MINI PROJECT
REPORT

HOME-ASSIST

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ON

HOME ASSIST

SUBMITTED BY:

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IN PARTIAL FULFILMENT FOR THE AWARD
Of
B.TECH DEGREE
In
COMPUTER SCIENCE AND ENGINEERING

SCHOOL OF ENGINEERING
COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

KOCHI-682022

MARCH,2016

Division of Computer Engineering
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CERTIFICATE

Certified that this is a bonafide record of the Mini Project work titled

HOME-ASSIST

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of VI semester Computer Science & Engineering in the year 2016 in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science & Engineering of Cochin University of Science & Technology.

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ACKNOWLEDGEMENT

The completion of our project would not have been possible without the kind support and help of many individuals. We would like to extend our sincere thanks to all of them. We are highly indebted to Dr. LATHA R. NAIR for her guidance and constant supervision by providing us with the necessary information regarding the project and also for her support in completing the project. We also take this opportunity to express a deep sense of gratitude to our class coordinator, Ms. SHEENA S. for her cordial support, valuable suggestions and guidance. We would also like to thank our respected Head of the Division, Dr. ANCY ZACHARIAH, for allowing us to use the facilities available. Our thanks and appreciations also go to our classmates who have willingly helped us out with their abilities. We also thank all our faculty members for steering us through the tough as well as easy phases of the project in a result oriented manner.

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ABSTRACT

Home Assist is a website which aims at providing a gamut of vital services to any person who manages household services.Paying our bills promptly will help us avoid late fees and interest charges. If our bills and Expense Records are not kept organised, we will end up with unnecessary late fees, or end up paying some bills twice and forgetting to pay others, only finding out about it when the debt collector is at our door.This helps to show us how to keep our finances in good order with easy clicks.

User can see at a glance what bills have been paid and what is left to pay. It is simple and only takes about two minutes each time we receive a bill.With facility of bill payment reminders, it also help go through previous and current Expenses month-wise. It offers facilities like making to-do list which will manage Personal and Professional events or tasks.

Provision for viewing Regional Calender(1900-2050) which is used by the Kerala Government Officials and Staffs. It is a solar and sidereal Hindu Calendar used in Kerala, India. All temple events, festivals and agricultural events in the state are decided according to the dates in the this calendar. User can view details of any particular date regarding Stars, Moon Transitions and Nazhika.

This website will be easy to use, it can plan tasks, set bill payment reminders and manage expenses along with view of the Regional Calendar.

Contents

1 INTRODUCTION

This gives an overview about the Aim, Objectives, Background and Operational Environment of the system.

1.1 PROJECT AIMS AND OBJECTIVES

The Project aims and objectives that will be achieved after completion of this project are as follows:

a) Users are allowed to Manage and Update their profile.

b) Once the profile has been created the user gets multiple options for home assistance.

c) There will be an option for viewing the Calender with notifications about the events like festivals, Tasks etc.

d) The user can view Expense Details which will give clear idea about the statistics of the Expense.

e) The user can maintain his list of Personal and Professional Events and Task to be Attended/Completed and they will be notified accordingly.

g) The system is developed to cope up with the current issues and problems of difficulty in searching the details. The system can add New User, Validate User and is also bug free.

h) Save Time: Users are able to manage any household activities by just few clicks of mouse and few search keywords thus saving their valuable time.

1.2 BACKGROUND OF PROJECT

Home Assist is a Web Portal which which aims at providing variety of services to any person who manages household services across different geography. The service offered will enable the user to map his profile without a tiresome search of different Expense Details, the user can manage all the household details just from one platform.User can set Reminders of Events or Task stores in To-Do List along with the view of the Regional Calender. Provision of viewing a particular date in detail like Stars, Nazhika and Moon Transitions. The users can edit their profile, store important reminders which they often tend to forget the upcoming events will be displayed prior so that the user get to know about the event.

1.3 OPERATIONAL ENVIRONMENT

PROCESSOR	INTEL CORE PROCESSOR OR BETTER PERFORMANCE
OPERATING SYSTEM	Operating System independent, Web Application is hosted on Apache web server on windows
MEMORY	1GB RAM OR MORE
HARD DISK SPACE	MINIMUM 3 GB FOR DATABASE USAGE FOR FUTURE
DATABASE	MySQL

Table 1: Operational Environment

2 SYSTEM STUDY

In this chapter, the developing process of Home-Assist including its Feasibility, Precision, Functional Requirements and Details about existing and proposed system are discussed and analyzed. Feasibility will tell how feasible it is to develop this project both, technically and economically. Precision gives us an overall idea of how much precise the project is. Existing system gives us the detailed description of the existing system and Proposed system gives detailed description of the Proposed system. Besides that, existing and proposed systems provides a view of how the proposed system will be more efficient than the existing one.

2.1 FEASIBILITY

Feasibility Study aims to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats present in the environment, the resources required to carry through, and ultimately the prospects for success. This project is more like a third party Home Management System. However such home management system already exists in the form of thehappyhousewife.com, homemanagement.hu and many more but what differentiates this project from others is that we have included a Malayalam/ English Calender with details from 1900-2050. All the major festivals and important events, ceremonies in temples depends on this calender and its Nakshatras. The user can make queries from this calender about these events. All of the existing websites do not check for such details. This project also provides help to the user to reduce the paper work for maintenance of the bill records.

Technical Feasibility:
The Technical feasibility of the proposed system is so high. As we know all offices are computerized nowadays so there is no extra cost of purchasing computers or printers or any related accessories. As our software is web-based so just an active server like XAMPP and though we use MySQL database it’s easy for network usage too.

Operational Feasibility:
As the proposed system is mainly based on mouse clicks. We don't require a skilled System Operator for same, Easy Interface ensure user-friendliness. Hence the system assures operational feasibility to a greater extend.

Economic Feasibility:
Economic feasibility of new system is quite interesting because our project doesn't need much economy for the implementation and operation as stated above. As said almost all offices are computerized to implement Home Assist there is no extra initial investment required.

Hence we can firmly believe that this project is highly feasible and has an advantage for all users. This project would be a new addition in the field of household management to the existing market with its own uniqueness. But with already giant experts present in this field, to increase the growth of this project would be an uphill task with lots of difficulties upfront.

2.2 PRECISION

Precision does not mean that the measurements are close to the target value– it means that the measurements are close to one another. They may or may not be near the target value. “Home Assist” is not just a Home Management Portal but it also helps in enhancing the statistics. Hence we can say that the search results in the View Expense page will be highly precise on the filters they choose. The options are provided for viewing monthly as well as yearly bill records. This would give them an idea about all the expenditures from one platform, instead of keeping multiple bills and adding them, which often becomes a tiresome job. The users also have the advantage of making prior plans with the help of the Calender that lists all the Festival Dates and Holidays. After finalizing the plans they can store the information in the "To-Do List". This will set a reminder for the user and the user will be notified as per the notification field. Therefore it can be said that this web application is precise but not fully accurate. However it can always be increased by increasing the complexity of filter more and more. There is always a scope of improvement in every project in order to make it better than the existing one.

2.3 FUNCTIONAL REQUIREMENTS

In Software Engineering (and System Engineering), a Functional Requirement defines a function of a system and its components which is described as a set of Inputs, Behavior and Outputs.
The User's Profile will be created by themselves and user would be eligible to make changes in the uploaded details. Each user will have a unique User Id that can be specified by the user itself. The user id will serve as the unique key that would be used for accessing the details of the information entered in the database and new registration can be done using Sign Up page.
Therefore, we can say that this project has 4 modules namely:

ACCOUNT
EXPENSE
REMINDERS
CALENDER

Here, all the modules are interrelated to one another. The user can create an account and manage all the modules themselves except the calender module that has been designed using the online open source library.

A)ACCOUNT

User Login
This feature is used by the user to login into system. They are required to enter user id and password before they are allowed to enter the system.The user id and password will be verified and if invalid id is there user is not allowed to enter the system. User Id is created at the time of registration itself. The system must only allow user with valid id and password to enter to

the system. The system performs authorization process which decides what user level can access. The user must be able to logout after they finished using system.

Register New User
This feature can be used by a new user to create account and accordingly new login credentials are generated as per the inputed details. System must be able to verify information and provide an option to the user to edit the necessary profile details .

B)EXPENSE

This feature allows to add and view expense details to the expense system database, beside the general expense user also has an option for Medical and Educational descriptions and related details.

Add Expense
This feature is meant for adding the monthly expenditures and the details into the database using the unique User Id of the user. There are three sections General Expense, Medical Expense and Educational Expense, they are managed using separate databases.

View Expense
This feature is meant for viewing the expense, the user can filter the details by selecting the option specific to their needs.The result will be displayed in a tabular form which will help user to get the statistics about the expenditures.

C)REMINDERS

This features is used for setting reminders or making a "To-Do List". This stores events, birthdays, bill due dates etc. Beside storing the details it also shows notifications about the upcoming events or tasks. The event reminder can be set as per the user settings to show notification. This feature helps to enhance efficiency of the Home Management by providing a time-line for the tasks to be performed.

D)CALENDER

This feature is the unique aspect of this project the Gregorian Calender serves as the main frame of the Regional Calender. We have implemented traditional calender used in Kerala using an open source library for its implementation i.e kollavarsham.org. The Malayalam months are named after the Signs of the Zodiac.

There are 12 Malayalam Months:
Chingam, Kanni, Thulam, Vrischikam, Dhanu, Makaram, Kumbham, Meenam, Medam, Edavam, Midhunam, Karkidakam.

There are 7 Week-Days:
Njayar, Thinkal, Chowa, Budhan, Vyazham, Velli, Shani.

There are 27 Nakshatras or Stars in the zodiac belt:
Ashwathi, Bharani, Karthika, Rohini, Makayiram, Thiruvathira, Punartham, Pooyam, Aayilyam, Makam, Pooram, Uthram, Atham, Chithira, Chothi, Vishakham, Anizham, Thrikketta, Moolam, Pooradam, Uthradam, Thiruvonam, Avittam, Poororuttathy, Uthruttathy, Revathy.

The Malayalam Calendar months are named after the constellations in which the Sun is seen during the period. It is a dynamic calender from the year 1900-2050. We have also used a database that store the details about the festivals, the Nazhika's i.e the duration of a star in a day and the Star corresponding to each day.we have calculated star duration using a simple relation that connects hours and nazhika. As per the relation one hour is equal to two and half nazhika. The user can make query to fetch the details of a day such as stars , moon position , festivals etc. The calender also shows the Moon Transitions that serve in two Pakshas -Krishna Paksha and Shukla Paksha. The calender can be displayed in both English and Malayalam.

