

1.INTRODUCTION

1.1 OVERVIEW OF THE PROJECT

This project is a web based application developed for Marian college Kuttikkanam. This project can be used to store students record and properly manage the fee payment of these students. It also generates messages for due balances in student fee. The system is designed for fee management of college administration department. It makes searching record easier and faster. In existing system, college have to manually maintain information regarding to fee deposited by students. College management systems are complex and time consuming to maintain fees of students by that very difficult. It is not properly capable to manage student records with their fee details in a single place. By using this project at the organization, they can easily manage students fee details. It will reduce many time consuming tasks presents in the existing system. It can easily generate reports of fee payment and dues which will take hours on existing system. It can also use to send fee payment alert as SMS based on student's dues

2.SYSTEM STUDY

2.1 INTRODUCTION

The system study is the first phase of the system lifecycle. The importance of the system analysis phase is the establishment of the requirements for the system to be developed and installed. In system analysis, the entire task to be done is divided into separate components and then a detailed study is done in each of the components. Each of these components has to be linked and grouped in an orderly manner in order to achieve the objective.

System analysis includes the investigation and possible changes to the existing system. The analysis is used to gain an understanding of the existing system and what is required for it. And the final result of system analysis would be system description and set of requirements for a new system. If there is no such existing system, then analysis only defines the requirements. This new system may build a fresh or by changing the existing system. Development begins by defining a model of the new system and continues this model to a working system. The model of the system shows what the system must do to satisfy these requirements.

2.2 EXISTING SYSTEM

In existing system, college have to manually maintain information regarding to fee deposited by students. College management systems are complex and time consuming to maintain fees of students by that very difficult. It is not properly capable to manage student records with their fee details in a single place.

2.3 PROPOSED SYSTEM

The proposed system is developed in PHP. By using this project at the organization, they can easily manage students fee details. It will reduce many time consuming tasks presents in the existing system. It can easily generate reports of fee payment and dues which will take hours on existing system. It can also use to send fee payment alert as SMS based on student's dues. Also it will be easy to use due to its simple and user friendly interface.

2.4 REQUIREMENT SPECIFICATION

Server	: iis or apache
Front End	: HTML, php, css, java script
Platform	: Windows or Linux.
Back End	: MySQL 5.6
PHP version	: 5.6

3. SYSTEM DESIGN

3.1 INTRODUCTION

The creative aspect of any software is its design. The better design will be the quality and accuracy of the software that is developed. The design of an information system produces the details that state how a system will meet the requirement identified during system stage. System specialist often refers this stage as logical design. Here determines how the output is to be produced and in which format. Input data and master files have to be design to meet the requirement of the proposed output.

In any software design, initially the preliminary design is carried out, followed by a design. Relation between theoretical ideas and the resources available established during the course of design. System design is the process of design a new system. There are two steps in system design - logical and physical design. Logical design reviews the present physical system, prepares input and output specification. The physical design maps out the details of the physical system, plans the system implementation, devices a test and implementation, plan and specify any new hardware and software.

3.2 MODULE SPECIFICATION

The different modules in this project are:

- Login
This module is used to login into the system
- Fee Collection
This module is used to collect fee from the students
- Fee structure Management
This module is used to manage the fee structure of various courses
- Dues List Management
This module is used to retrieve the dues of students of various courses
- Fee Report Generation
This module is used to generate a report of payed fee
- Student Management
This module used to manage some student details
- SMS Alert
This module is used to send SMS alerts on fee dues

3.3 INPUT DESIGN

Input design is a design process of converting user oriented inputs to a computer based format. The keyboard is used as input media. Details are entered through data entry screens by keyboard. Outline data entry accepts commands and the data are displayed on the CRT screen for verification. The major approaches to input design are the menu and the prompt design. In each alternative, the user's options are predefined and the system is designed in a user friendly manner. Appropriate error messages are given when false details are entered. Design of a system in a menu driven fashion enables the user to select any option accordingly using simple keystrokes or mouse clicks.

