ONLINE BLOGGING SYSTEM

*Mini-Project – BT0079*

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*B.Sc. IT (Third Semester)*

in

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# Title of the project

Online Blogging System

# Introduction

A blog is a frequently updated online personal journal or diary. It is a place to express yourself to the world. A place to share your thoughts and your passions. Really, it’s anything you want it to be. For our purposes we’ll say that a blog is your own website that you are going to update on an ongoing basis. Blog is a short form for the word weblog and the two words are used interchangeably. Blogs range from the personal to the political, and can focus on one narrow subject or a whole range of subjects. It can also play an important role in student’s life. It can help in the promotion of critical and analytical thinking, increased access and exposure to quality content and a combination of solitary and social interactions with peers.

Currently students in schools or colleges are unable to express their ideas, their talent or anything that can expressed for some benefits for everyone. The reason is, schools or colleges don’t have any proper medium to accomplish it. But proposed online blogging system can help in accomplish these things and even much more. We will cover the objectives of this online blogging system in next section.

Internet has become reality and usage of internet become very much popular and there is tremendous increase of internet in all over the world for educational purpose. The Online Blogging System is easy to use, full-featured and much more.

# Objective

Online Blogging System is a perfect platform for students, teachers, institutional administrative purposes.

The basic objective of developing this project is:

* + - To promote collaboration between students and teachers. Mutual learning between students and teachers.
    - To have fun. Yes, you heard it right. It is wonderful when students think that they are having so much fun, they forget that they are actually learning.
    - To increase motivation for reading and writing.
    - To establish a home-school or home-college connection in order to make the parents/guardians aware about the happenings or events. Parents with internet access can check their child’s work and writings.
    - To improve the writing and digital literacy of the students.
    - To showcase the student’s accomplishments, talents, ideas or anything that they can’t express.
    - To give a voice to students.
    - To give students a global and authentic audience – no longer working for a teacher who checks and evaluates work but a potential global audience.
    - To create a digital portfolio of students.
    - To create a cross-curricular environment.
    - To develop critical thinking skills.
    - Work is permanently stored, easily accessed and valuable comparisons can be made over time for assessment and evaluation purpose.

# Project Scope

The Online Blogging System will allow the users to publish the writings, videos, images or audios if he/she should have credentials to login. The main users of this project are students, teachers and administrators.

From an end-user perspective, the Online Blogging System project consists of following functional elements:

* + - **Dashboard:** It is the default page of the site and we can access this option from left hand side anytime. All links are available on this page. We can also find the Quick Draft and Activity section here.
    - **Posts:** Here we can see all the published contents by clicking on “All Posts” option and we can also publish new content by “Add New” option.
    - **Media:** We can see the uploaded media items (videos, images, audios) by clicking on “Library” option and we can also add new media item from local system with the help of “Add New” button.
    - **Comments:** In this section, we can check that who, when and what has been commented.
    - **Profile:** In this section, we can personalize our profile like Password Change, Profile Picture Change, Display Name, Nickname etc.
    - **Tools:** This option is having additional plugins to install, which may enhance the current functionality.
    - **Collapse:** We can collapse the menu with this option.
    - **Home Button:** It is located at the top left portion and we can use this button to check the timeline where we can view the contents published by everyone.

# Project Category

It is an application that can be accessed over web.

# Technologies

# Operating Environment

* + - The online blogging system web application will operate with the following Web Browsers: Microsoft Internet Explorer, Mozilla Firefox and Google Chrome.
    - Operating System: Linux 6.8(CentOS) hosted on VMWare Workstation 10.0
    - Software requirements: MySQL, Apache HTTP Server, PHP, PHP-MySQL, php-MyAdmin and WordPress.
    - Languages used: PHP.
    - RAM: 1 GB(minimum) and we can assign maximum any size of RAM as per our requirement.
    - Hard Disc: nGB depending upon the requirement to store the data. We have assigned 40 GB for our project.

# Deployment Environment

## DE-1: LAMP Server

OS: Linux 6.8 (CentOS)

Virtual Machine: VMware Workstation 10.0.1 MySQL 5.1.73

Apache http server 2.2.15 PHP 5.3.3

PHP My Admin Word Press 4.6.1

HDD: Min 30 GB, Recommended 60 GB RAM: 1 GB, Recommended 4 GB

Processor: Intel(R) Core(TM) i5-4300U CPU @ 1.90GHz (in my case)

## DE-2: Client (for testing purpose but we can also do the same on DE-1)

Web Browsers: Internet Explorer, Google Chrome and Mozilla Firefox.

