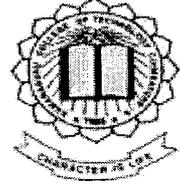
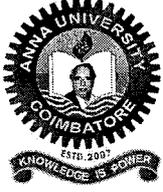


P-3243



MYTAMILTHAI.COM-

A TAMIL WEB PORTAL DEVELOPMENT

PROJECT REPORT

Submitted By

A.PARIMALADEVI

Register No.: 0720300026

*in partial fulfillment for the award of the degree
of*

MASTER OF COMPUTER APPLICATIONS

in

COMPUTER APPLICATIONS

KUMARAGURU COLLEGE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University, Coimbatore)

May, 2010

KUMARAGURU COLLEGE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University, Coimbatore)

COIMBATORE – 641 006.

Department of Computer Applications

PROJECT WORK

MAY 2010

This is to certify that the project entitled

MYTAMILTHAI.COM-

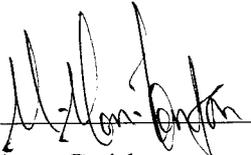
A TAMIL WEB PORTAL DEVELOPMENT

is the bonafide record of project work done by

A.PARIMALADEVI

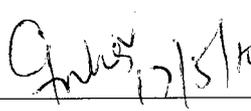
Register No: 0720300026

of MCA (Computer Applications) during the year 2009-2010.


Project Guide


Head of the Department

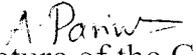
Submitted for the Project Viva-Voce examination held on 17.05.2010


Internal Examiner


External Examiner

DECLARATION

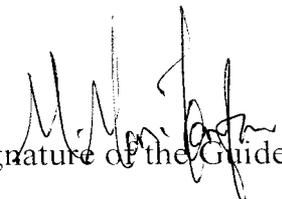
I affirm that the project work titled **MYTAMILTHAI.COM-A TAMIL WEB PORTAL DEVELOPMENT** being submitted in partial fulfillments for the award of **MASTER OF COMPUTER APPLICATIONS** is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.


(Signature of the Candidate)

A.Parimaladevi

0720300026

I certify that the declaration made above by the candidate is true


Signature of the Guide,
M. MAURIKANTAN,
SLIMCA.

ABSTRACT

The purpose of this project is mainly for the people who feel uncomfortable while browsing in English. This site includes the information about Tamil history, entertainment, sports, medicines and also information for youth, women in Tamil. Instead of searching different sites user can search a single site for his entire requirement.

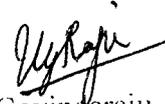
This site also includes the English to Tamil dictionary. User who needs to search the Tamil meaning for a particular English word can effectively use this site. Also if the particular word is not found and if the user knows the meaning, then he can add the new word. This word is added to the temporary database. Administrator who has the rights to see the words in temporary database and add to the existing database of the dictionary. This site also includes Tamil to English and Tamil to Tamil dictionaries and also Glossary in Tamil.

Some pages of the site can be viewed by all people but certain pages are viewed by the user only after they register their name in this site. Also authorized user can advertise for the jobs they provide and also the authorized user can able to post their resume for the jobs they need.

Apr. 30, 2010.

CERTIFICATE

This is to certify that Ms.A.Parimaladevi(07203000026) has undertaken a project with us entitled "Mytamilthai.com – A Tamil Web Portal Development" and completed successfully on Apr. 30, 2010. She is a sincere and hardworking project student and reported regularly about her progress.

V. Govindaraju.
Partner

ACKNOWLEDGEMENT

First and foremost I thank the Almighty for his continuous blessings showered on me in completing this project successfully.

I wish to express my profound gratitude to **Dr. S. Ramachandran, Principal, Kumaraguru College of Technology, Coimbatore** for providing an opportunity and necessary facilities in carrying out this project work.

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I also take this opportunity to thank my Coordinator, **Mrs. V. Geetha M.C.A., Asst. Professor, Kumaraguru College of Technology, Coimbatore** for her continuous support.

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CHAPTER 1

INTRODUCTION

This chapter is organized into two parts. The first part deals with the organization profile. It provides a brief insight into the history of the organization and the products. The second part gives an introduction about the project.

1.1 ORGANIZATION PROFILE

Bannari Research consultants (Barcindia.net) was started in the year of 2008 by two PSG tech alluminies, as a training and research institute. They have trained more than 15 Students in various platforms and on various applications.

Their areas of specialization are E-LEARNING, WEB SITE DEVELOPMENT and TAMIL COMPUTING.