2.4 EXISTING SYSTEM

In the current ecology of Home Management Systems the user do not have an option for efficient home management. There is no single platform which caters to the needs of the users. Leading to a tiresome job of maintaining all the bills and summing them up to find monthly expenses. Rather this can be generated automatically from our Management Portal. While the existing systems are too time consuming .

Talking from the perspective of the users who have to manage expense, it is a headache to go through all the paper based bills. Also such records may fail to highlight the monthly and yearly expenditures in a proper way.

In the busy schedule, Sometimes a person may forget various important task. Its not always possible to maintain a dairy and search through the pages. In such condition a person might forget to accomplish his tasks.

2.5 PROPOSED SYSTEM

The proposed system aims to solve issues stated above and reduce burdens of paper based bills. User creates a profile and can add his monthly expense into the data base and fetch them and plan out a monthly budget. The user also uploads bills along with the relevant details.

If the user is already added or present in the database they can log into the account and do various functions.

If the user has added details about his expenditures like general expense, medical expense or the educational expense. They would be able to view the entries as per the view request. Once the expense is selected, it can be changed later based on the User's choice.

The option for the "To-Do List" enables a user to maintain a reminder database. This feature provides notification to the user so that he/she does not forget the task or any event in specific. These notifications are displayed on webpage itself by fetching the reminders from the database as per the users choice.

Apart from this, there are many amendments which can be done to this project in order to implement it on a larger scale.

Links to make payment from the the web page itself. Moreover providing a payment gateway. The calender can be enhanced by including other Regional Calenders too. Moreover in order to increase the value of this website, a Mobile Application can be developed in future so that users can operate it any time and make it more user friendly.

Further more amendments can be done in this project in order to make it more valuable which could be used by large number of users throughout the world for managing not just house hold but also schools, shops or any such small firms. Such type of a website is not present in the market and it's a new concept where the work of the House Hold manager will be provided efficiently without any ambiguity.

2.6 SOFTWARE AND HARDWARE REQUIREMENTS

This section describes the Software and Hardware Requirements of the system. Software requirements deal with defining software resource requirements and prerequisites that need to be installed on a computer to provide optimal functioning of an application.A hardware requirements list is often accompanied by a Hardware Compatibility List (HCL), especially in case of operating systems. A HCL lists tested, compatible, and sometimes incompatible hardware devices for a particular operating system or application.

2.6.1 SOFTWARE REQUIREMENTS

Operating System- This web application is operating system independent and runs on any operating system running a web server (preferably Apache on Window).

Database- MySQL is used as database as it easy to maintain and retrieve records by simple queries which are in English language which are easy to understand and easy to write.

Development tools and Programming Languages- HTML is used to write the whole code and develop webpages with CSS, JavaScript for styling work and PHP for sever side scripting.

2.6.2 HARDWARE REQUIREMENTS

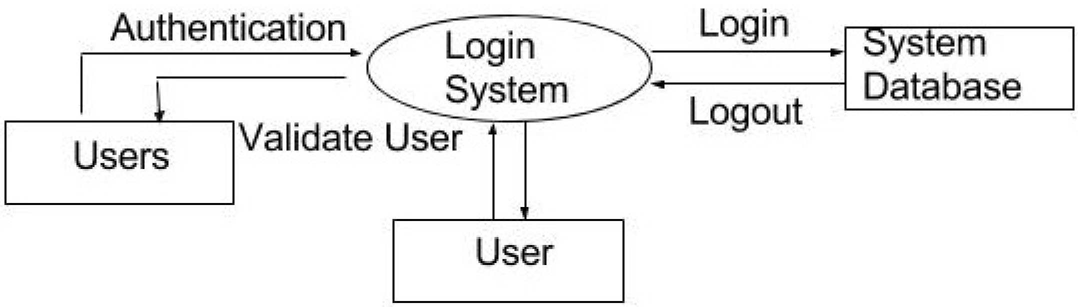
Intel Core i5 2nd Generation is preferred as a processor because it is faster than other processors and is Reliable and Stable. Anyway, Pentium 4 or more for optimum performance can be said to be minimum requirement for system to be executed effectively.

RAM 1 GB if used will provide fast reading and writing capabilities and will in turn support in processing.