# Development Tools and Technologies

# DT - 1: PHP

The acronym PHP initially stood for Personal Home Pages, but it now stands for the recursive backronym PHP: Hypertext Preprocessor. PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management system and web frameworks. It is a general purpose server side scripting language that is used to develop:

* + - Static websites
    - Dynamic websites
    - Web applications

PHP scripts can only be interpreted on a server that has PHP installed. The client computers accessing the PHP scripts require a web browser only.

Things we need to know about PHP are as follows:

* + - As we said before it is a server-side scripting language.
    - PHP is free and is an open source software product.
    - The PHP scripts are executed on the server.
    - PHP supports many databases (MySQL, Sybase, Oracle and many others)
    - PHP runs on different platforms (Unix, Linux, Windows)
    - PHP is compatible with almost all web-servers used today (Apache, IIS, etc.)
    - A PHP file can contain plain text, HTML tags and scripts.
    - The PHP files can have one of the following extensions: php, php3 or phtml.

If you don’t want to spend money, you can also install everything on your local machine. The easiest way is to install WAMP if you have a Windows machine and LAMP if you have a Linux machine. (WAMP = Windows Apache MySQL PHP and LAMP = Linux Apache MySQL PHP.) These packages install everything you need.

# DT – 2: MySQL

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 runs

on virtually all platforms, including Linux, UNIX, and Windows. Although it can be used in a wide range of applications, MySQL is most often associated with web-based applications and online publishing and is an important component of an open source enterprise stack called LAMP. LAMP is a Web development platform that uses Linux as the operating system, Apache as the Web server, MySQL as the relational database management system and PHP as the object- oriented scripting language. 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. 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 PHP, PERL, C, C++, JAVA, etc.
    - 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.

If YES, then you will receive an email on your email ID with login details

Use the login details from email and access the website

If unable to login, then contact the ADMIN

# Process Flow Chart

Raise a request to ADMIN to create an account for blogging system

Did your request approve?

If NOT, then re-initiate the request

If login is OK, then new content can be published by **Posts > Add New**

You can logout by clicking on your User ID located at top right corner

* 1. **Data Flow Diagram(DFD)**

A data-flow diagram (DFD) is a graphical representation of the "flow" of data through an information system. DFDs can also be used for the visualization of data processing (structured design). On a DFD, data items flow from an external data source or an internal data store to an internal data store or an external data sink, via an internal process.

# Context Level

Users Admin

Online Blogging System

Readers

This context-level data flow diagram, which shows the interaction between the system and external agents which act as data sources and data sinks. On the context diagram (also known as the Level 0 DFD) the system's interactions with the outside world are modelled purely in terms of data flows across the system boundary. This context diagram shows the entire Online Blogging System as a single process.

# High Level Diagram (Level 1)

This level (level 1) shows all processes at the first level of numbering, data stores, external entities and the data flows between them. The purpose of this level is to show the major high- level processes of the Online Blogging System and their interrelation. A level-1 diagram must be balanced with its parent context level diagram, i.e. there must be the same external entities and the same data flows, these can be broken down to more detail in the level 1, e.g. the "Login" data flow could be spilt into "Create and Publish the content" and "Content Removal" and still be valid.

Login

Create and Publish

the content

Content removal

User addition and

removal

Admin

Users

* 1. **Future Enhancement**

This project was developed to fulfil the requirement of common blogging platform for educational purposes. However, there are lots of scope to improve the performance of the Online Blogging System in the area of user interface, database performance, and query processing time etc.

So, there are many things for future enhancement of this project. The future enhancements that are possible in the project are as follows:

* Possibility of account creation of parents/guardians with limited rights.
* Web based interface for generate reports, like who has published more contents, who has commented most, the logged in time etc.
* Linking and integration of other online educational web sites.
* Integration with school/college database through Web Services.
* Development of mobile application which can run on multiple OS and devices.
* We can also add a quiz feature and winners will get some educational assistance or any other reward.
  1. **Bibliography**

# Websites

Following websites has been referred to create this project report:

* <http://www.google.com/>
* <http://www.vmware.com/>
* https://[www.centos.org/download/](http://www.centos.org/download/)
* https://wordpress.org/download/
* https://en.wikipedia.org/
  + - https://[www.digitalocean.com/community/tutorials/how-to-install-linux-apache-mysql-](http://www.digitalocean.com/community/tutorials/how-to-install-linux-apache-mysql-) php-lamp-stack-on-centos-6
    - https://[www.digitalocean.com/community/tutorials/how-to-install-wordpress-on-](http://www.digitalocean.com/community/tutorials/how-to-install-wordpress-on-) centos-6--2

# Books/e-books

Following books/e-books has been referred to create this project report:

* + - BT0079-Mini Project Guidelines.pdf