**NIT JAMSHEDPUR**



**SCHOOL MANAGEMENT SYSTEM**

BY:- GROUP 11

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***ABSTRACT***

BASICALLY THE SCHOOL MANAGEMENT PROJECT HANDLES STUDENT, TECHERS AND SUBJECT ETC.ALMOST THE WHOLE POWER IS GIVEN TO THE ADMIN WHERE ADMIN CAN ADD TEACHER, CLASS, AND SUBJECT. SOME OF THE POWER IS GIVEN TO TEACHER WHERE HE/SHE CAN UPDATE HIS DETAILS, ADD STUDENT ADD CLASS, and ENTER STUDENT’S MARKS. AFTER THAT ADMIN CAN VIEW MARKS OF STUDENTS UPLOADED. ADMIN CAN ACCESS ALL DETAILS REGARDING TEACHERS, SUBJECT, AND MARKS. ADMIN CAN DELETE SOME OF THE TEACHERS, SUBJECT FROM THE DATABASE. IT IS VERY MUCH AS IT INCLUDES SESSION SUPERLOADED VARIABLE OF PHP WHICH MAINTAINS SUFFICIENT PRIVACY. HERE IS A CAPTION TO UPLOAD IMAGES OF THE TEACHERS DURING ITS DETAILS UPDATION WHICH IS ALSO A GOOD WAY TO RECOGNISE SOMEONE IF DETAILS OF FEW PEOPLES ARE IDENTICAL.

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***INTRODUCTION***

THE SCHOOL MANAGEMENT PROJECT IS DESIGNED TO HANDLE TEACHERS DETAILS, CLASS DETAILS, AND SUBJECT DETAILS THAT ADMIN WANTS TO ADD IN THE SCHOOL. ADMIN CAN ADMIN CAN ONLY ADD TEACHER NAME, SALARY, QUALIFICATION AND REST INFORMATION WILL BE FILLED BY THE TEACHER. THIS IS A DISTRACT COMBINATION OF MANAGEMENT AND EDUCATION. THERE ARE ONLY SEVEN DATABASES WHICH HOLDS THEIR RESPECTIVE INFORMATION LIKE STAFF, CLASS, SUBJECT, SALARY ETC. SOME OF THE ADDED INFORMATION CAN BE PUBLIC VIEWED BY WITHOUT FETCHING DETAILS FROM DATABASE DIRECTLY AND DELETION OPTION IS ALSO PROVIDED AT THE SAME PLACE TO REMOVE SOME DETAILS.

FUNCTIONALITIES IMPLEMENTED AND PROPER FUNCTIONING.

THIS PROJECT FIRST INCLUDES ADMIN LOGIN PANEL, TEACHER LOGIN PANEL, CONTACTUS LINK WHICH IS BEING PROVIDED IN THE FIRST PAGE IN NAVBAR SECTION.AS SOON AS ADMIN GET IN BY PROVIDING ITS USERNAME AND PASSWORD THE WHOLE INFORMATION CAN BE FETCHED BY HIM/HER.

HE/SHE CAN ADD CLASS DETAILS LIKE “CLASS AND SEC.” WHICH HE/SHE WANTS TO ADD IN THE SCHOOL CURRICULUM?

THIS POWER IS ONLY GIVEN TO ADMIN TO ADD CLASS AND DELETE THIS AS WELL.FURTHER, ADMIN CAN UPLOAD TEACHER’S NAME, QUALIFIACTION, AND SALARY IN THE RESPECTIVE PANELAND IT CAN ALSO BE VIEWED BY ADMIN AS WELL.

ADMIN CAN ALSO ADD THE SUBJECTS WHICH ARE BEING TAUGHT N THE CLASSES.ADMIN HOME PAGE CONTAINS THE INFORMATION ABOUT SCHOOL INCLUDING ITS LOCATION.

