through which he can submit the required criteria for a student to appear for a placement drive. He can also post the number of vacancies that are available and the salary packages offered. The flash news and the events corner display the latest development, announcements and events with the college activities. The administrator has the responsibility for displaying the recruiters from on the notice board in response to which student can submit his willingness to attend the drive along with his resume.

Keywords: ***JSP, SQL Server, JAVA, Browser,Cloud-based system, college management ,information system, document management system, management information system.***

INTRODUCTION

Study of telecommunication networks was often based on traffic measurements, out of which traffic models and performance estimates are built. While the measuring and modeling processes proved to be reasonably simple in traditional, circuit-switched telephone networks, they seem to be much harder in packet-switched data networks. In particular, on a data network like the Internet, the layered structure of the TCP/IP protocol suite requires the analysis of traffic at least at the IP (packet), TCP/UDP (flow1), and Application/User– behavior (session) layers. While lot of attention has been traditionally dedicated to the characterization of the packet and flow levels.

The paper goals are, first, to correctly identify, and, second, to determine statistical properties of

Web user sessions, i.e., set of TCP connections created by a given user while surfing the Web in a given time frame, by analyzing traces of measured data. We concentrate on the identification of client Web user-sessions generated by a single host; being WWW the most widely used interactive service. We assume that only a single user runs a browser on each host, a reasonable assumption today given the vast majority of PC based hosts. The informal definition of a user session can be obtained by describing a typical behavior of a user running a Web browser: an activity period, when the user browses the Web, alternates with a silent period over which the user is not active on the Internet. This activity period, named session in this paper, may comprise several TCP connections, opened by the same host toward possibly different servers.

The identification of user-session plays an important role both in Internet traffic characterization and in the proper dimensioning of network resources. Unfortunately, the identification of active and silent periods is not trivial. Traditional approaches [1, 7] rely on the adoption of a threshold _: TCP connections are aggregated in the same session if the inter-arrival time between two TCP connections is smaller than the threshold value; otherwise, a new session is identified. This approach works well if the threshold value is correctly matched to the average value of connection and session inter-arrival time; however, to know these values in advance is unrealistic in practice. If the threshold value is not correctly matched to user session Clustering techniques are used in many areas to find groups of similar variables/objects, to analyze a large data set, and in particular they allow partitioning the data set in “similar subsets”, by defining a proper notion of similarity.

The first fundamental choice regards the n statistical variables used to define the metric space X = Rn to be used in the clustering analysis; this implies also to select the metric space that best fits our problem. The typical and easiest approach is to let the clustering algorithm to run over a very large number of statistical variables, typically including the vast majority of available data (in our example, potential statistical variables may be IP source address, TCP destination port, TCP flows starting and ending time.

Typically, several metrics over which a distance measure can be defined are associated to points (named samples in this paper) in the data set; informally, the partitioning process tries to put in the same subset neighboring samples and in different subsets distant samples. The main advantage of using such approach is that there is no need to define a priori any threshold value. Thus, this methodology should be less error prone than simpler threshold based mechanisms.

In computer science, in particular networking, a **session** is a semi-permanent interactive information interchange, also known as a dialogue, a conversation or a meeting, between two or more communicating devices, or between a computer and user (see Login session). A session is set up or established at a certain point in time, and torn down at a later point in time. An established communication session may involve

more than one message in each direction. A session is typically, but not always, stateful, meaning that at least one of the communicating parts needs to save information about the session history in order to be able to communicate, as opposed to stateless communication, where the communication consists of independent requests with responses.

An established session is the basic requirement to perform a connection-oriented communication. A session also is the basic step to transmit in connectionless communication modes. However any unidirectional transmission does not define a session.

Communication sessions may be implemented as part of protocols and services at the application layer, at the session layer or at the transport layer in the OSI model.

- Application layer examples:
  - HTTP sessions, which allow associating information with individual visitors.
  - A telnet remote login session.
- Session layer example:
  - A Session Initiation Protocol (SIP) based Internet phone call.
- Transport layer example:
  - A TCP session, which is synonymous to a TCP virtual circuit, a TCP connection, or an established TCP socket.