They also concentrate on software development on free open sources software platforms.

This project work experience is to be illustrated at Tamil internet conference 2010 to be held at Coimbatore.

1.2 PROJECT OVERVIEW

“**Mytamilthai.com**” is a website that includes all the details in Tamil. This site is going to develop mainly for the people who feel uncomfortable while browsing in English. This site includes the information about recent news, entertainment, sports, medicines and also information for youth, women in Tamil. Instead of searching different sites user can search a single site for his/her entire requirement.

This site also includes English to Tamil dictionary and Tamil to English dictionary with English and Tamil explanation according to user wish. User who needs to search the Tamil meaning for a particular English word can effectively use this site. Also if the particular word is not found and if the user knows the meaning, then he can add the new word. This word is added to the database. Administrator who has all the rights to see the words in database and if it is not valid, then he/she may remove the particular word from database.

Some pages of the site can be viewed by all people but certain pages are viewed by the user only after registering. Also authorized user can advertise for the jobs they provide. For advertising about particular job, the user needs to contact administrator and the advertisement will be displayed in index page of all user.

User who views the site can also post their comments. Admin who has all the rights to allow the comments to display on the site or else to delete the same.

CHAPTER 2

SYSTEM STUDY AND ANALYSIS

A complete understanding of the requirement is essential for the success of software development. The software scope, initially established by the system engineer and refined during the project planning, is refined in detail. Model of the required data, information and control flow, and operational behaviour are created. Alternative solution are analyzed and allocated to various software elements. The feasibility study evaluates the viability of the project and presents the recommended strategy adopted for the development.

2.1 EXISTING SYSTEM

In the existing system, there will be various information in Tamil and about Tamil dictionary in different sites. Also English to Tamil and Tamil to English dictionary with explanation is not available at single site.

2.1.1 Drawbacks of the Existing System

- There are sites available in Tamil but it doesn't contain all the information in a single site.
- The existing site in Tamil includes information related to one particular topic. So it is difficult for the people who wish to know all the information in Tamil at a single site.
- To get the information about various topics, one might want to remember all the site address.
- To overcome the above difficulties, a well designed site is needed.

2.2 PROPOSED SYSTEM

This project aims at making easy search of words in dictionary with both English and Tamil explanation. The user can use these facilities by just registering in this site.

2.2.1 Advantages of Proposed System

The expected benefits of the proposed system are

- The site mytamilthai.com is a Tamil web portal development.
- This includes information regarding
 - இளமை - youth
 - பெண்கள் - women
 - நகைச்சுவை - jokes
 - விளையாட்டு - sports
 - மருந்தகம் - medicines
 - உள்ளே செல்ல - login
 - வேலை வாய்ப்பு - jobs available
 - கருத்தைச் சேர்க்க - post comments
 - விசைப்பலகை - keyboard
- This site also includes English to Tamil dictionary.
- There is also a facility to add new word to the site by the authorized user but with the administrator rights.
- Also jobs related advertisements can be posted by the authorised user and the same way job seekers can view all the information regarding that.
- User can post their comments and admin who allows the comments to post in the site or else to reject it.

2.2 USER INTERFACE REQUIREMENTS

The User Interfaces are designed using PHP, HTML, and in Unicode format. The interfaces would be designed in a user friendly manner with less complexity so that it proves to be useful for the users to navigate through the system. All the modules are available as horizontal menus so that the user can easily navigate through the pages.

2.3.1 Functional Requirements

Functional requirements are those that refer to the functionality of the system, i.e., what service it will provide to the user.

1) The system has the following type of users:

- 1) End-Users.
- 2) System administrator.

2) The users can perform the following tasks:

End-Users:

- Enter dictionary information.
- Provides information about job.

System Administrator:

- Enter dictionary information.
- Enters information about job provided by job provider.
- Update recent news, Events and Publications.

3) The system has the following Interfaces:

- 1) Login
 - a) End-User
 - b) System Administrator

4) Come up with the database design. The Login to the system is database driven i.e. an administrator will be allowed to access the system if and only if he is the valid user of the system.

5) Decide a format in the status to get printed in word document.

2.3.2 Non Functional (System) Requirements

Non-functional (supplementary) requirements pertain to other information needed to reduce the correct system and are detailed separately.

Usability

- The website is expected to be user friendly. The user must be able to operate the website with ease.
- This website is developed with user friendly interface screens.