INFORMATION REGARDING EXAMS WOULD BE SET ACCORDING TO THE ADMINISTRATOR.STUDENT’S DETAILS CAN BE VIEWED BY THE ADMIN BY JUST ENTERING HIS CLASS AND RESPECTIVE SECTION OF THE STUDENT.ADMIN CAN DELETE THE EXISTING STAFFS FROM THE DATABASE AS WELL.ULTIMATELY WE CAN SEE ALMOST THE WHOLE POWER HAS BEEN GIVEN TO ADMIN. AFTER PERFORMING ALL THESE EVALUATIONS ADMIN CAN SECURELY LOGGED-OUT FROM THE WEBSITE BY VISITING LOGOUT BUTTON.

AS FAR AS TEACHERS OR STAFFS ARE CONCERNED THEY ALSO HAVE THIR LOGIN PANELIN WHICH THEY CAN UPLOAD THEIR DETAILS LIKE ADDRESS, IMAGES, PHONE\_NO. IN PROFILE SECTION. THEY ALSO HAVE PROVIDED A OPPURTUNITY TO CHOOSE THEIR CLASS ACCORDING TO THEIR CAPABILITY AND UNDERSTANDING.RESPACTIVE TEACHER HA GIVEN RESPONSIBILTY TO ADD STUDENTS OF THEIR CLASS.

AS SOON AS STUDENT GET REGISTERED THEY HAVE PROVIDED A RGISTRATION-ID WHICH IS AUTO-INCREMENTED EVERY TIME WHEN A STUDENT GET REGISTERED.

AFTER ALLOTING EACH STUDENT IN THE DATABASE RESPECTIVE TEACHER CAN UPLOAD THE STUDENTS MARKS IN ADD MARKS SECTION OF THE PANEL AND CAN BE FREQUENTLY SEEN TO UPDATE FOR FUTURE REFERNCES.

BOTH ADMIN AND TEACHER CAN WORK IN A SYNCHRONOUS MANNER IN THIS PROJECT.

SUFFICIENT PRIVACY IS ALSO MAINTAINED SO THAT NO ONE CAN GET INFORMATION ABOUT ANY STUDENT AND ABOUT ANY NECESSARY THING.

IT ALSO INCLUDES FEATURES LIKE ONCE ADMIN GET LOGGED-IN THEN ALL INFORMATION CAN BE VIEWED AND ADMIN WILL HOVER INSIDE ITS HOMEPAGE UNTIL OR UNLESS HE GET LOGGED-OUT.

IT IS HIGHLY RECOMMENDED FOR STAFFS AS WLL AS FOR ADMIN AFTER DOING ITS RESPONSIBILTIES THEY MUST GET LOGGED-OUT. IF YOU HAVE TO FETCH ANY INFORMATION REGARDING COLLEGE THEY YOU CAN VISIT CONTACTUS LINK.

EVERY PAGE IS CONNECTED VIA LINKS TO EACH-OTHER USING SIDE-BAR MENU PROVIDED IN EVERY PAGE OF THE WEBSITE.

PHP IS EXTENSIVELY USED IN THIS PROJECT TO CONNECT TO THE DATABASE.

THIS PROJECT IS HIGHLY SECURED USING END-TO-END ENCRYPTION AND PROPER EVALUATION HAS BEEN DONE USING VARIOUS FUNCTIONS.

MANY PHP SUPERGLOBAL VARIABLES ARE USED IN THIS PROJECT TO MANAGE PRIVACY AMONGST ADMIN, STUDENT, AND TEACHER.

THIS PROJECT BASICALLY INCLUDES 8 TABLES WHICH CONTAINS INFORMATION REGARDING STAFFS, CLASS, SECTION, SUBJECT ETC.

***CODE***

***CONNECTION CONNECTING WITH THE DATABASE:-***

***HERE, PHP IS BEING USED AS A MEDIUM TO STABLISH A CONNECTION BETWEEN THE DATABASES AND THE SQL CODES WHICH ARE TO BE EXECUTED TO PERFORM ALL THE FUNCTIONS AND INPUT AND OUTPUT OF THE FUNCTIONALITIES.***

***WE ARE USING VARIBALE TO STORE THE QUARRIES AND THE USING THE EXECUTION USING THE QUERRY FUNCTIONS WE EXECUTE THE CODES. XAMPP IS USED TO MAKE THE SYSTEM A LOCALHOST AND IT HELPS TO EXECUTE THE WEBSITES ON THE PARTICULAR COMPUTER USING LOCALHOST COMMANDS AND LOCALHOST URL.***