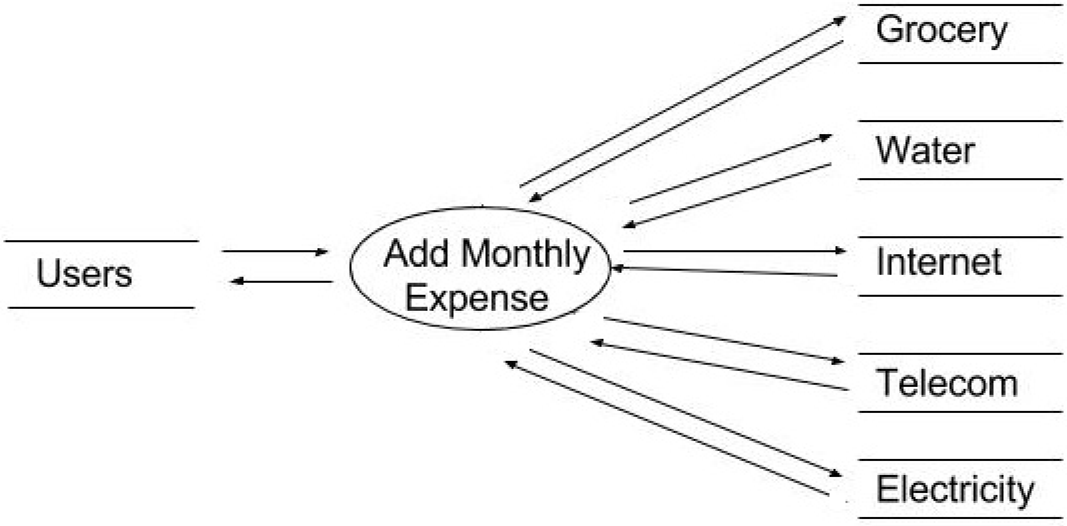
3 SYSTEM DESIGN

3.1 DATA FLOW DIAGRAMS

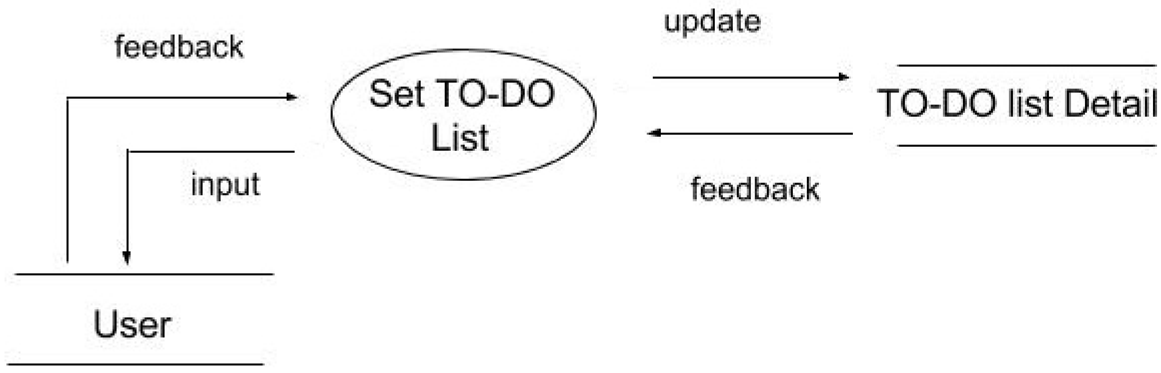
3.1.1 Log In



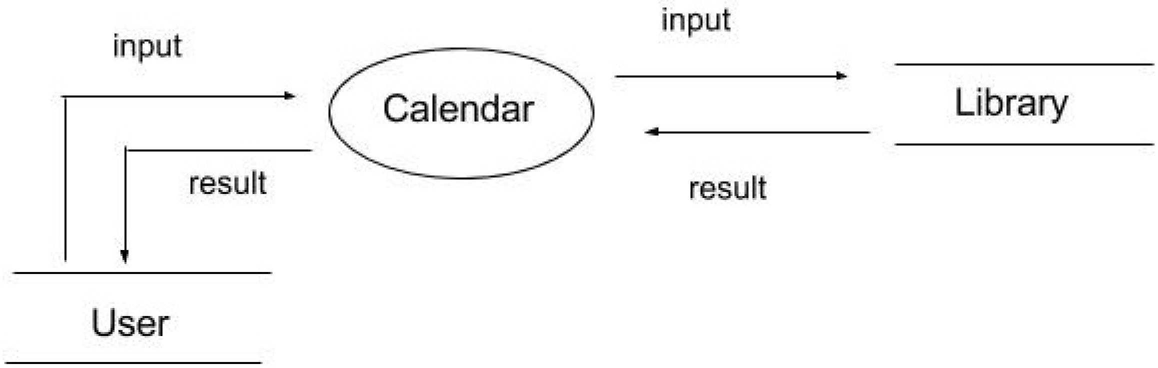
3.1.2 Expense Module



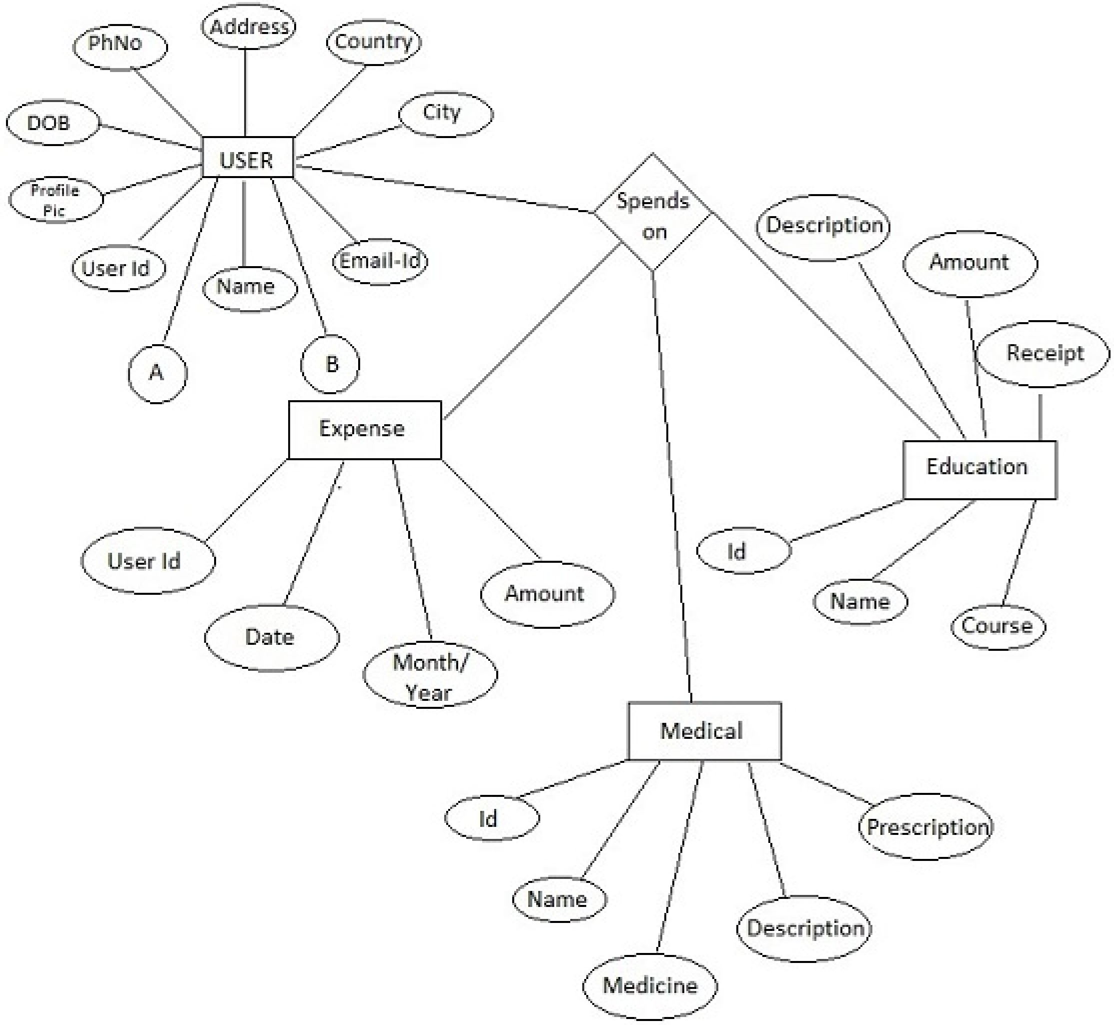
3.1.3 Reminder/ To-Do Module



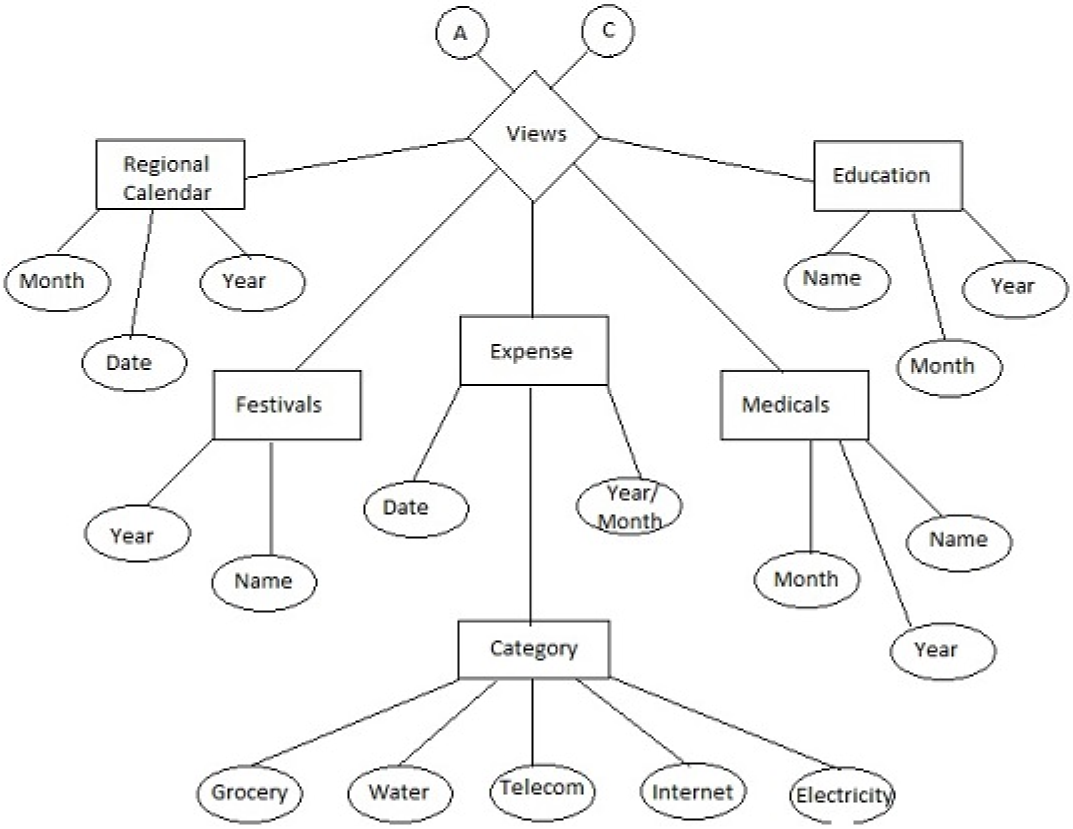
3.1.4 Calender Module



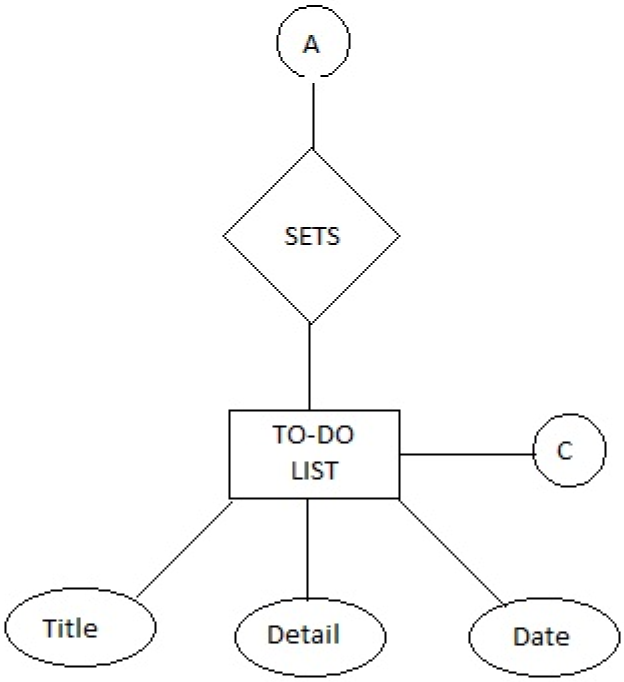
3.2 ER DIAGRAM



Views


A
C
Views
Regional Calendar
Month
Date
Year
Festivals
Year
Name
Expense
Date
Year/ Month
Category
Grocery
Water
Telecom
Internet
Electricity
Education
Name
Month
Year
Medicals
Month
Year
Name

Reminder/ To-Do List



3.3 TABLE DESIGN

In the Table Design section, we have shown the various table that we have been used in the database and they serve the purpose of storing the information that are being entered by the user.

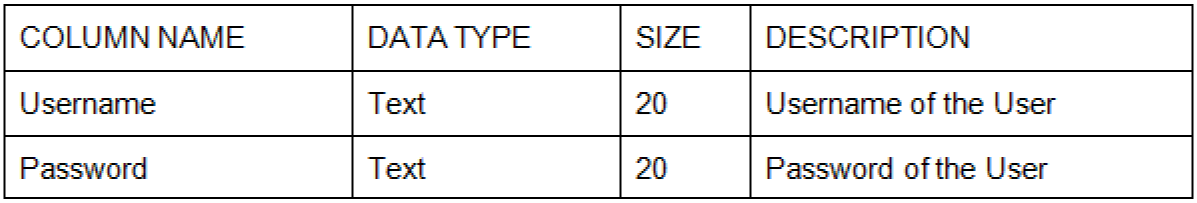
Each module has different sets of tables corresponding to its needs.

The **Account Module** uses the Profile Table to enter the details of the user and use the result when an existing user wants to Login into the system or in case of New Registration.

The **Expense Module** make use of three tables Expense, Medical and Educational. These tables store the relevant details of the various fields and helps the user to retrieve the information according to the query.

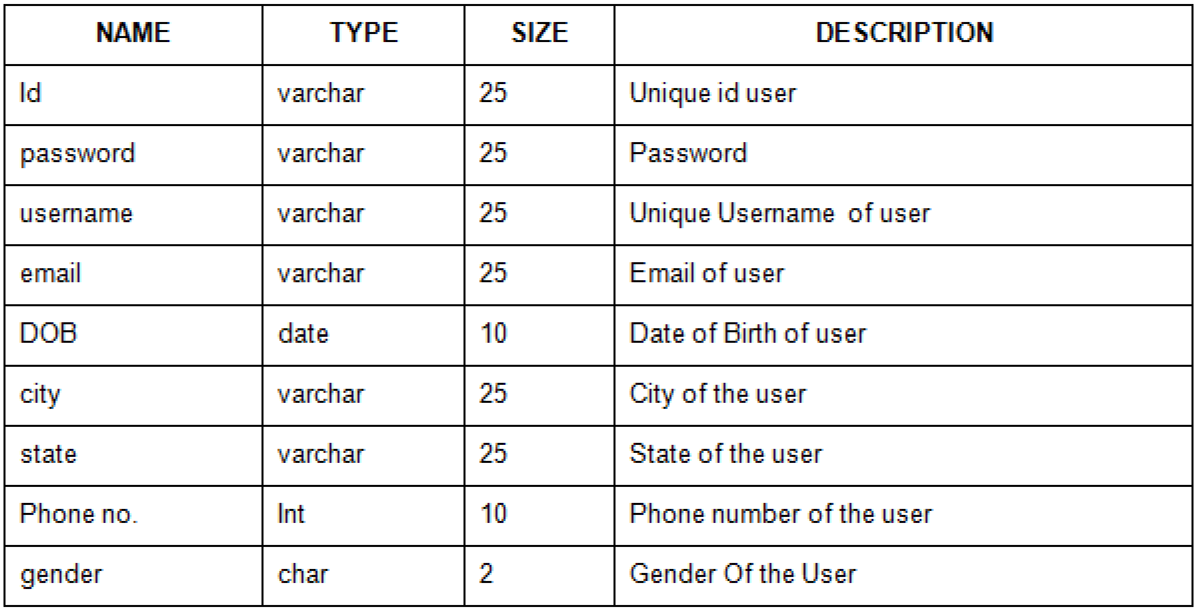
The **Reminder Module** uses the To-Do List Table that stores different sets of reminders and events. This table is used to fetch the notification date or time and notify the user about the upcoming events accordingly.