In the case of transport protocols that do not implement a formal session layer (e.g., UDP) or where sessions at the session layer are generally very short-lived (e.g., HTTP), sessions are maintained by a higher level program using a method defined in the data being exchanged. For example, an HTTP exchange between a browser and a remote host may include an HTTP cookie which identifies state, such as a unique session ID, information about the user's preferences or authorization level.

HTTP/1.0 was thought to only allow a single request and response during one Web/HTTP Session. However a workaround was created by David Hostettler Wain in 1996 such that it was possible to use session IDs to allow multiple phase Web Transaction Processing (TP) Systems (in ICL nomenclature), with the first implementation being called Deity. Protocol version HTTP/1.1 further improved by completing the Common Gateway Interface (CGI) making it easier to maintain the Web Session and supporting cookies and file uploads.

Most client-server sessions are maintained by the transport layer - a single connection for a single session. However each transaction phase of a Web/HTTP session creates a separate connection. Maintaining session continuity between phases required a session ID. The session ID is embedded within the <A HREF> or

<FORM> links of dynamic web pages so that it is passed back to the CGI. CGI then uses the session ID to ensure session continuity between transaction phases. One advantage of one connection-per-phase is that it works well over low bandwidth (modem) connections. Deity used a sessionID, screenID and actionID to simplify the design of multiple phase sessions.

CP sessions are typically implemented in software using child processes and/or multithreading, where a new process or thread is created when the computer establishes or joins a session. HTTP sessions are typically not implemented using one thread per session, but by means of a database with information about the state of each session. The advantage with multiple processes or threads is relaxed complexity of the software, since each thread is an instance with its own history and encapsulated variables. The disadvantage is large overhead in terms of system resources, and that the session may be interrupted if the system is restarted.

When a client may connect to any in a cluster of servers, a special problem is encountered in maintaining consistency when the servers must maintain session state. The client must either be directed to the same server for the duration of the session, or the servers must transmit server-side session information via a shared file system or database. Otherwise, the client may reconnect to a different server than the one it started the session with, which will cause problems when the new server does not have access to the stored state of the old one.

SERVER SIDE WEB SESSIONS

Server-side sessions are handy and efficient, but can become difficult to handle in conjunction with load-balancing/high-availability systems and are not usable at all in some embedded systems with no storage. The load-balancing problem can be solved by using shared storage or by applying forced peering between each client and a single server in the cluster, although this can compromise system efficiency and load distribution.

A method of using server-side sessions in systems without mass-storage is to reserve a portion of RAM for storage of session data. This method is applicable for servers with a limited number of clients (e.g. router or access point with infrequent or disallowed access to more than one client at a time).

CLIENT SIDE WEB SESSIONS

Client-side sessions use cookies and cryptographic techniques to maintain state without storing as much data on the server. When presenting a dynamic web page, the server sends the current state data to the client (web browser) in the form of a cookie. The client saves the cookie in memory or on disk. With each

successive request, the client sends the cookie back to the server, and the server uses the data to "remember" the state of the application for that specific client and generate an appropriate response.

This mechanism may work well in some contexts; however, data stored on the client is vulnerable to tampering by the user or by software that has access to the client computer. To use client-side sessions where confidentiality and integrity are required, the following must be guaranteed:

1. Confidentiality: Nothing apart from the server should be able to interpret session data.
2. Data integrity: Nothing apart from the server should manipulate session data (accidentally or maliciously).
3. Authenticity: Nothing apart from the server should be able to initiate valid sessions.

To accomplish this, the server needs to encrypt the session data before sending it to the client, and modification of such information by any other party should be prevented via cryptographic means.

Transmitting state back and forth with every request is only practical when the size of the cookie is small. In essence, client-side sessions trade server disk space for the extra bandwidth that each web request will require. Moreover, web browsers limit the number and size of cookies that may be stored by a web site. To improve efficiency and allow for more session data, the server may compress the data before creating the cookie, decompressing it later when the cookie is returned by the client.

WEB SERVER SESSION MANAGEMENT

Hypertext Transfer Protocol (HTTP) is stateless: a client computer running a web browser must establish a new Transmission Control Protocol (TCP) network connection to the web server with each new HTTP GET or POST request. The web server, therefore, cannot rely on an established TCP network connection for longer than a single HTTP GET or POST operation. Session management is the technique used by the web developer to make the stateless HTTP protocol support session state. For example, once a user has been authenticated to the web server, the user's next HTTP request (GET or POST) should not cause the web server to ask for the user's account and password again. For a discussion of the methods used to accomplish this see HTTP cookie and Session ID.