The following are the features of the data entry screen for proposed system:

- I. User friendly:** - The proposed system is designed in a user friendly manner.
- II. Menu driven:** - The proposed system is menu driven. This helps the user to select any option designs at any time and operations are very easy.
- III. Interact:** - The package is developed on the support of menu driven program. When we look through the menu items we can easily understand what is mean, so a person with little experience can also operate the system.
 - i. Input design is the link between the information system and the users and those steps that are necessary to put transaction data into the usable form for processing data entry. The activity of putting data into the computer for processing can be activated by instructing the computer to read data from a written printed document or it can occur by keying data directly into system. The designs of input focusing on controlling the amount of input required controlling the errors, avoid delay extra steps, and keeping the process simple.
 - ii. The input form is highly designed with data validation, data integration and consistency with databases and application logic.
 - iii. The users are directed with standard messages and alerts which enables them to feed the data with accuracy. It also provides shot keys which make the feeling of data much simpler and easier.

Record types may contain the following data types: -

The primary key should be unique to the record. A primary key should be suitable for use as a parameter for storing values, which are available to a program. The data items, which are not, used as secondary key and which are not repeating groups.

The secondary key data items which are unique to the record and may if fixed length and a suitable code for addressing, be stored in the record rather than as a set.

3.4 OUTPUT DESIGN

The output is designed in such a way that it may acquire the full satisfaction of the system user. The output devices usually used are printers and VDU. So the output can be hardcopy outputs or display outputs. As the outputs are the most important source of information to the users, better design should improve the system's relationship with us and also help in decision making. The formatted output is designed in order to understand the facts at a glance. Each column is labeled with suitable headings. Another thing that is to be considered is the output device's capability, print quality, response time, requirements etc.

3.5 DATABASE DESIGN

A database is an organized mechanism that has the capability of storing information through which a user can retrieve stored information in an effective and efficient Manner. The data is the purpose of any database and must be protected. The database design is a two level process. In the first step, user requirements are gathered together and a database is designed which will meet these requirements as clearly as possible. This step is called Information Level Design and it is taken independent of any individual Database Management System (DBMS).

In the second step, this Information level design is transferred into a design for the specific DBMS that will be used to implement the system in question. This step is called Physical Level Design, concerned with the characteristics of the specific DBMS that will be used. A database design runs parallel with the system design. The organization of the data in the database is aimed to achieve the following two major objectives.

- Data Integrity
- Data independence

NORMALIZATION

One of the major tasks in designing a relational database is normalization. The process of normalization ensures that there will not be problems in updating the database and the operation of the various relations will not lead to inconsistent and incorrect data.

Normalization is the process of organizing data in a database. This includes creating tables and establishing relationship between those tables according to rules designed both to protect data and to make the database more flexible by eliminating two factors: Redundancy and inconsistent dependency, redundant data wastes disks space and creates maintenance problems. If data that exists in more than one place must be changed, the data must be changed in exactly the same way in all locations.

There are few rules for database normalization. Each rule is called a “normal form”, if the first rule is observed, the database is said to be in “first normal form”.

First Normal Form

A relation is in First Normal Form if and only if the domain of each attribute contains only atomic values, and the value of each attribute contains only a single value from that domain.

- Eliminate repeating groups in individual tables.
- Create a separate table for each set of related data.
- Identify each set of related data with a primary key
- Do not use multiple fields in a single table to store similar data.

Second Normal Form

A relation is said to be in 2NF if it is in 1NF and non-key attributes are functionally dependent on the key attributes.

- Create separate tables for sets of values that apply to multiple records
- Relate these tables with a foreign key.

Third Normal Form

Third normal form normalization will be needed where all attributes in a relation tuple are not functionally dependent only on the key attribute. If two non key attributes are functionally dependent then there will be unnecessary duplication of data. Eliminate fields that do not depend on the key. Values in record that are not part of that record's key do not belong in the table. In general, any time the contents of a group of fields may apply to more than a single record in the table, consider placing those fields in a separate table.

During the normalization process, first check whether the relations are in the first normal form, then in the second and finally in third normal form. To confirm to second and third normal forms, each non-key fields must give us information about the entire key. Thus normalization creates a database in which there is minimum redundancy of data.

A database is a repository of information. It is a collection of interrelated data stored with minimum redundancy to serve many users quick and efficiently. Relational database stores data in tables, which is turn, are composed of rows also known as records, columns also knows as fields.

Primary key - The key which uniquely identify records. They also notify the not null constraint.

Foreign key – Foreign key is a field that points to the primary key of another table.

DATABASE TABLE DESIGN

Tables are used to store information about various data.

