HOSTEL MANAGEMENT SYSTEM

By Siddhi Teli, Akhil Mhatre, Prakash Sharma, Amit Tiwari

Under the guidance of Prof.M.Velladurai

Abstract— **As the name specifies "HOSTEL MANAGEMENT SYSTEM" is a software developed for managing various activities in the hostel. For the past few years the number of educational institutions are increasing rapidly. Thereby the number of hostels are also increasing for the accommodation of the students studying in this institution.**

Keywords—less human error , easy data updating

INTRODUCTION

We have got nine hostels in our university, which consist of four boy's hostel and fivegirl's hostel. All these hostels at present are managed manually by the hostel office. The Registration form verification to the different data processing are done manually .Thus there are a lot of repetitions which can be easily avoided. And hence there is a lot of strain on the person who are running the hostel and software's are not usually used in this context. This particular project deals with the problems on managing a hostel and avoids the problems which occur when carried manually Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more user friendly and more GUI oriented. We can improve the efficiency of the system, thusovercome the drawbacks of the existing system.

I.SYSTEM ENVIRONMENT

A. Software Features

PHP is a scripting language originally designed for producing dynamic web pages. It has evolved to include a command line interface capability and can be used in standalone graphical applications. While PHP was originally created by Rasmus Lerdorf in 1995, the main implementation of PHP is now produced by The PHP Group and serves as the *de facto* standard for PHP as there is no formal specification. PHP is free software released under the PHP License, however it is incompatible with the GNU General Public License.

B. Usage

PHP is generally a general-purpose language that is especially suited for web development. PHP gnenrally runs on a web server, taking PHP code as its input and creating web pages PHP can be deployed on most web servers, many operating systems. PHP primarily acts as a filter, taking input form a file or stream containing text and/or PHP instructions and outputs another stream of data; most commonly the output will be HTML

II. SPEED OPTIMIZATION

As with many scripting languages, PHP scripts are
normally kept as human-readable source code, even on production web servers. In this case, PHP scripts will be compiled at runtime by the PHP engine,which increases their execution time. PHP scripts are able to be compiled before runtime using PHP compilers as with other programming languages such as C (the language PHP and its extensions are written in). Code optimizers aim to reduce the computational complexity of the compiled code by reducing its size and making other changes that can reduce the execution time with the overall goal of improving performance. The nature of the PHP compiler is such that there are often opportunities for code optimization, and an example of a code optimizer is the Zend Optimizer PHP extension.

C. Security

The National Vulnerability Database stores all vulnerabilities found in computer software. The overall proportion of PHP-related vulnerabilities on the database amounted to: 12% in 2003, 20% in 2004, 28% in 2005, 43% in 2006, 36% in 2007, and 35% in 2008. Most of these PHP-related vulnerabilities can be exploited remotely: they allow hackers to steal or destroy data from data sources linked to the webserver (such as an SQL database), send spam or contribute to DOS attacks using malware, which itself can be installed on the vulnerable servers.These vulnerabilities are caused mostly by not following best practice programming rules:technical security flaws of the language itself or of its core libraries are not frequent. Recognizing that programmers cannot be trusted, some languages include taint checking to detect automatically the lack ofinput validation which induces many issues. However, such a feature is being developed for PHP Hosting PHP applications on a server requires a careful and

constant attention to deal with these security risks. There are advanced protection patches such as Suhosin and Hardening-Patch, especially designed for web hosting environments. Installing PHP as a CGI binary rather than as an Apache module is the preferred method for added security. With respect to securing the code itself, PHP code can be obfuscated to make it difficult to read while remaining functional.

D. Data types

PHP stores whole numbers in a platform-dependent range. This range is typically that of 32-bit signed integers. Unsigned integers are converted to signed values in certain situations; this behavior is different from other programming languages. Integer variables can be assigned using decimal (positive and negative), octal, and hexadecimal notations. Floating point numbers are also stored in a platform-specific range. They can be specified using floating point notation, or two forms of scientific notation. PHP has a native Boolean type that is similar to the native Boolean types in Java and C++. Using the Boolean type conversion rules, non-zero values are interpreted as true and zero as false, as in Perl and C++. The null data type represents a variable that has no value.