The world's first session management system was called Deity, invented and developed by David Hostettler Win in 1996. Using a web browser for text & image applications was deemed preferable to installing bespoke MS-

Windows clients or X Window servers, especially for low bandwidth connections. However HTTP/1.0 initially did not support all the functionality for Web Sessions.

However DHW created a workaround using Session IDs which worked on NCSA Mosaic and Netscape with http versions 1.0. The whole point of Session IDs is that the entire session state did not need to be passed to/from the client/server via HTTP cookies on each transaction phase.

The session information is stored on the web server using the session identifier Session ID generated as a result of the first (sometimes the first authenticated) request from the end user running a web browser. The "storage" of Session IDs and the associated session data (user name, account number, etc.) on the web server is accomplished using a variety of techniques including, but not limited to, local memory, flat files, and databases.

In situations where multiple web servers must share knowledge of session state (as is typical in a cluster environment) session information must be shared between the cluster nodes that are running web server software. Methods for sharing session state between nodes in a cluster include: multicasting session information to member nodes (see JGroups for one example of this technique), sharing session information with a partner node using distributed shared memory or memory virtualization, sharing session information between nodes using network sockets, storing session information on a shared file system such as the network file system or the global file system, or storing the session information outside the cluster in a database.

The implementation phase is less creative than system design. A system design may be dropped at any time prior to implementation, although it becomes more difficult when it goes to the design phase. The final report of the implementation phase includes procedural flowcharts, record layouts, and a workable plan for implementing the candidate system design into a operational design.

It is designed to prepare the users for testing & converting the system. There is several ways to trail the users they are:

1) User manual.

2) Help screens.

3) Training demonstrations.

1) User manual:

The summary of important functions about the system & software can be provided as a document to the user. User training is designed to prepare the user for testing and convening a system.

The summary of important functions about the system and the software can be provided as a document to the user

1. Open http page.
2. Type the file name with URL index .asp in the address bar.
3. Index. ASP is opened existing user the type the username and password.
4. Click the submit button.

2) Help screens

This features now available in every software package, especially when it is used with a menu. The user selects the "Help" option from the menu. The System success the necessary description or information for user reference.

3) Training demonstration

Another user training element is a training demonstration. Live demonstration with personal contact is extremely effective for training users.

APPLICATIONS:

- ✓ Used in secure database.
- ✓ Prevents hacking in the network.
- ✓ Used in big companies.
- ✓ Provides high security.

Purpose Of Document:

This paper is the Software Requirement Specification (SRS) for the College Management System for College (CMS) project .The purpose of this paper is to describe the functionality, requirements and general interface of the CMS.

Scope for Development of this paper:

The requirement of the user is to:

- Access/ Search information.
- Login to the system through the first page of the application
- Change the password after logging into the system
- View/change his/her details.
- Can get help through the help option to view different features of the system.
- Students can give feedback on college/staff/any other student.
- An admin login should be present who can read as well as remove any uploads

Main modules of the system:

A .Campus Information:

This module gives the information about

- **Buildings/Blocks:** It contains the information about the total number of blocks present in the campus and also the number of rooms present in each block.

- **Laboratories:** This gives the information about the number of laboratories present in each department.

- **Library:** students can borrow/return and can view status of books present in the Library

B .Administration:

This module deals mainly with,

• **Admission:**

This mainly deals registering the students/ staff and assigning them with a login id and password.

C. Department Information:

This module gives the information about,

• **Course:** This contains the information about the number of the courses offered by the college and number of seats present in each.

• **Staff:** This contains the number of staff available in each department.

• **Infrastructure:** This has the details of the assets allotted for each department

. • **Syllabus:** This provides the academic syllabus of the students from different branches.

D. Staff Information:

This module deals mainly with,

• **Profile:** This provides personal details of the staff.

• **Attendance:** This provides the staff with his/her attendance details.

• **Salary:** This provides the staff with his/ her salary details

. • **Feedback:** This feature enables the staff to provide feedbacks to the management.

• **View Student Details:** This provides the staff to view the student details.