Table-1 courses

Purpose: To course information

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	id	int(100)			No	None	AUTO_INCREMENT
2	name	varchar(100)			Yes	NULL	
3	dept_id	varchar(10)			Yes	NULL	
4	shortname	varchar(100)			Yes	NULL	
5	shortcode	varchar(100)			Yes	NULL	
6	degree	varchar(100)			Yes	NULL	
7	mode	varchar(100)			Yes	NULL	
8	stream	varchar(100)			Yes	NULL	
9	batch	varchar(100)			Yes	NULL	

Table-2 Fee_con

Purpose: To store fee concession information

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	id	int(11)			No	None	AUTO_INCREMENT
2	stu_id	varchar(10)			No	None	
3	amt	int(11)			No	None	
4	sem	int(11)			No	None	
5	sts	int(11)			No	None	

Table-3 fee_master

Purpose: To store fee structure

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	id	int(11)			No	None	AUTO_INCREMENT
2	name	varchar(15)			No	None	
3	type	varchar(5)			No	None	

Table-4 fee_pay

Purpose: To store fee payment

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	id	bigint(20)			No	None	AUTO_INCREMENT
2	reg_no	varchar(10)			No	None	
3	fee_id	int(11)			No	None	
4	amt	bigint(20)			No	None	
5	date	date			No	None	
6	res_no	varchar(50)			No	None	

Table-5 fee_type

Purpose: To store fee type

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	id	int(11)			No	None	AUTO_INCREMENT
2	fee_name	varchar(20)			No	None	
3	course_short_name	varchar(10)			No	None	
4	sem	int(11)			No	None	
5	fee_amt	int(11)			No	None	
6	adyr	int(11)			No	None	
7	stream	varchar(15)			No	None	
8	mode	varchar(15)			No	None	
9	degree	varchar(3)			No	None	
10	type	varchar(5)			No	None	
11	sts	int(11)			No	None	
12	GENERAL	int(11)			No	None	
13	OBC	int(11)			No	None	
14	FC	int(11)			No	None	
15	SEBC	int(11)			No	None	
16	ST	int(11)			No	None	
17	KPCR	int(11)			No	None	
18	OEC	int(11)			No	None	
19	SC	int(11)			No	None	

Table-6 log

Purpose: To store website log

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	id	int(11)			No	None	AUTO_INCREMENT
2	time	varchar(30)			No	None	
3	logs	text			No	None	

Table-7 login

Purpose: To store user credentials

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	id	int(11)			No	None	
2	username	varchar(20)			No	None	
3	pass	varchar(20)			No	None	
4	date	varchar(40)			No	None	
5	type	varchar(6)			No	None	

Table-8 pho

Purpose: To store parents mobile number

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	Roll_Number	varchar(100)			Yes	NULL	
2	Name	varchar(100)			Yes	NULL	
3	Course	varchar(100)			Yes	NULL	
4	Father__Guardian_name	varchar(100)			Yes	NULL	
5	Father__Guardian_Phone_Number	double			Yes	NULL	

Table-9 Students

Purpose: To store students details

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	regno	varchar(100)			Yes	NULL	
2	name	varchar(100)			Yes	NULL	
3	cat	varchar(100)			Yes	NULL	
4	course	varchar(100)			Yes	NULL	
5	course_id	double			Yes	NULL	
6	phone	bigint(20)			No	None	
7	sts	double			Yes	NULL	
8	hst	double			Yes	NULL	
9	stream	varchar(100)			Yes	NULL	

Table-9 template

Purpose: To store sms templates

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	id	int(11)			No	None	AUTO_INCREMENT
2	name	varchar(30)			No	None	
3	txt	text			No	None	

4. SYSTEM TESTING

4.1 INTRODUCTION

When a system is developed it is hoped that it performs properly. In practice however some errors always occur. The main purpose of testing an information system is to find the errors and correct them. A successful test is one which finds an error. The main objectives of the system test are:

- To ensure during operation the system will perform as per specification.
- To make sure that the system meets user requirements during operation.
- To verify that the controls incorporated in the system function as intended.
- To see that when correct inputs are fed to the system and the outputs are correcting.
- To make sure that during operation incorrect input processing and output will be detected.

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and coding. If the testing conducted successfully it will uncover errors in the software. As a secondary benefit, testing demonstrates and that performance requirements appear to have been made.