<?php

                            $sl="select DISTINCT(CSEC) from class";

                            $r=$db->query($sl);

                                if($r->num\_rows>0)

                                {

                                    echo "<option value=''>Select</option>";

                                    while($ro=$r->fetch\_assoc())

                                    {

                                        echo "<option value='{$ro["CSEC"]}'>{$ro["CSEC"]}</option>";

                                    }

                                }

                        ?>

*HERE, THE SQL CODE IS BEING EXECUTED TO SELECT OR TO GET ALL THE DISTINCT VALUES IN THE COLUMN CSEC FROM THR TABLE BEING EXECUTED WITH THE HELP OF PHP.*

<?php

                            $s="select \* from sub";

                            $re=$db->query($s);

                            if($re->num\_rows>0)

                            {

                                echo "<option value=''>Select</option>";

                                while($r=$re->fetch\_assoc())

                                {

                                echo "<option value='{$r["SNAME"]}'>{$r["SNAME"]}</option>";

                                }

                            }

                        ?>

*HERE, AGAIN USIGN THE SAME PHP SYNTAX WE ARE CALLING THE DIFFERENT TABLES AND USING ALL THE QUERRIES TO THE REQUIRED DATAS WE NEED THAT ARE AVAILABLE IN THE PARTICULAR TABLE BEING USED OR BEING CALLED.*

<?php

    $db=new mysqli("localhost","root","","school");

    if(!$db)

    {

        echo "failed";

    }

?>

*HERE IS THE CONNECTION CODES IN THIS WE ARE USING LOCALHOST AS THE HOST OF THE WEBSITES, ROOT AS A UERSID , NULL OR ”” AS PASSWORD AND SCHOOL AS THE DATABASE NAME. THEN USING THE VARIABLE DB WE EXECUTE THE CODE AND GETS THE CONNECTIONS IF ANYTHING WENTS WRONG WE THE ERROR MESSAGE.*

<?php

                if(isset($\_POST["login"]))

                {

                    $sql="select \* from admin where ANAME='{$\_POST["aname"]}' and APASS='{$\_POST["apass"]}'";

                    $res=$db->query($sql);

                    if($res->num\_rows>0)

                    {

                        $ro=$res->fetch\_assoc();

                        $\_SESSION["AID"]=$ro["AID"];

                        $\_SESSION["ANAME"]=$ro["ANAME"];

                        echo "<script>window.open('admin\_home.php','\_self');</script>";

                    }

                    else

                    {

                        echo "<div class='error'>Invalid Username or Password</div>";

                    }

                }

            ?>

*THIS IS THE CODE WHICH IS RELATED FOR LOGIN PURPOSE. IF WE ENTER THE CORECT DETAILS THEN WE WILL GO TO THE NEXT PAGE, OTHERWISE IT WILL GIVE A POP UP THAT THE USERNAME OR PASSWORD IS INVALID.*

***TECHNOLOGIES USED:-***

THIS PROJECT IS BEING IMPLEMENTED BY PHP USING SOME OF THE IMPROVED VERSION OF JAVASCRIPT , CSS, SQL ETC. PHP IS WIDELY USED OPEN SOURCE GENERAL PURPOSE SCRIPTING LANGUAGE THAT IS ESPECIALLY SUITABLE FOE WEB DEVELOPMENT AND CAN BE EMBEDDED IN HTML.

TECHNOLOGIES USED :-

* HTML
* CSS
* JAVASCRIPT
* JQUERY
* BOOTSTRAP
* PHP
* MYSQL

HTML :- HTML STANDS FOR HYPER TEXT MARKUP LANGUAGE. WEB BROWSERS RECIEVES HTML DOCUMENTS FROM A WEB SERVER OR FROM A LOCAL HOST STORAGE AND RENDER THE DOCUMENT INTO MULTIMEDIA WEB PAGE.

CSS :- CSS (CASCADING STYLE SHEETS) IS A STYLE SHEET LANGUAGE USED FOR DESCRIBING THE PERSENTATION OF A DOCUMENT WRITTEN IN A MARKUP LANGUAGE LIKE HTML.