E. MySQL Functions

1.Macromedia Dreamweaver 8:

Is a professional HTML editor for designing, coding, and developing websites, web pages, and webapplications. Whether you enjoy the control of hand-coding HTML or prefer to work in a visual editing environment, Dreamweaver provides you with helpful tools to enhance your web creation experience.he visual editing features in Dreamweaver let you quickly create pages without writing a line of code.You can view all your site elements or assets and drag them from an easy-to-use panel directly into a document. You can streamline your development workflow by creating and editing images in Macromedia Fireworks or another graphics application, then importing them directly into Dreamweaver, or by adding Macromedia
Flash objects.

2. Dreamweaver and accessibility:

Accessibility refers to making websites and web products usable for people with visual, auditory, motor, and other disabilities. Examples of accessibility features for software products andwebsites include screen reader support, text equivalents for graphics, keyboard shortcuts, change of display colors to high contrast, and so on. Dreamweaver provides tools that make the product accessible and tools that help you author accessible content:

a.Using Dreamweaver accessibility features: For Dreamweaver web designers who need to use accessibility features, Dreamweaver offers screen reader support, keyboard navigation, and operating system accessibility support. For more information, see Using Dreamweaver accessibility features.

b.Authoring for accessibility For Dreamweaver web designers who need to create accessible content, Dreamweaver assists you in creating accessible pages that contain useful content for screen readers and comply with government guidelines.

II. SYSTEM DESIGN

After the text edit has been completed, the paper is ready for the template. Duplicate the template file by using the Save As command, and use the naming convention prescribed by your conference for the name of your paper. In this newly created file, highlight all of the contents and import your prepared text file. You are now ready to style your paper; use the scroll down window on the left of the MS Word Formatting toolbar.

A. Adminstrator:

A process of converting user originated inputs to a computer-based format. Input design is an important part of development process since inaccurate input data are the most common cause of errors indata processing. Erroneous entries can be controlled by input design. It consists of developing specifications and procedures for entering data into a system and must be in simple format**.** The goal of input data design is to make data entry as easy, logical and free from errors as possible. In input data design, we design the source document that capture the data and then select the media used to enter them into the computer.

B. Process Design

Process design plays an important role in project development. In order to understand the working procedure, process design is necessary. Data Flow Diagram and System Flow chart are thetools used for process design. System Flow Chart is a graphical representation of the system showing the overall flow of control in processing at the job level; specifies what activities must be done to convert from a physical to logical model. Data Flow Diagram the logical representation of the data flow of the project. The DFD is drawn using various symbols. It has a source and a destination. The process is represented using circles and source and destination are represented using squares. The data flow is represented using arrows. One reader can easily get the idea about the project through Data Flow Diagram.

C. Use case diagram:
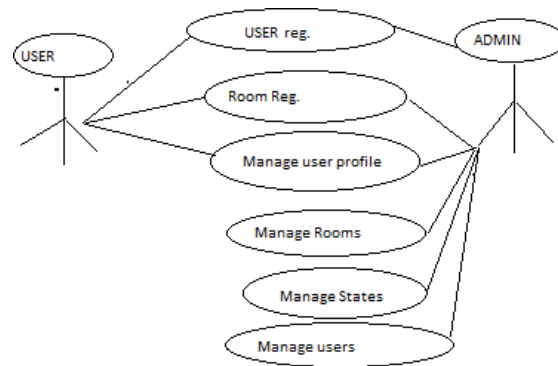
A DFD represents flow of data through a system. Data flow diagrams are commonly used during problem analysis. It views a system as a

function that transforms the input into desired output. A DFD shows movement of data throughthe different transformations or processes in the system.

III.ER DIAGRAMS

An Entity Relation(ER) Diagram is a specialized graphics that illustrates the interrelationship between entities in a database. ER diagrams often use symbols to represent 3 different types of information. Boxes are commonly used to represent entities. Diamonds are normally used to represent relationships and ovals are used torepresent attributes.An Entity Relationship Model (ERM), in software engineering is an abstract and conceptual representation of data. Entity Relationship modeling is a relational schema database modeling method, used to produce a type of conceptual schema or semantic data model of a system, often a relation database, and its requirements in atop-down fashion
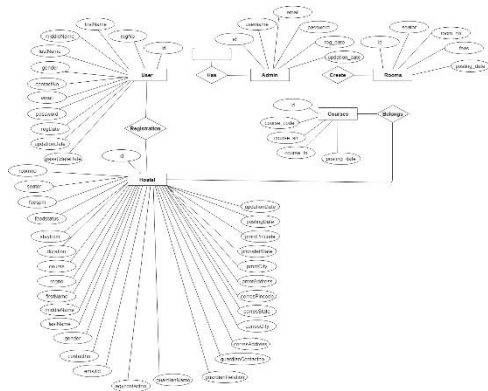
IV.SYSTEM TESTING

System testing is the stage of implementation, which is aimed at ensuring that the system works accurately and efficiently before live operation commences. Testing is the process of executing the program with the intent of finding errors and missing operations and also a complete verification to determine whether the objectives are met and the user requirements are satisfied. The ultimate aim is quality assurance.