The scope of the system test should include both manual operations and computer operation system testing is comprehensive evaluation of the programs manual procedures, computer operation and control.

System testing is the process of checking if the developed system is working according to the original objectives and requirements. All the testing need to be conducted in accordance to the test conditions specified earlier.

4.2 TESTING METHODS

UNIT TESTING

Unit testing focuses verification efforts on the smallest unit of software design module. This is known as module testing. The modules are tested separately. This testing is carried out during the programming stage itself. In the testing step each module of the total of 10 modules in the system is found to be working satisfactory as regard to the expected output from the module.

INTEGRATION TESTING

Data can be lost across an 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 for constructing the program structure, while at the same time conducting test to uncover errors 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 connection is difficult because the vast expense of the entire program complicates the isolation of cause.

USER ACCEPTANCE TESTING

The system is validated by negotiating the existing and proposed system. The test evaluates the system in the real time environment with live data and finds it to be satisfied. This is done by the user. The various possibilities of the data are entered and response from the system tested once the acceptance.

VALIDATION TESTING

After integration testing the software is completely assembled as a package. Interfacing errors have been uncovered and corrected, and then test of software is conducted ie, validation test succeeds when software function in manner that can be reasonably expected by the client. Software validation is achieved through a series of Black Box Testing which confirms with requirements. Black Box testing is conducted at software interface. This test through is designed to uncover errors interfaces, is also used to demonstrates that software function is operational. Input is properly accepted; output is produced correctly. I made sure that the system solves the 'problem' and it satisfies all the customer requirements and functional requirements.

5. SCOPE FOR FURTHER DEVELOPMENT

We can develop this project with further advanced features including online payment, automated SMS alert etc..

6. CONCLUSION

CONCLUSION

Fee manager is a project which has been developed to ease out the difficult tasks in the college office. By using this project the office staffs can reduce their workload. It will help to track the students fee payment and dues easily. It can also be used to send fee alert to the students parents. By using this project at the organization, they can easily manage students fee details. It will reduce many time consuming tasks presents in the existing system. It can easily generate reports of fee payment and dues which will take hours on existing system. It can also be used to send fee payment alert as SMS based on student's dues

7. BIBLIOGRAPHY

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2. PHP THE COMPLETE REFERENCE – STEVEN HOLZNER
3. BLACK BOOK HTML – WILEY DREAMTECH

WEBSITE REFERRED

1. W3schools - <https://www.w3schools.com/php/default.asp>
2. PHP - <http://php.net/manual/en/intro-what-is.php>
3. Tutorial point - <https://www.tutorialspoint.com/php>

APPENDIX-A SCREEN SHOTS

Home Page

HOME

GENRES

A-Z LIST

RELEASING

25th DECEMBER

ADI KAPYARA KUTTAMANI

Adi Kapyara Kuttamani is a 2015 Malayalam comedy horror film directed by John Varghese and starring Dhyana Sreenivasan, Namitha Pramod, Aju Varghese, Neeraj Madhav, Vineeth Mohan, Mukesh and Bijukuttan. The film is jointly produced by Sandra Thomas and Vijay Babu under the banner of Friday Film House and ...

kjhvcghuj

uhghghv

Tarzen

kjhfgfxc

abcd

tryuio

Adi kapyara kuttamani

Adi Kapyara Kuttamani is a 2015 Malayalam comedy horror film directed by John Varghese and starring Dhyana Sreenivasan...

FEATURED MOVIES

Tarzen

2016

★☆☆☆☆

Tarzen

20106

★★★★☆

kjhvcghuj

2016

★☆☆☆☆

Tarzen

2016

★★★★★

abcd

2014

★☆☆☆☆

MOST POPULAR MOVIES

Tarzen

2016

★☆☆☆☆

Tarzen

20106

★★★★☆

Tarzen

2016

★★★★★

kjhvcghuj

2016

★☆☆☆☆

abcd

2014

★☆☆☆☆

Adi kapyara kuttamani

2016

☆☆☆☆☆

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MOVIES FAQ ACTION ADVENTURE COMEDY ICONS CONTACT US

P.G Department of Computer Applications

Page | 26

Dashboard

MAIN NAVIGATION

- Dashboard
- Collect Fee
- Fee Structure
- Fee Due
- Fee Report
- Fee Cons
- Template
- Activities
- Remove Student
- Update Phone Number
- Logout