The **Calender Module** is being generated from the open source library kollavarsham.org, we have stored extra details about the calender and the events corresponding to the dates which are stored in the CALENDER table. Proper Nazhika calculations has been performed on the basis of daily sunrise and sunset time.One hour is equivalent to two and half Nazhika,this relation has been utilized for the calculation.



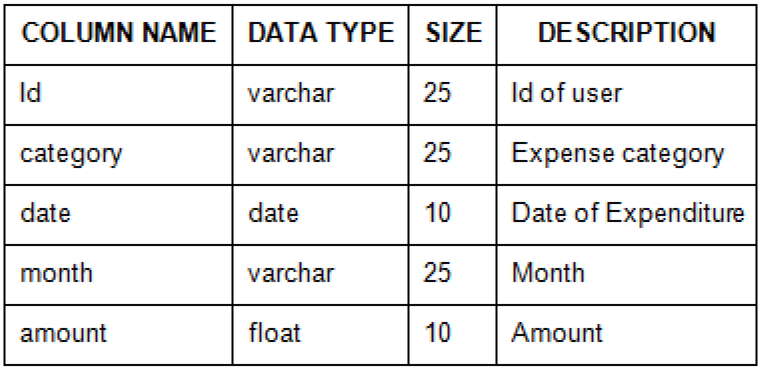
COLUMN NAME	DATA TYPE	SIZE	DESCRIPTION
Username	Text	20	Username of the User
Password	Text	20	Password of the User

Login System



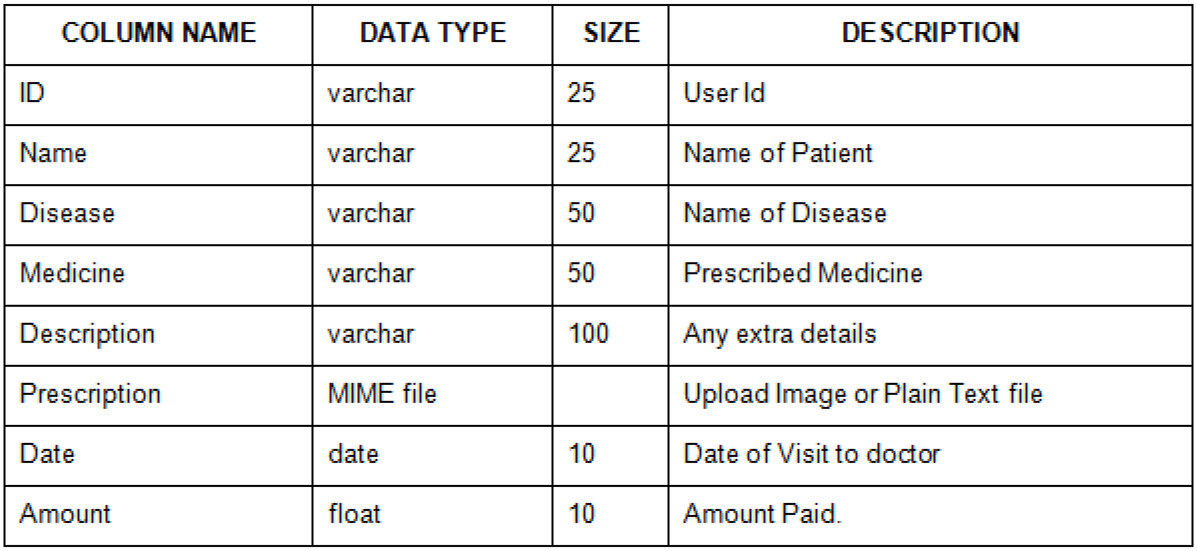
NAME	TYPE	SIZE	DESCRIPTION
Id	varchar	25	Unique id user
password	varchar	25	Password
username	varchar	25	Unique Username of user
email	varchar	25	Email of user
DOB	date	10	Date of Birth of user
city	varchar	25	City of the user
state	varchar	25	State of the user
Phone no.	Int	10	Phone number of the user
gender	char	2	Gender Of the User

User Profile



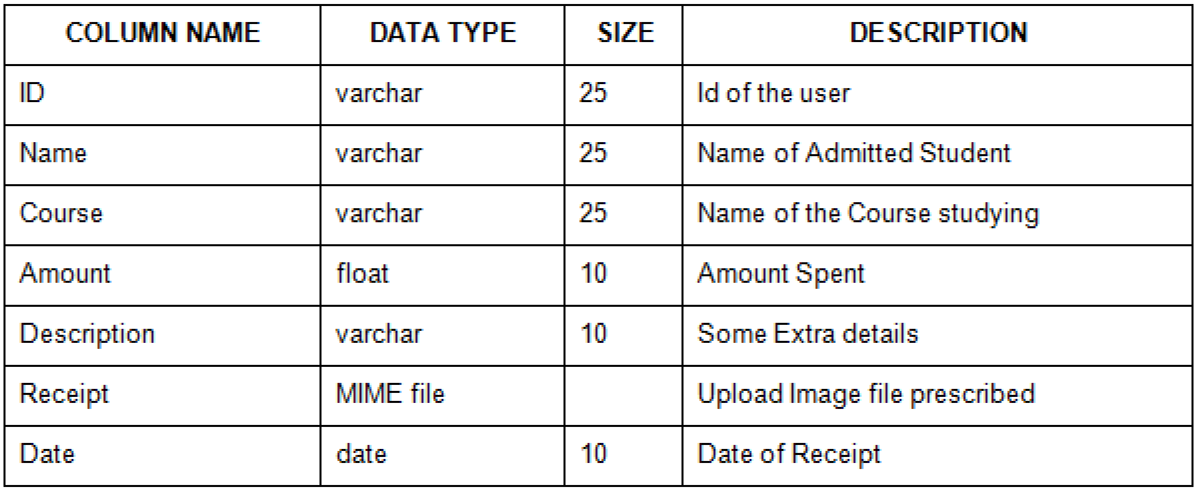
COLUMN NAME	DATA TYPE	SIZE	DESCRIPTION
Id	varchar	25	Id of user
category	varchar	25	Expense category
date	date	10	Date of Expenditure
month	varchar	25	Month
amount	float	10	Amount

Expense



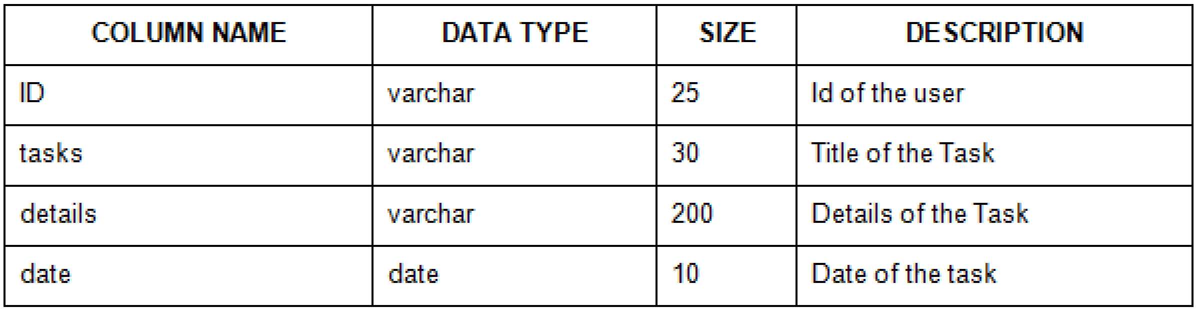
COLUMN NAME	DATA TYPE	SIZE	DESCRIPTION
ID	varchar	25	User Id
Name	varchar	25	Name of Patient
Disease	varchar	50	Name of Disease
Medicine	varchar	50	Prescribed Medicine
Description	varchar	100	Any extra details
Prescription	MIME file		Upload Image or Plain Text file
Date	date	10	Date of Visit to doctor
Amount	float	10	Amount Paid.

Medical



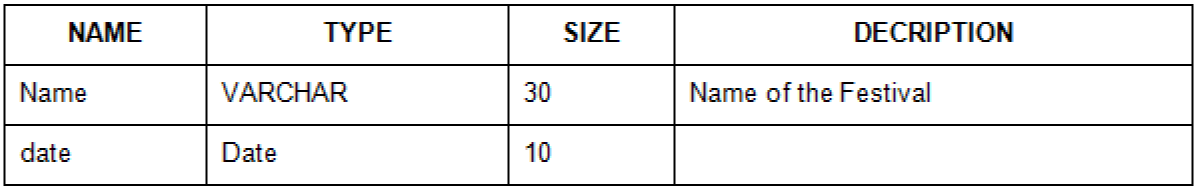
COLUMN NAME	DATA TYPE	SIZE	DESCRIPTION
ID	varchar	25	Id of the user
Name	varchar	25	Name of Admitted Student
Course	varchar	25	Name of the Course studying
Amount	float	10	Amount Spent
Description	varchar	10	Some Extra details
Receipt	MIME file		Upload Image file prescribed
Date	date	10	Date of Receipt

Education



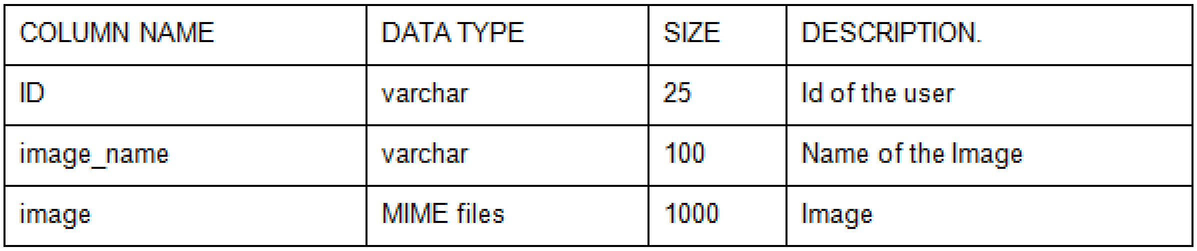
COLUMN NAME	DATA TYPE	SIZE	DESCRIPTION
ID	varchar	25	Id of the user
tasks	varchar	30	Title of the Task
details	varchar	200	Details of the Task
date	date	10	Date of the task

To-Do List



NAME	TYPE	SIZE	DECRIPTION
Name	VARCHAR	30	Name of the Festival
date	Date	10	

Festivals



COLUMN NAME	DATA TYPE	SIZE	DESCRIPTION.
ID	varchar	25	Id of the user
image_name	varchar	100	Name of the Image
image	MIME files	1000	Image

Uploads

4 IMPLEMENTATIONAL TOOLS AND TESTING

The whole Project Deveplopment is divided in two parts the Front-End and the Back-End.