SYSTEM STUDY

EXISTING SYSTEM

In existing system tracking visitor details is not a easy job. The time taken to track the visitor is high. Moreover in existing system we need to pay the third party in order to track the user information.

DISADVANTAGE

1. Non Securable.
2. Information accessed by any one on the network environment.
3. It is not convenient for the user.
4. Time and money consuming.
5. Data provided is not accurate.

PROPOSED SYSTEM

Proposed system is built to overcome the difficulties of existing system. Here though session tracking we can find the details of the users visiting the website with less amount of time as well more accurately. Since tracking is done hacking of data is prevented and provides safe transaction over the network.

ADVANTAGES

1. Reduced costs and manpower.
2. Provide security during transaction over the network.
3. Flexibility.
4. Time is saved.

PROJECT DESCRIPTION

"Tracking visitors with ASP.Net "is a system that eases the administrator at some of the ways to track visitors/users on your site with IIS and ASP.Net without spending a fortune on costly log analysis applications.

Special care is taken while developing server and client pages .Some major key modules are explained here.

1. Admin Module.

2. General module.

1. Admin Module:

This is the gateway module of the system, which helps admin to log the system. It avoids anonymous login.

It includes the following sub modules:

Session tracking: In this module session of a user is the major activity. The time a unique visitor spends on the site is called session.ASP.Net also helps us with this by providing a session context while the visitor is continually active for a predetermined amount of time. Later, we discuss how cookies can be used to keep track of visitors across session.

This process only helps to track the visitor.

- Company: In this module giving company details is the vital information.
- Services: In this module what are the services included with this system the services classified by category.
- News: This module offers the news service accompanied with the system.
- Contacts: This module contains contacts regarding the site.

2. GENERAL MODULE

This module contains some general vital information about the system and what is session tracking. I also contains what are major steps involved while tracking a visitor and what are the techniques to be followed while session tracking.

DATA FLOW DIAGRAM

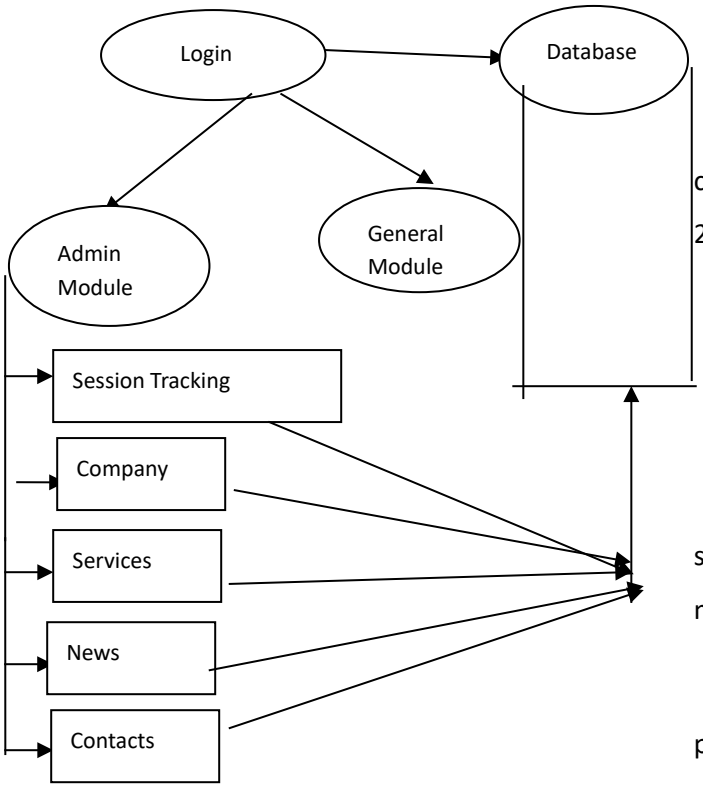
Data flow diagram describes the data flow for a data processing system. It provides a logical diagram of how the system operates. It represents the flow of documents, the operations performed in data processing system. It also reflects the relationship between inputs, processing and outputs.

Following are the features of system flow diagram:

The sources from which data is generated and device used for this purpose.

Various processing steps involved.

The intermediate and final output prepared and the devices used for their storage.