[JAVASCRIPT :-](javascript:-) JAVASCRIPT IS ONE OF THE CORE TECHNOLOGIES OF THE WORLD WIDE WEB. JAVASCRIPT ENABLES INTERACTIVE WEB PAGES AND IS AN ESSENSIAL PART OF WEB APPLICATION.

JQUERY :- JQUERY IS A JAVASCRIPT LIBRARY DESIGNED TO SIMPLIFY HTML DOM TREE TRANERSAL AND MANIPULATION.

BOOTSTRAP :-BOOTSTRAP IS A FREE AND OPEN SOURCE FRAMEWORK DIRECTED AT RESPONSIVE, MOBILE FIRST FRONTED WEB DEVELOPEMENT.

PHP :- HYPERTEXT PREPROCESSOR IS A GENERAL PURPOSE PROGRAMMING LANGUAGE ORIGINALLY DESIGNED FOR A WEB DEVELOPMENT.

SQL :- SQL IS A OPEN SOURCE RELATIONAL DATABASE

MANAGEMENT SYSTEM(RDBMS). IT IS A DATABASE LANGUAGE AND CAN ALSO BE USED FOR CREATION,DELETION ,FETCHING ROWS ETC. IT CONTAINS QUERY WHICH COMMUNICATES WITH THE DATABASE AND RETRIVES INFORMATIONS PRESENT INSIDE DATABASE.

***TABLES IN THE PROJECT:-***

# ***CLASS***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *NAME* | *TYPE* | *NULL* | *KEY* | *EXTRA* |
| *CID* | ***INT*** | ***NO*** | ***PRIMARY KEY*** | ***AUTO\_INCREMENT*** |
| *CNAME* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *CSEC* | ***VARCHAR(150)*** | ***NO*** |  |  |

# **ADMIN**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *NAME* | *TYPE* | *NULL* | *KEY* | *EXTRA* |
| *AID* | ***INT*** | ***NO*** | ***PRIMARY KEY*** | ***AUTO\_INCREMENT*** |
| *ANAME* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *APASS* | ***VARCHAR(150)*** | ***NO*** |  |  |

# EXAM

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *NAME* | *TYPE* | *NULL* | *KEY* | *EXTRA* |
| *EID* | ***INT*** | ***NO*** | ***PRIMARY KEY*** | ***AUTO\_INCREMENT*** |
| *ENAME* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *ETYPE* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *EDATE* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *SESSION* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *CLASS* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *SUB* | ***VARCHAR(150)*** | ***NO*** |  |  |

# HCLASS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *NAME* | *TYPE* | *NULL* | *KEY* | *EXTRA* |
| *HID* | ***INT*** | ***NO*** | ***PRIMARY KEY*** | ***AUTO\_INCREMENT*** |
| *TID* | ***INT*** | ***NO*** |  |  |
| *CLA* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *SEC* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *SUB* | ***VARCHAR(150)*** | ***NO*** |  |  |

# 0MARK

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *NAME* | *TYPE* | *NULL* | *KEY* | *EXTRA* |
| *MID* | ***INT*** | ***NO*** | ***PRIMARY KEY*** | ***AUTO\_INCREMENT*** |
| *REGNO* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *SUB* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *MARK* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *TERM* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *CLASS* | ***VARCHAR(150)*** | ***NO*** |  |  |

# STAFF

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *NAME* | *TYPE* | *NULL* | *KEY* | *EXTRA* |
| *TID* | ***INT*** | ***NO*** | ***PRIMARY KEY*** | ***AUTO\_INCREMENT*** |
| *TNAME* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *TPASS* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *QUAL* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *SAL* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *PNO* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *MAIL* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *PADDR* | ***TEXT*** | ***NO*** |  |  |
| *IMG* | ***VARCHAR(150)*** | ***NO*** |  |  |

# STUDENT

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *NAME* | *TYPE* | *NULL* | *KEY* | *EXTRA* |
| *ID* | ***INT*** | ***NO*** | ***PRIMARY KEY*** | ***AUTO\_INCREMENT*** |
| *RNO* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *NAME* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *FNAME* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *DOB* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *GEN* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *PHO* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *MAIL* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *ADDR* | ***TEXT*** | ***NO*** |  |  |
| *SCLASS* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *SSEC* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *SIMG* | ***VARCHAR(150)*** | ***NO*** |  |  |
| *TID* | ***INT*** | ***NO*** |  |  |