A.UNIT TESTING

THE SOFTWARE UNITS IN A SYSTEM ARE MODULES AND ROUTINES THAT ARE ASSEMBLED AND INTEGRATED TO PERFORM A SPECIFIC FUNCTION. UNIT TESTING FOCUSES FIRST ON MODULES, INDEPENDENTLY OF ONE ANOTHER, TO LOCATE ERRORS. THIS ENABLES, TO DETECT ERRORS IN CODING AND LOGIC THAT ARE CONTAINED WITHIN EACH MODULE. THIS TESTING INCLUDES ENTERING DATA AND ASCERTAINING IF THE VALUE MATCHES TO THE TYPE AND SIZE SUPPORTED BY JAVA. THE VARIOUS CONTROLS ARE TESTED TO ENSURE THAT EACH PERFORMS ITS ACTION AS REQUIRED.

a. Integration Testing

Data can be lost across any interface, one module can have an adverse effect on another, sub Functions when combined, may not produce the desired major functions. Integration testing is a systematic testing to discover errors associated within the interface. The objective is to take unit tested modules and build a program structure. All the modules are combined and tested as a whole. Here the Server module and Client module options are integrated and tested. This testing providesthe assurance that the application is well integrated functional unit with smooth transition of data.

V. IMPLEMENTATION

Implementation is the stage in the project where the theoretical design is turned into a working systemand is giving confidence on the new system for the users that it will work efficiently and effectively. It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the change over, an evaluation of change over methods. Apart from planning major taskof preparing the implementation are education and training of users. The implementation process begins with preparing a plan for the implementation of the system. According to this plan, the activities are to be carried out, discussions made regarding the equipment and resources and the additional equipment has to be acquired to implement the new system. In network backup system no additional resources are needed.

1.USER TRAINING

After the system is implemented successfully, training of the user is one of the most important subtasks of the developer. For this purpose user manuals are prepared and handled over to the user to operate the developed system. Thus the users are trained to operate the developed system.Both the hardware and software securities are made to run the developed systems successfully in future.
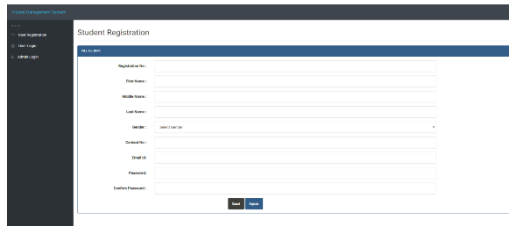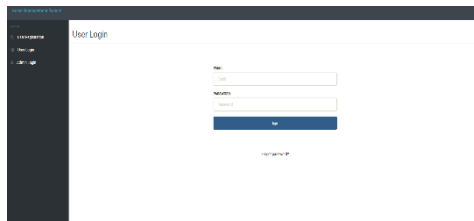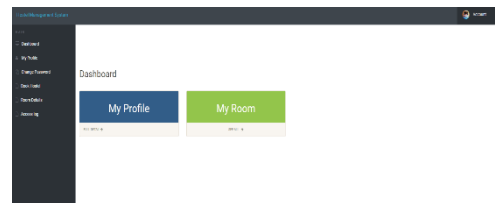

2.SECURITY AND MAINTENANCE

Maintenance involves the software industry captive, typing up system resources .It means restoring something to its original condition. Maintenance follows conversion to the extend that changes are necessary to maintain satisfactory operations relative to changes in the user's environment. Maintenance often includes minor enhancements or corrections to problems that surface in the system's operation. Maintenance is also done based on fixing the problems reported, changing the interface with other software or hardware enhancing the software. Any system developed should be secured and protected against possible hazards. Security measures are provided to prevent unauthorized access of the database at various levels. An uninterrupted power supply should be so that the power failure or voltage fluctuations will not erase the data in the files. Password

protection and simple procedures to prevent the unauthorized access are provided to the users .The system allows the user to enter the system only through proper user name and password.

3.Output:

User signup

User sign in

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