IMPLEMENTATION

Implementation is the stage in the project where the theoretical design is turned into a working system. The most crucial stage is achieving a successful new system and giving a user confidence in that the new system will work efficiently and effectively in the implementation stage. The stage consist of

1. Testing a developed program with sample data.

2. Detection and correction of error.

3. Creating whether the system meets a user requirement.

4. making necessary changes as desired by users.

5. Training user personal.

System design is a “how to” approach to creation of a new system. System design goes through 2 phases. They are

Logical design.

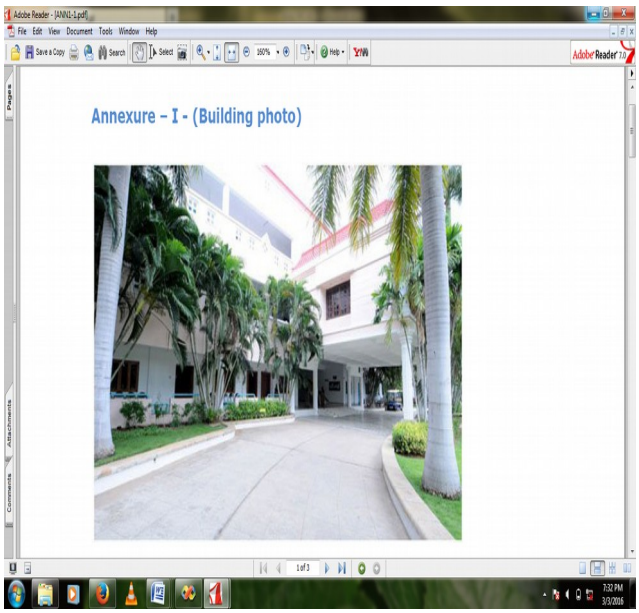
Physical design.

Logical design reviews the present physical system, prepares input and output specifications, makes edit security and control specifications.

Physical design maps out the details of the physical system, plans, system implementation, device a test and implementation plan.

RESULTS

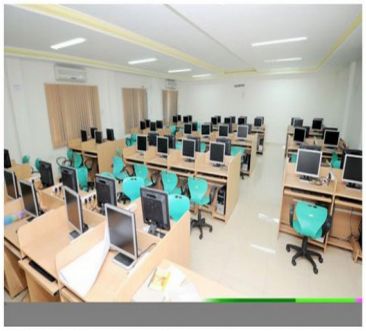
BUILDING PHOTOS:



Lab-I

Lab-II

Lab-III



Governance

- Members of the Board and their brief background

S.NO	NAME	POSITION	PROFESSIONAL POSITION
1.	A.Srinivasan	CHAIRMAN	CHAIRMAN Dhanalakshmi Srinivasan Charitable & Educational Trust. Perambalur
2.	S.Kathiravan	VICE CHAIRMAN	VICE CHAIRMAN Dhanalakshmi Srinivasan Charitable & Educational Trust. Perambalur
3.	P.Neelaraj	SECRETARY	SECRETARY Dhanalakshmi Srinivasan Charitable & Educational Trust. Perambalur
4.	Dr.N.Ramanujam	TECHNICAL EDUCATIONALIST	Head,Dept of Mathematics Bharathidasan University, Tiruchirapalli
5	Dr.S.V.Kasmir Raja		Dean Of Research S.R.M Chennai

- Members of Academic Advisory Body

SNo	Name	Position	Professional Position
1.	Mr.Gopinath Ganapathy	CHAIRMAN	Director,Technology Park Bharathidasan University,Khajamalai campus.
2.	Dr.S.V.kasmir Raja	MEMBERS	Director Dept.of.Comp.Science S.R.M.College of Technology Chennai
4.	Kasinath Ramachandiran		VICE PRESIDENT Ramco System Limited No,3-5,Sardar Patel Road, Taramani Chennai-6001 013
5.	Dr.S.Thayumanavan		Principal Dhanalakshmi Srinivasan Engg College – Perambalur

Placement Facility

The following committees are looking after the activities of the cell

- Proposal approval Committee.