4.1 FRONT END TOOLS

The front end is designed using of HTML, CSS and JAVA SCRIPT.

4.1.1 HTML

HTML or Hyper Text Markup Language is the main markup language for creating web pages and other information that can be displayed in a web browser. HTML is written in the form of HTML elements, consisting of tags enclosed in angle brackets (like <html>), within the web page content. HTML tags most commonly come in pairs like <h1> and </h1>, although some tags represent empty elements and so are unpaired, for example <img>. The first tag in a pair is the start tag and the second tag is the end tag (they are also called opening tags and closing tags). In between these tags web designers can add text, further tags, comments and other types of text-based content. The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page. HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages.

4.1.2 CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language.

While most often used to style web pages and interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages use CSS style sheets to describe their presentation. CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple pages to share formatting, and reduce complexity and repetition in the structural content (such as by allowing for table less web design). CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braillebased, tactile devices. It can also be used to allow the web page to display differently depending on the screen size or device on which it is being viewed. While the author of a document typically links that document to a CSS file, readers can use a different style sheet, perhaps one on their own computer, to override the one the author has specified. However if the author or the reader did not link the document to a specific style sheet the default style of the browser will be applied. CSS specifies a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities or weights are calculated and assigned to rules, so that the results are predictable.

4.1.3 JAVASCRIPT

JavaScript (JS) is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously and alter the document content that is displayed. It is also being used in server-side programming, game development and the creation of desktop and mobile applications. JavaScript is a prototype-based scripting language with dynamic typing and has first class functions. Its syntax was influenced by C. JavaScript copies many names and naming conventions from Java, but the two languages are otherwise unrelated and have very different semantics. The key design principles within JavaScript are taken from the Self and Scheme programming languages. It is a multi-paradigm language, supporting object-oriented, imperative and functional programming styles. The application of JavaScript to use outside of web pages—for example, in PDF documents, site-specific browsers and desktop widgets—is also significant. Newer and faster JavaScript VMs and platforms built upon them (notably Node.js) have also increased the popularity of JavaScript for server-side web applications.

4.2 BACK END TOOLS

The Back-End is designed using PHP and MySQL which is used to design the databases.

4.2.1 PHP

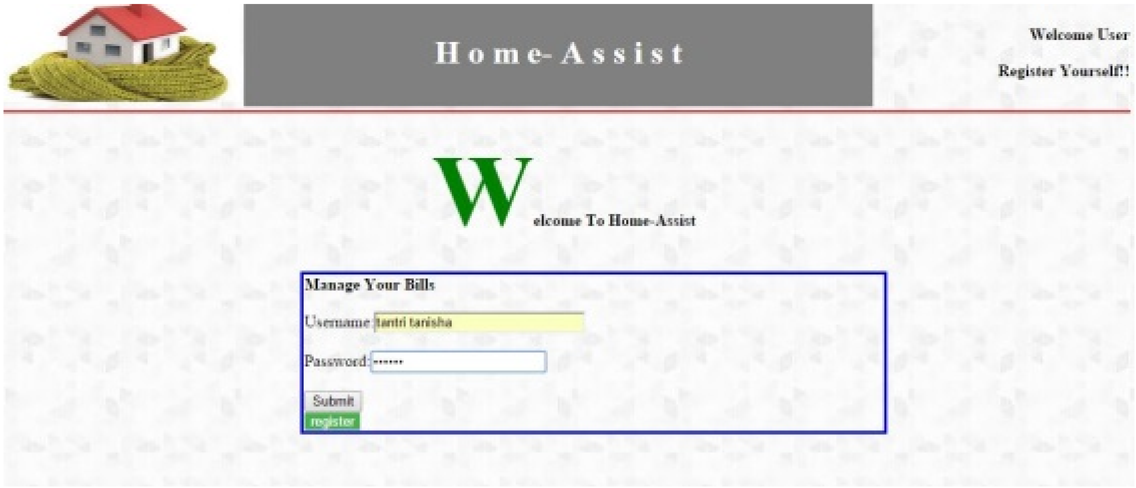
PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP is now installed on more than 244 million websites and 2.1 million web servers. Originally created by Rasmus Lerdorf in 1995, the reference implementation of PHP is now produced by The PHP Group. While PHP originally stood for Personal Home Page, it now stands for PHP: Hypertext Preprocessor, a recursive backronym. PHP code is interpreted by a web server with a PHP processor module, which generates the resulting web page: PHP commands can be embedded directly into an HTML source document rather than calling an external file to process data. It has also evolved to include a command-line interface capability and can be used in standalone graphical applications. PHP is free software released under the PHP License. PHP can be deployed on most web servers and also as a standalone shell on almost every operating system and platform, free of charge.

4.2.2 MySQL

MySQL ("My SQL", officially, but also called "My Sequel") is the world's second most widely used open-source Relational Database Management System (RDBMS). It is named after co-founder Michael Widenius daughter, My. The SQL phrase stands for Structured Query Language. The MySQL development project have made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. MySQL is a popular choice of database for use in web applications, and is a central component of the widely used XAMPP Open Source web application software stack (and other 'AMP' stacks). XAMPP is an acronym for "Linux, Apache, MySQL and Perl/ PHP/ Python". Free-software-open source projects that require a full-featured database management system often use MySQL.

4.3 SCREENSHOTS

LOGIN

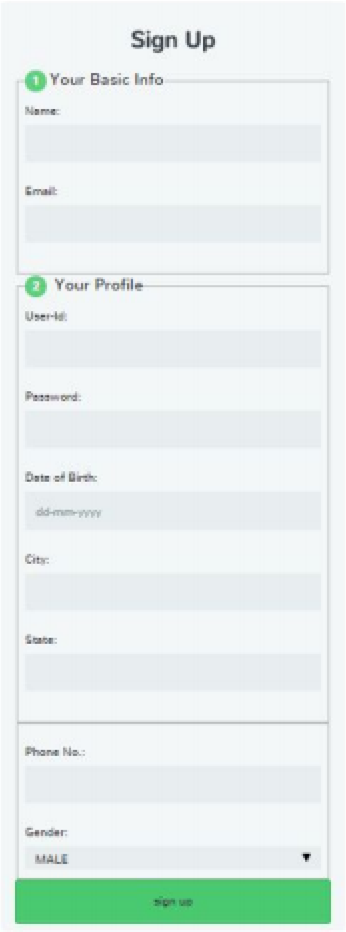


Manage Your Bills

Username: tantri tanisha

Password: ••••••

SIGNUP



Sign Up

1 Your Basic Info

Name:

Email:

2 Your Profile

User-Id:

Password:

Date of Birth: dd-mm-yyyy

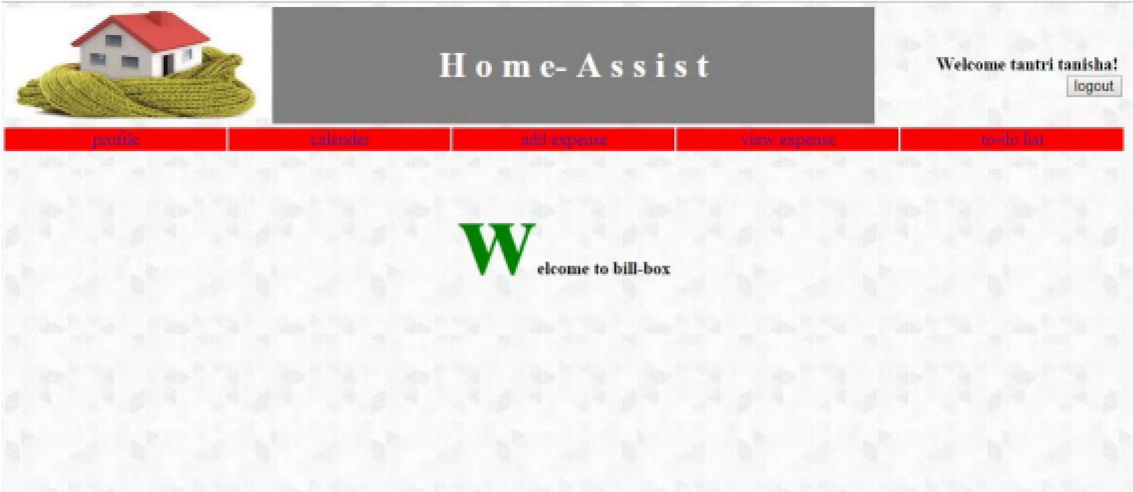
City:

State:

Phone No.:

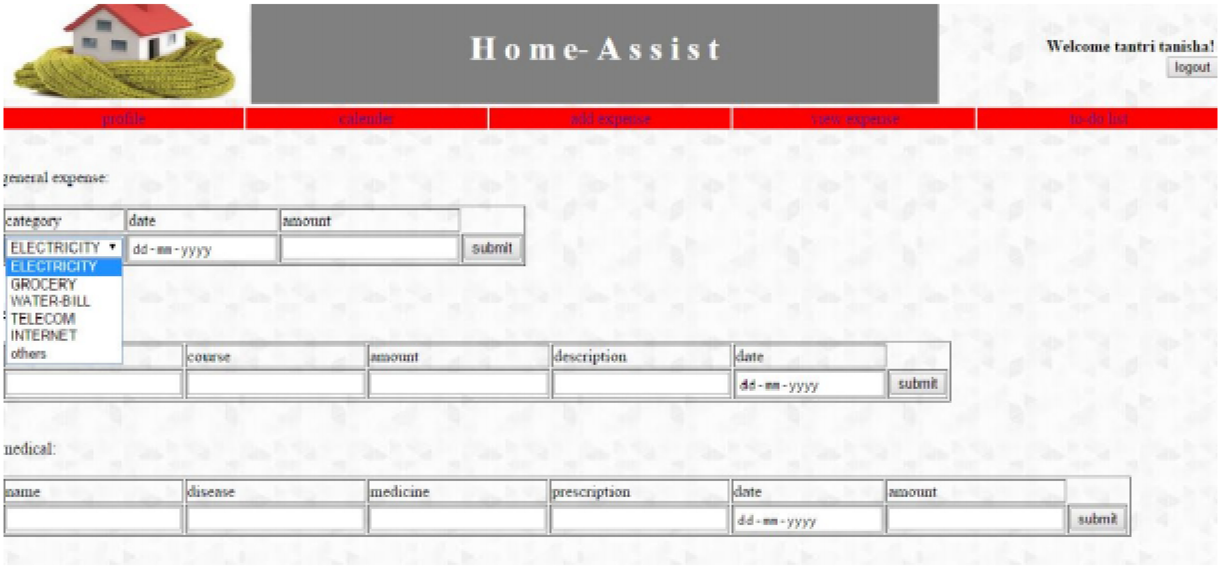
Gender: MALE ▼

HOME PAGE



Welcome to bill-box

ADD EXPENSE



general expense:

category	date	amount	
ELECTRICITY ▾	dd-mm-yyyy		submit

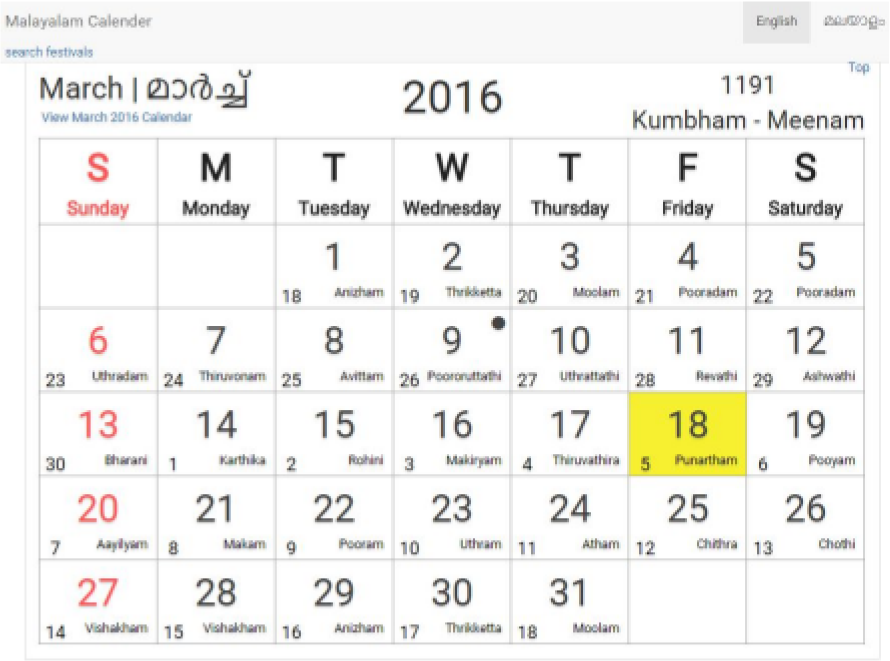
ELECTRICITY
GROCERY
WATER-BILL
TELECOM
INTERNET
others

	course	amount	description	date	
				dd-mm-yyyy	submit

medical:

name	disease	medicine	prescription	date	amount	
				dd-mm-yyyy		submit

Calender Page in English



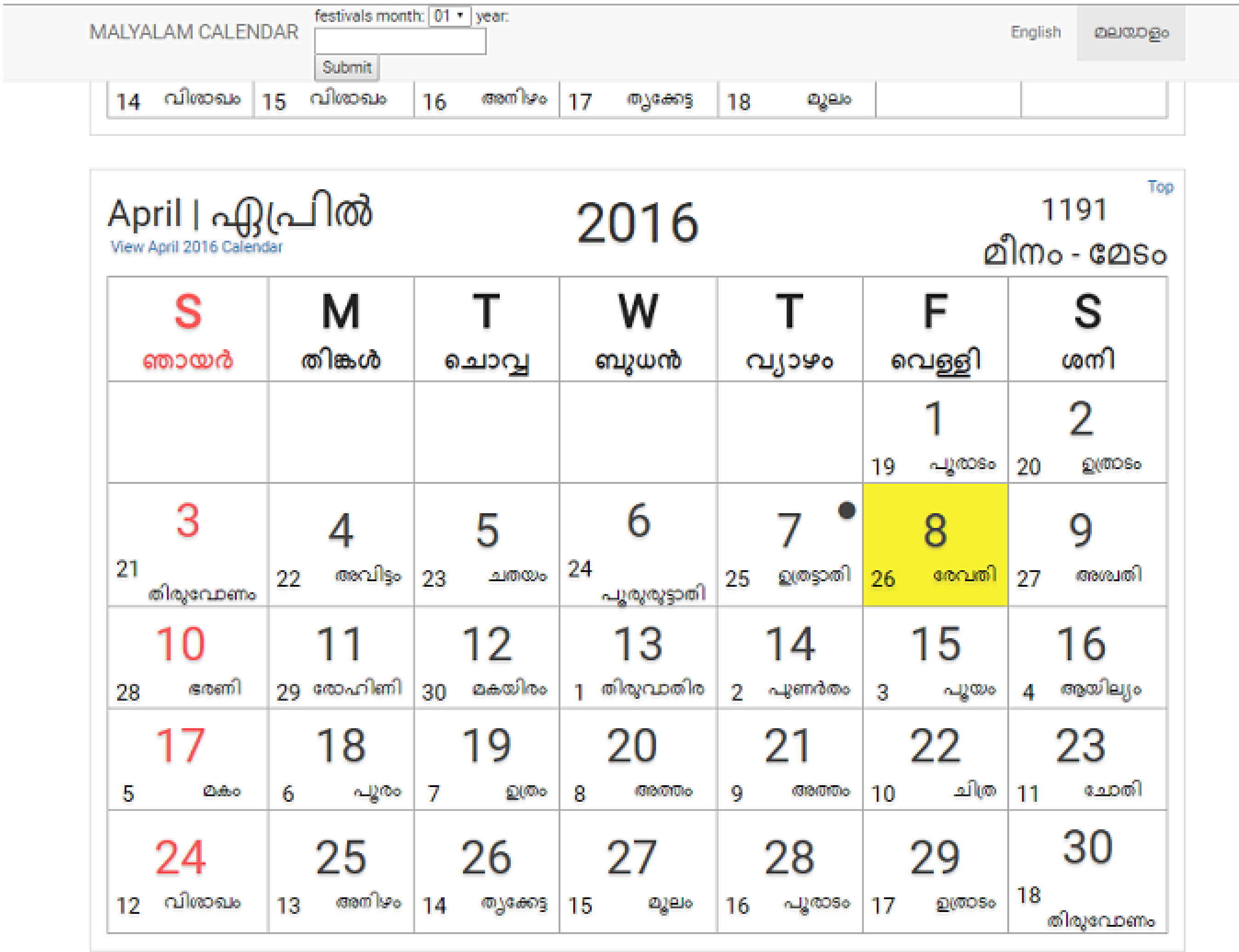
March | മാർച്ച്

2016

1191
Kumbham - Meenam

S Sunday	M Monday	T Tuesday	W Wednesday	T Thursday	F Friday	S Saturday
		1 18 Anizham	2 19 Thrikketta	3 20 Moolam	4 21 Pooradam	5 22 Pooradam
6 23 Uthradam	7 24 Thiruvonam	8 25 Avittam	9 ● 26 Poororuttathi	10 27 Uthrattathi	11 28 Revathi	12 29 Ashwathi
13 30 Bharani	14 1 Karthika	15 2 Rohini	16 3 Makiryam	17 4 Thiruvathira	18 5 Punartham	19 6 Pooyam
20 7 Aayilyam	21 8 Makam	22 9 Pooram	23 10 Uthram	24 11 Atham	25 12 Chithra	26 13 Chothi
27 14 Vishakham	28 15 Vishakham	29 16 Anizham	30 17 Thrikketta	31 18 Moolam		

Calender Page in Malayalam



14 വിശാഖം	15 വിശാഖം	16 അനിഴം	17 തൃക്കേട്ട	18 മൂലം		

April | ഏപ്രിൽ

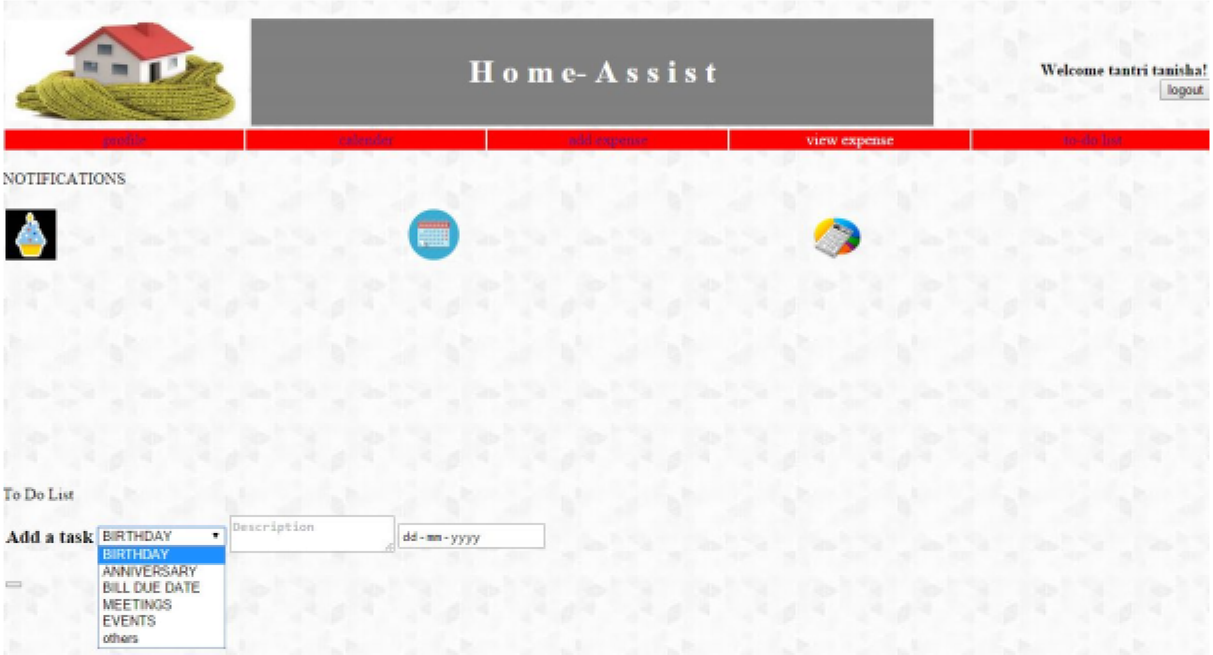
View April 2016 Calendar

2016

1191
മീനം - മേടം

S ഞായർ	M തിങ്കൾ	T ചൊവ്വ	W ബുധൻ	T വ്യാഴം	F വെള്ളി	S ശനി
					1 19 പൂരാടം	2 20 ഉത്രാടം
3 21 തിരുവോണം	4 22 അവിട്ടം	5 23 ചതയം	6 24 പൂരുരുട്ടാതി	7 ● 25 ഉത്രട്ടാതി	8 26 രേവതി	9 27 അശ്വതി
10 28 ഭരണി	11 29 രോഹിണി	12 30 മകയിരം	13 1 തിരുവാതിര	14 2 പുണർതം	15 3 പൂയം	16 4 ആയില്യം
17 5 മകം	18 6 പൂരം	19 7 ഉത്രം	20 8 അത്തം	21 9 അത്തം	22 10 ചിത്ര	23 11 ചോതി
24 12 വിശാഖം	25 13 അനിഴം	26 14 തൃക്കേട്ട	27 15 മൂലം	28 16 പൂരാടം	29 17 ഉത്രാടം	30 18 തിരുവോണം