# SUB

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *NAME* | *TYPE* | *NULL* | *KEY* | *EXTRA* |
| *SID* | ***INT*** | ***NO*** | ***PRIMARY KEY*** | ***AUTO\_INCREMENT*** |
| *SNAME* | ***VARCHAR(150)*** | ***NO*** |  |  |

**CONCLUSIONS**

FINALLY THIS PROJECT PROVES TO BE A EFFICIENT SCHOOL MANAGEMENT PROJECT AS EVERY SINGLE PERSON IS ASSIGNED HIS PERSONAL DUTIES. ADMIN CAN MANAGE STUDENT AND TEACHER AND AT THE SAME TIME TEACHER MANAGES MARKS OF THE STUDENT AND ITS OWN DETAILS. THE MAJOR POWER IS ASSIGNED TO ADMIN TO INSERT STAFFS, CLASS, AND SUBJECT AND CAN ALSO DELETE ACCORDING TO HIS UNDERSTANDING. A PROPER ACCESSIBILITY HAS BEEN PROVIDED TO BOTH ADMIN AND TEACHER. ADMIN CAN ACCESS ALL THE DETAILS THAT WILL BE UPLOADED BY THE TEACHER. THIS PROJECT IS HIGHLY COMPACT AND FEASIBLE BECAUSE IT IS HASSLE FREE.

**FUTURE ENHANCEMENTS**

THIS PROJECT IS MADE USING PRESENT TECHNOLOGY BUT THIS CAN BE IMPLIMENTED BY USING UPCOMING TECHNOLOGIES AND CAN ALSO MADE SECURE USING END TO END INCRUPTION IN FUTURE. IN FUTURE WE CAN ELIMINATE THE ERRORS THAT CAN BE DEVELOPED USING THE DEVELOPMENT PHASE. WE CAN ALSO INCREASE THE PROPER FUNCTIONING ACCORDING TO THE NEED. WE CAN IMPLEMENT IT IN ANOTHER PLATFORM BY MOVING IT ADAPTIVE TO WORK IN NEW PLATFORM. WE CAN PERFORM CODING AND INTEGERATION SYSTEM TO ENSURE THAT EACH MODULE IS MOVING PROPERLY OR NOT TO INDICATE FURTHER ONES CONCEPTION.

**TESTING**

LETS ASSUME A PERSON BEHAVES AS AN ADMIN AND INSERT ANY DATA ITS OWN. THEN A POPPED UP MESSAGE PRETENDING THAT THE USER ENTERS VALID USERNAME AND PASSWORD WILL BE SHOWN. BUT IF USER ENTERS CORRECT DETAILS THEN HE CAN INSERT STAFF DETAILS CLASS, SECTION AS PER RECUIREMENT REFERING TO THE TEACHERS PANEL WHERE HE CAN INSERT ITS DETAILS BY PROVIDING SOME AMBIGUIOUS DATE THEN THE SAME WILL NOT BE SUBMITTED INFORMING THEM THAT THE DETAILS INSERTED ARE NOT AS PER THE SPECIFIED DATABASE LIKE INVALID EMAIL\_ID, PHONE NO. ETC HAVE BEEN INSERTED. LET SOME OF THEM ENTERS NAME IN FORM OF SOME NUMBER, PHONE NO. IN THE FORM OF SOME CHARACTERS. THEN THIS TYPE OF SITUATION MAY BE HANDLED BY THE TESTER AS PROPER VALIDATIONS ARE PERFORMED IN EACH SPECIFIED FIELD.

# ***REFERENCES:-***

* DATABASE SYSTEM CONCEPTS, SIXTH EDITION BYABRAHAM SILBERSCHATZ, HENRY F. KORTH, S.SUDARSHAN
* WIKIPEDIA <https://wikipedia.com>
* MYSQL DOCUMENTATION <https://dev.mysql.com/doc/>
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