Chairman

↓

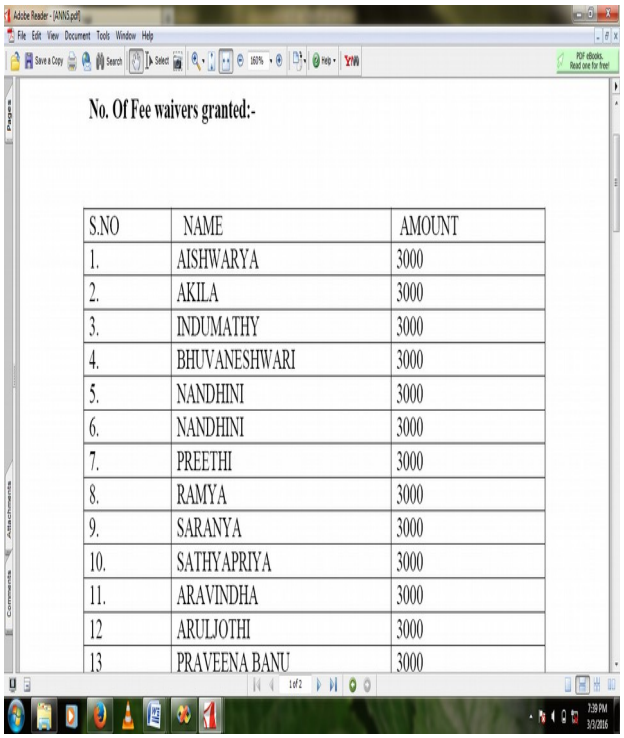
Secretary

↓

Director

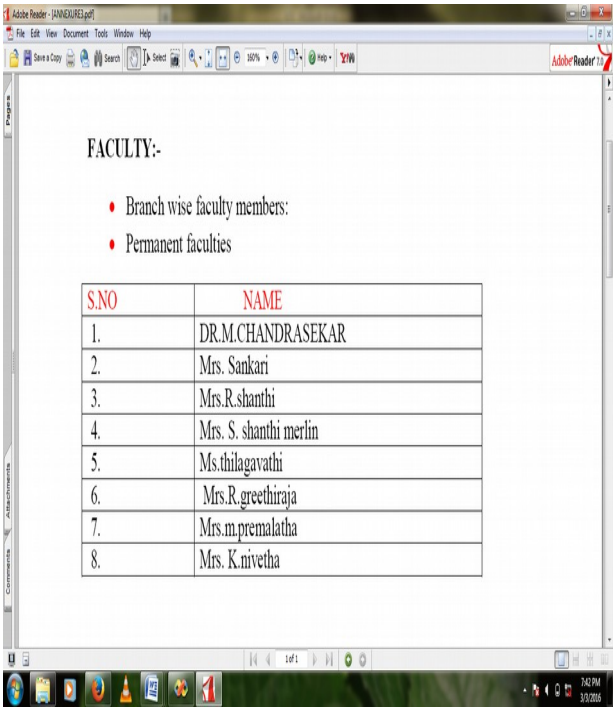
↓

Training and Placement Officer



No. Of Fee waivers granted:-

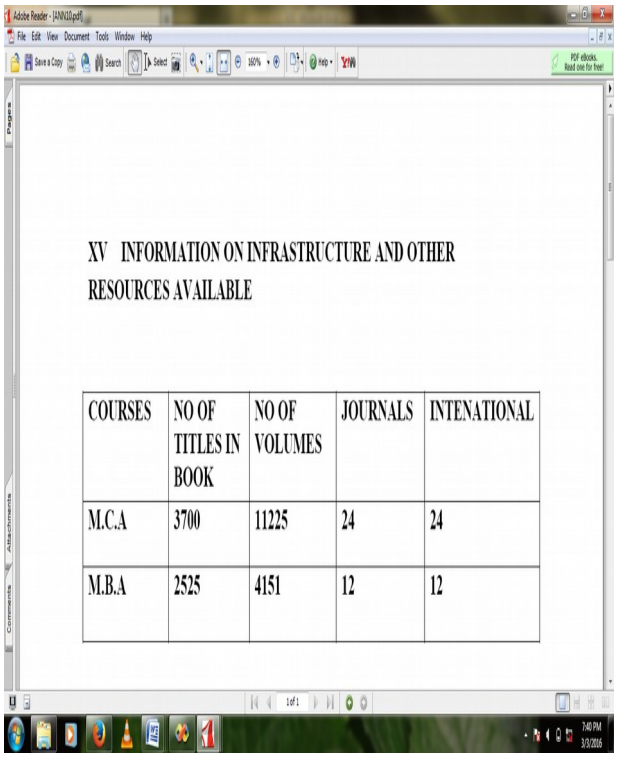
S.NO	NAME	AMOUNT
1.	AISHWARYA	3000
2.	AKILA	3000
3.	INDUMATHY	3000
4.	BHUVANESHWARI	3000
5.	NANDHINI	3000
6.	NANDHINI	3000
7.	PREETHI	3000
8.	RAMYA	3000
9.	SARANYA	3000
10.	SATHYAPRIYA	3000
11.	ARAVINDHA	3000
12	ARULJOTHI	3000
13	PRAVEENA BANU	3000