DO LIST



Home-Assist
Welcome tantri tanisha!
logout
profile
calender
add expense
view expense
to-do list
NOTIFICATIONS
To Do List
Add a task
BIRTHDAY
BIRTHDAY
ANNIVERSARY
BILL DUE DATE
MEETINGS
EVENTS
others
Description
dd - mm - yyyy

4.4 SYSTEM TESTING

The aim of the System Testing process was to determine all defects in our project. The program was subjected to a set of test inputs and various observations were made and based on these observations it will be decided whether the program behaves as expected or not.

Our Project went through two levels of testing
1. Unit testing
2. Integration testing

4.4.1 UNIT TESTING

Unit Testing is undertaken when a module has been created and successfully reviewed. In order to test a single module we need to provide a complete environment i.e. besides the module we would require. The procedures belonging to other modules that the module under test calls Non local data structures that module accesses. A procedure to call the functions of the module under test with appropriate parameters. Unit Testing was performed on every module that is described under module description of chapter 4.

Test For the Calender Module
Testing Calender Page
This form is pregenerated from the library i.e kallavarsham.org. In this we can select different Dates, Months and Year for specific details about the query. It also has an option for other queries from the database.

Test For the Reminder module
Testing "To-Do List" form
This form is generated to accept a list of reminders. In this we can select different dates and specify the tasks to be done. The notification is provided on the same page about the upcoming events.

Test for User Login Module

Test for User login Form

This form is used for Login by the user. In this the user enters the username and password if all these are correct user login page will open other wise if any of data is wrong it will get redirected back to the login page and again ask for username and password.

Test for Sign-Up

This form is used for New Account Creation when user does not fill the form completely it asks again to fill the whole form when he fill the form completely it gets redirected to page which show waiting for confirmation message as his data will be only added by administrator after Authentication.

Test for Reminder Module

This form is used for adding tasks and events so that user can get notified before the Event. In this we enter the title its description and the date due for the task. The form is specific to each user and stores details by the use of unique id.

4.4.2 INTEGRATION TESTING

Integration testing was the phase in our testing part in which individual modules are combined and tested as a group. It occurs after unit testing and before validation testing. Integration testing takes as its input modules that have been unit tested, groups them in larger aggregates, applies tests defined in an integration test plan to those aggregates and delivers as its output the integrated system ready for system testing.

The purpose of integration testing was to verify functional, performance and reliability requirements placed on major design of our project. These designed items were exercised through their interfaces using black box testing, success and error cases being simulated via appropriate parameter and data inputs. Simulated usage of shared data areas and inter-process communication was tested and individual subsystems were exercised through their input interface. Test cases were constructed to test whether all the components within design items interact correctly, for example across procedure calls or process activations and this is done after testing individual modules i.e. unit testing.

5 CONCLUSIONS and FUTURE ENHANCEMENTS

This project provides a website that will be beneficial for users in managing the house at their finger tips just like a proper "Home Assistance". It makes entire process online for the user, each user with a unique user id can access their details and store them securely. Users have to login to see if any recent notifications are their on the website. With view of festivals in regional Calendar ,it can serve as an event planner to plan holidays and events.

There is a future scope of this facility that many more features such as different languages can be added to make it more user friendly. Group chats where users can discuss various issues can be added to this project thus making it more interactive, more user friendly and project which fulfills each users need in the best possible way.

SMS Notifications
In the present system notifications are displayed only on the homepage of user. It will be more user friendly if user can get notified on their mobile devices about big events like birthdays, anniversaries,bill payments,warranty expiring etc. In the future version of the web application a facility to provide SMS notfiications to the users is planned.

Mobile Application
In this era of mobile computing no service is complete if it is not available on mobile. It is also planned to develop mobile applications on all platforms for the web applications. This will help in increasing the reach of the service and clients getting prompt notifications of updates over the air.

Expense View
In present scenario, the number of queries are limited for viewing the expenses . In the future version of the web application a service to provide detailed statistical presentation of the expense is to be made, which will makes it easier to manage the monetory affairs.

Connectivity Among Users

the current version of the web application there is no facility for the user to interact with each other. In the future versions the facilities to interact is also planned. This will work as a service to connect the like minded people across the globe and can share their managing secrets among themselves.

6 REFERENCES

Textbooks:
1. Jyothishmathy Noottanu Panchagam 1925-2050, Puliyoor Mohanan Namboodhiri.
2. Fundamentals of Software Engineering, Rajib Mall, PHI Learning

URL:
1. http://www.w3schools.com/html/html_intro.asp
2. http://www.w3schools.com/css/css_background.asp
3. http://www.w3schools.com/js/js_datatypes.asp
4. http://www.w3schools.com/sql/sql_update.asp
5. http://www.w3schools.com/php/php_forms.asp
6. https://kollavarsham.org

APPENDIX

APPENDIX

CODE SNIPPETS

1. CSS Page with Page Template

```
body {
  margin-top: 0px;
  background-image: url("b.jpg");
}

table {
  color: grey;
}

th {
  color: black;
}

p:first-letter {
  font-weight: bold;
  font-size: 100px;
  color: green;
}

#b {
  background-color: grey;
  color: white;
}

#d {
  text-align: center;
}
```

```
#a {
  background-color: red;
}

a:link {
  color: white;
  text-decoration: none;
}

a:hover {
  color: white;
  background-color: #362F2F;
}

.button {
  background-color: #4CAF50;
  border: none;
  color: white;
  text-align: center;
  cursor: pointer;
}

body {
  margin-top: 0px;
}

table {
  color: black;
}

th {
  color: red;
}
```

```
p:first-letter {
  font-weight: bold;
  font-size: 100px;
  color: green;
}

#c {
  background-color: yellow;
  font-size: 16px;
}

#d {
  text-align: center;
}

#f {
  color: blue;
  text-align: left;
}

#g {
  border: 3px solid blue;
}
```

2. Login Page (Front-End)

```
<!doctype html>

<html>
<head><link href="main.css" rel="stylesheet"
type="text/css"/>
<title></title>
</head>
<body>
```

```
<table width="100%">
<tr>
<th width="6%"></th>
<td width="88%">
<table width="100%">
<tr>
<td width="20%">
<img src="icon.jpg" width="240"
height="100"
/>
</td>
<td width="57%" align="center" colspan="2"
id="b";>
<h1><strong>H o m  e- A s s i s
t</strong></h1>
</td>
<td width="23%" align="right" colspan="2";>
<strong>Welcome User<br>
<br>
Register Yourself!! </strong>
</td>
</tr>
</table>
                    <table width="100%">
<tr id="a">
<td width="100%" id="d">
<a> </a></td>
</tr>
        </table>
                    <table width="100%">
                    <tr>
<td id="d"><strong><p>Welcome To
Home-Assist</p></strong>
                    </td>
                    </tr>
                    </table>
                <table id="z">
                <tr>
                <td width=50% id="g">
                <strong>Manage Your Bills</strong>
                <br><br>
                <form action="login.php" method="
                post">
                Username:<input type="text" name=
                "name" size="25"
                maxlength="25" value="Enter
                username here"/>
                <br><br>Password:<input type=
                "password"
                name="pwd"/><br><br>
<input type="submit"></form>
                <a href="signup_page.html">
                <button class="button">
                register</button>
                </td>
                </tr>
                </table>
    <th width="6%"></th>
</tr>
</table>
</body>
</html>
```

3. Login Page (Back-End)

```
<?php

session_start();
```

```
$username=$_POST[’name’];
$password=$_POST[’pwd’];

if($username&&$password)
{
 $connect=mysql_connect("localhost","root","") or
 die("Couldnt
 connect to Database");
 mysql_select_db("tt") or die("Couldnt find Data
 base");
 $query = mysql_query("SELECT * FROM users WHERE
 username=’$username’");

 $numrows = mysql_num_rows($query);

 if($numrows!==0)
 {
  while($row = mysql_fetch_assoc($query))
  {
   $dbusername = $row[’username’];
   $dbpassword = $row[’password’];

  }
  if($username==$dbusername&&$password==
  $dbpassword)
  {
   echo "You are logged in!";
   $_SESSION[’username’] = $username;



  }
  else
  echo "Your password is incorrect!";
  echo "<br /><a href='profile.php'>continue</a>";
    }
 else
   die("That user dosnt exist!");
}
else
   die("Please enter a username and password");

echo "<br /><a href='login.html'>Signin</a>";
?>
```

4. Sign-Out Page

```
<?php

session_start(); # Starts the session

session_unset(); #removes all the variables
in the session

session_destroy(); #destroys the session

if(!$_SESSION['username'])
    echo "Successfully logged out!
<br />";
else
     echo "Error Occured!!
<br />";
        include 'login.html';
```