Collect Fee

View Full Fee Due

Activities

- (Thu) 28-Feb-2019 02:02 PM
Login from IP:::1 by USER1
- (Fri) 22-Feb-2019 06:02 PM
Logout
- (Fri) 22-Feb-2019 06:02 PM
Login from IP:::1 by USER1
- (Sun) 17-Feb-2019 02:02 PM
Login from IP:::1 by USER1
- (Tue) 04-Dec-2018 05:12 AM
Login from IP:::1 by USER1
- (Mon) 03-Dec-2018 08:12 AM
Login from IP:::1 by USER1

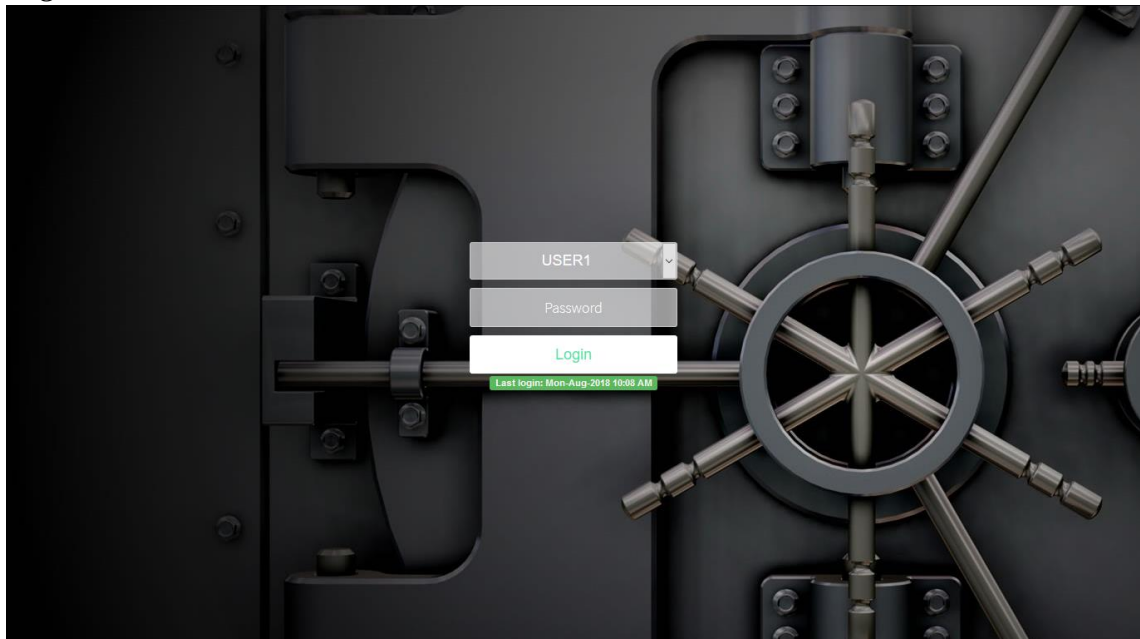
USER1

Password

Login

Last login: Mon-Aug-2018 10:00 AM

Login



Fee Due

USER1

MAIN NAVIGATION

- Dashboard
- Collect Fee
- Fee Structure
- Fee Due
- Fee Report
- Fee Cons
- Template
- Activities
- Remove Student
- Update Phone Number
- Logout

View Fee Due By

VIEW BY ADMISSION YEAR
VIEW BY COURSE

Select Criteria

Course Name :
Admission Year :
Semester:

Bachelor of Computer Applications-Aided-Re
2016
1

LOAD DATA

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**Fee Collec
t**

USER1

MAIN NAVIGATION

- Dashboard
- Collect Fee
- Fee Structure
- Fee Due
- Fee Report
- Fee Cons
- Template
- Activities
- Remove Student
- Update Phone Number
- Logout

Select Criteria

Course Name:
Admission Year :

Bachelor of Computer Applications
2016

LOAD

Student List:

#	Name	Reg No	
1	Aby Thomas	16ubc101	COLLECT
2	Ajith jiji	16ubc102	COLLECT
3	ajithkumar.r.p	16ubc103	COLLECT
4	ALAN ROY	16ubc105	COLLECT
5	Alan Satheesh	16ubc106	COLLECT
6	Alant sabu	16ubc107	COLLECT