FACULTY:-

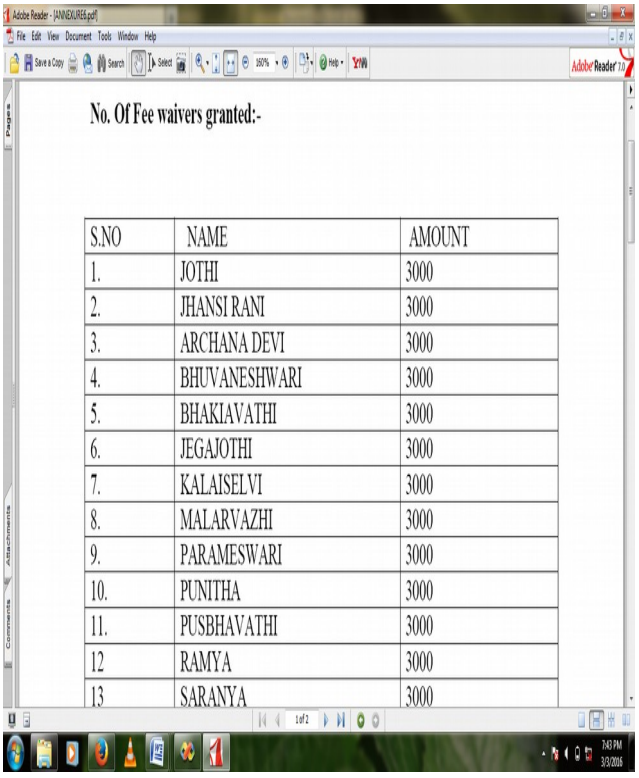
- Branch wise faculty members:
- Permanent faculties

S.NO	NAME
1.	DR.M.CHANDRASEKAR
2.	Mrs. Sankari
3.	Mrs.R.shanthi
4.	Mrs. S. shanthi merlin
5.	Ms.thilagavathi
6.	Mrs.R.greethiraja
7.	Mrs.m.premalatha
8.	Mrs. K.nivetha



XV INFORMATION ON INFRASTRUCTURE AND OTHER RESOURCES AVAILABLE

COURSES	NO OF TITLES IN BOOK	NO OF VOLUMES	JOURNALS	INTENATIONAL
M.C.A	3700	11225	24	24
M.B.A	2525	4151	12	12



No. Of Fee waivers granted:-

S.NO	NAME	AMOUNT
1.	JOTHI	3000
2.	JHANSI RANI	3000
3.	ARCHANA DEVI	3000
4.	BHUVANESHWARI	3000
5.	BHAKIAVATHI	3000
6.	JEGAJOTHI	3000
7.	KALAISELVI	3000
8.	MALARVAZHI	3000
9.	PARAMESWARI	3000
10.	PUNITHA	3000
11.	PUSBHAVATHI	3000
12	RAMYA	3000
13	SARANYA	3000

CONCLUSION

The college web site serves as both the home page and the domain. Web visitor count feature helps in counting the number of users visited our website. Admin can view all the user details providing the company and user details. The college home page starts with the main menu tab showing the home, about us, Contact us DS Trust and also the Mandatory Disclosure. The Mandatory disclosure discloses the list of courses offered like MCA and MBA. Once the MCA page is opened it show cases all the buildings, lab facilities, infrastructures, library and books. The web site serves as a central cloud **reference system** for the management, teaching faulty, students, parents and the visitors.

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- www.codeguru.com