5. Sign-Up Page(Front End)

```
<!DOCTYPE html><html ><head><meta charset="UTF-8">
<title>Sign Up</title><link rel="stylesheet"
href="css_signup/normalize.css"><link rel="styles
heet"
href="css_signup/style.css"></head><body><head>
<meta charset="utf-8"><meta name="viewport"
content="width=device-width, initial-scale=1.0">
<title>Sign Up
Form</title><link rel="stylesheet"
href="css_signup/normalize.css"><link
href='http://fonts.googleapis.com/css?family=Nunito:
400,300'
rel='stylesheet' type='text/css'><link rel="styles
heet" href="css/main.css"></head><body><form
action="sig.php"
method="post"><h1>Sign Up</h1><fieldset><legend><span
class="number">1</span>Your Basic Info</legend><label
for="name">Name:</label><input type="text" id="name"
name="n"><label for="mail">Email:</label><input type
="email"
id="mail" name="e"></fieldset><fieldset><legend><span
class="number">2</span>

Your Profile</legend><label for="userid">User-Id:
</label><input
type="text" id="userid" name="id"><label
for="password">Password:</label><input type="password"
id="password" name="p"><label for="dob">Date of Birth:
</label><input type="date" id="dob" name="dob"><label
for="city">City:</label><input type="text" id="city"
name="c"><label for="state">State:</label><input
type="text"
id="state" name="s"></fieldset><fieldset><br><label
for="phno">Phone No.:</label><input type="number"
```

```
id="phno"
name="pno"><label>Gender:</label><select id="bg"
name="g"><option>MALE</option><option>FEMALE</option>
</select><br
></fieldset><button type="submit">sign
up</button></form></body></html></body></html>
```

6. Sign-Up Page (Back-End)

```
<?php
     mysql_connect("localhost","root","");
      mysql_select_db("tt");

 ?>
<?php
           session_start();
          $id = $_POST['id'];
         $pass = $_POST['p'];
            $user = $_POST['n'];
            $email = $_POST['e'];
         $dob = $_POST['dob'];
           $city = $_POST['c'];
             $state = $_POST['s'];
         $phn_no = $_POST['pno'];
           $gender = $_POST['g'];

    if($id && $pass && $user){
          $sql = "INSERT into users
          values('$id','$pass','$user','$email'
          ,'$dob', '$city','$
          state','$phn_no','$gender')";
           $qury = mysql_query($sql);
```

```
        if(!$qury)
        {
            echo "Failed ".mysql_error();


        }
        else
        {
        echo "account created successfully";


        }}
 else echo "failed to create an account";
include 'login.html';
?>
```

7.Profile Page (Back-End)

```
<?php  mysql_connect("localhost","root","");
      mysql_select_db("tt");
      session_start();
      $val=$_SESSION['username'];
       ?>
<?php     $uname=$_SESSION['username'];
           $query = mysql_query("SELECT * FROM users
           WHERE username='$val'");
           $numrows = mysql_num_rows($query);

          if($numrows!==0)
             {
          while($row = mysql_fetch_assoc($query))
  {
     $dbusername = $row['username'];
     $dbid = $row['id'];
     $dbemail = $row['email'];
     $dbnum= $row['phn_no'];

  }
   echo "
<h3> Welcome to HOME ASSIST
    <BR>Hello
        <a1>$dbusername</a1> We are here to
        help you manage
        <BR> Your User -ID Is
            <a1>$dbid</a1>
            <br> .You Can Use Your Unique ID On
            HOME ASSIST To Manage Your Account.
                <br>Your Contact Details Are
                    <BR> EMAIL ID-
                        <a1>$dbemail</a1>
                        <BR> PHONE NUMBER-
                            <a1>$dbnum</a1>
                        </h3>";}
 else echo "error";
                            ?>
```

8. Add Expense Page

```
  $query = mysql_query("SELECT * FROM users WHERE
  username='$val'");
           $numrows = mysql_num_rows($query);

          if($numrows!==0)
             {
          while($row = mysql_fetch_assoc($query))
  {
     $dbusername = $row[’username’];
     $dbid = $row[’id’];


  }
   }
if(isset($_POST[’submit’])){
 $category = $_POST[’t1’];
 $date1 = $_POST[’t2’];
 $amount = $_POST[’t3’];


          $sql = "INSERT into expense values
          (’$dbid’,’$category’,’$date1’,’$amount’)";
           $qury = mysql_query($sql);

        if(!$qury)

                  echo "Failed ".mysql_error();

        else

                  echo "Successful";

        }

else if(isset($_POST[’submit1’])){
             $name = $_POST[’e1’];
             $course = $_POST[’e2’];
             $amount = $_POST[’e3’];
             $description = $_POST[’e4’];
             $date2 = $_POST[’e5’];
           $sql = "INSERT into education values
           (’$dbid’,’$name’,’$course’,’$amount’,
           ’$description’,’$date2’)";
           $qury = mysql_query($sql);

        if(!$qury)
                  echo "Failed ".mysql_error();

        else   echo "Successful";}

else if(isset($_POST[’submit2’])){
             $name1 = $_POST[’m1’];
             $treatment = $_POST[’m2’];
             $details = $_POST[’m4’];
             $date3 = $_POST[’m5’];
             $amount3=$_POST[’m6’];


           $sql = "INSERT into medical values
           (’$dbid’,’$name1’,’$treatment’,’$details’,
           ’$date3’,
           ’$amount3’)";
           $qury = mysql_query($sql);
  if(!$qury)

                  echo "Failed ".mysql_error();

        else
                  echo "Successful";
               }
?>
            <       <?php
mysql_connect("localhost","root","")or
die(mysql_error());
```

```
mysql_select_db("tt")or die(mysql_error());


if(!isset($_FILES['image']['tmp_name']))
  echo "upload bills";
else
{
$image=addslashes(file_get_contents($_FILES['image']
['tmp_name']));
$image_name=addslashes($_FILES['image']['name']);
$image_size=getimagesize($_FILES['image']['tmp_name']);
$date = $_POST['dat'];   $title = $_POST['det'];
if($image_size==FALSE)
   echo  "That's not an image.";

else
{
if(!$insert=mysql_query("INSERT INTO uploads VALUES
('$dbid','$title','$image_name','$date','$image')"))
   echo "Problem uploading image";

else
{

echo "Image uploaded";
}

}
}

?>
```

9. To-Do List Page

```
 $sql=mysql_query("SELECT * FROM expense WHERE
 id=’$dbid’ AND
 date1=CURDATE()");
 $sql1=mysql_query("SELECT * FROM medical WHERE
 id=’$dbid’ AND
 date3=CURDATE()");
 $sql2=mysql_query("SELECT * FROM education WHERE
 id=’$dbid’ AND
 date2=CURDATE()");

if(isset($_POST[’submit’]))
{$mn = $_POST[’month’];
 $yr= $_POST[’year’];
 $sql =mysql_query("SELECT * FROM expense WHERE
 (id=’$dbid’ AND
 MONTH(date1)=’$mn’ AND YEAR(date1)=’$yr’)");
 $sql1 =mysql_query("SELECT * FROM medical WHERE
 (id=’$dbid’ AND
 MONTH(date3)=’$mn’ AND YEAR(date3)=’$yr’)");
 $sql2 =mysql_query("SELECT * FROM education WHERE
 (id=’$dbid’
 AND MONTH(date2)=’$mn’ AND YEAR(date2)=’$yr’)");} ?>


<br>EXPENDITURES<br>
                 <br><table width=100%>
                        <tr>



                            <td width=33%><img src=
                            "h.jpg"

                            width="50" height="50" />
                            <?php echo
                            "<table border=2>";

while ($row = mysql_fetch_assoc($sql))
 {
echo "<tr>";
echo "<td>".$row[’category’]."</td>";
echo "<td>".$row[’amount’]."</td>";
echo "<td>".$row[’date1’]."</td>";
echo "</tr>";
}

echo"</table>";?></td>
                        </td>

                            <td width=33%><img src=
                            "m.jpg"
                            width="50" height="50" />
                            <?php echo
                            "<table border=2>";

while ($row = mysql_fetch_assoc($sql1))
 {
echo "<tr>";
echo "<td>".$row[’name1’]."</td>";
echo "<td>".$row[’treatments’]."</td>";
echo "<td>".$row[’details’]."</td>";
echo "<td>".$row[’date3’]."</td>";echo
"<td>".$row[’amount3’]."</td>";
echo "</tr>";
}

echo"</table>";?></td>
                        </td>
```

```
                            <td width=33%><img src
                            ="e.jpg"
                            width="50" height="50" />
                            <?php echo
                            "<table border=2>";

while ($row = mysql_fetch_assoc($sql2))
 {
echo "<tr>";
echo "<td>".$row['name']."</td>";
echo "<td>".$row['course']."</td>";
echo "<td>".$row['description']."</td>";
echo "<td>".$row['date2']."</td>";echo
"<td>".$row['amount']."</td>";
echo "</tr>";
}

echo"</table>";?></td>
</tr>
                </table>

<BR><BR><BR><BR><BR><BR><BR><BR><BR><BR><BR><BR>
          <table width="100%">
                   VIEW BILLS:  <tr> <form method=
                   "post"><td>
                         MONTH:select name="month1">
                            <option>01</option>
                            <option>02</option>
                            <option>03</option>
                            <option>04</option>
                            <option>05</option>
                            <option>06</option>
                            <option>07</option>
                            <option>08</option>
                            <option>09</option>
                            <option>10</option>
                            <option>11</option>
                            <option>12</option>
                             </select></TD>
                  <TD>    YEAR:<input type="numb
                  er" name="year1"
                  min="1900" ></TD>
                   <TD>   TITILE:<input type="text"
                   name="tx"></td>
                                 <td> <input
                                 type="submit"
                                 name="submit2"
                                 value="submit">
                                 </td></form>
<?php if(!isset($_POST['submit2']))
          echo "view bills";

      else if(isset($_POST['submit2']))
{$mn1=$_POST['month1'];
$yr1=$_POST['year1'];
$txt=$_POST['tx'];

$sql5 =mysql_query("SELECT * FROM uploads WHERE
(id='$dbid' AND
((MONTH(date)='$mn1' OR YEAR(date)='$yr1')
OR title='%$txt%'))")echo "<table border=2>";

while ($row = mysql_fetch_assoc($sql5))
 {
echo "<tr>";
echo "<td>".$row['date']."</td>";
echo "<td>".$row['title']."</td>";
echo "<td>";echo '<img
src="data:image/jpeg;base64,'.base64_encode(
$row['image'] ).'"/>';echo "</td>";

echo "</tr>";echo "<table border=2>";
echo "</tr>";


  }  echo"</table>"; } ?>
```