Reliability

- The website is expected to operate as close to 100 percentage reliability.
- The website must have no defects that can interface with normal operations.

Performance

- The website is accepted to respond to the users request(s) with minimum time.

Security

The server on which the mytamilthai.com module resides will have its own security to prevent unauthorized write/delete and access. There are no restrictions to view the system.

2.3 USERS OF THE SYSTEM

User Name	Description
Administrator	Manages and coordinates the website. Has full and access to the system.
End user	The users those who access the website

CHAPTER 3

DEVELOPMENT ENVIRONMENT

3.1 HARDWARE REQUIREMENTS

The hardware support required for deploying the application

Processor	:	Intel Pentium IV
Speed	:	1.7 GHZ
Memory	:	1 GB RAM
Hard Disk Capacity	:	160 GB
Monitor	:	15" inch SVGA
Mouse	:	Logitech Mouse (Scroll)
Keyboard	:	108 Keys, NHM writer

3.2 SOFTWARE REQUIREMENTS

The software support required for deployment is

Operating System	:	Windows XP
Scripting Language	:	PHP
Web Server	:	WampServer2.0i
Database	:	MY SQL

3.3 SOFTWARE OVERVIEW

PHP:

PHP: Hypertext Preprocessor is a widely used, general-purpose scripting language that was originally designed for web development to produce dynamic web pages. For this purpose, PHP code is embedded into the HTML source document and interpreted by a web server with a PHP processor module, which generates the web page document. Originally designed to create dynamic web pages, PHP now focuses mainly on server-side scripting, and it is similar to other server-side scripting languages that provide dynamic content from a web server to a client, such as Microsoft's Active Server Pages, Sun Microsystems' JavaServer Pages, and mod_perl.

PHP only parses code within its delimiters. Anything outside its delimiters is sent directly to the output and is not processed by PHP (although non-PHP text is still subject to control structures described within PHP code). The most common delimiters are `<?php` to open and `?>` to close PHP sections. The first form of delimiters, `<?php` and `?>`, in XHTML and other XML documents, creates correctly formed XML 'processing instructions'. This means that the resulting mixture of PHP code and other markup in the server-side file is itself well-formed XML.

Variables are prefixed with a dollar symbol and a type does not need to be specified in advance. Unlike function and class names, variable names are case sensitive. Both double-quoted (") and heredoc strings allow the ability to embed a variable's value into the string. PHP treats newlines as whitespace in the manner of a free-form language (except when inside string quotes), and statements are terminated by a semicolon. PHP has three types of comment syntax: `/* */` marks block and inline comments; `//` as well as `#` are used for one-line comments. The echo statement is one of several facilities PHP provides to output text (e.g. to a web browser).

In terms of keywords and language syntax, PHP is similar to most high level languages that follow the C style syntax. If conditions, for and while loops, and function returns are similar in syntax to languages such as C, C++, Java and Perl.

MYSQL:

MySQL, the most popular Open Source SQL database management system, is developed, distributed, and supported by Sun Microsystems, Inc.

MySQL is a database management system.

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network. To add, access, and process data stored in a computer database, you need a database management system such as MySQL Server. Since computers are very good at handling large amounts of data, database management systems play a central role in computing, as standalone utilities, or as parts of other applications.

MySQL is a relational database management system.

A relational database stores data in separate tables rather than putting all the data in one big storeroom. This adds speed and flexibility. The SQL part of “MySQL” stands for “Structured Query Language.” SQL is the most common standardized language used to access databases and is defined by the ANSI/ISO SQL Standard. The SQL standard has been evolving since 1986 and several versions exist. In this manual, “SQL-92” refers to the standard released in 1992, “SQL:1999” refers to the standard released in 1999, and “SQL:2003” refers to the current version of the standard. We use the phrase “the SQL standard” to mean the current version of the SQL Standard at any time.

MySQL software is Open Source.

Open Source means that it is possible for anyone to use and modify the software. Anybody can download the MySQL software from the Internet and use it without paying anything. If you wish, you may study the source code and change it to suit your needs. The MySQL software uses the GPL (GNU General Public License, to define what you may and may not do with the software in different situations.

The MySQL Database Server is very fast, reliable, and easy to use.

MySQL Server was originally developed to handle large databases much faster than existing solutions and has been successfully used in highly demanding production environments for several years. Although under constant development, MySQL Server today offers a rich and useful set of functions. Its connectivity, speed, and security make MySQL Server highly suited for accessing databases on the Internet.

MySQL Server works in client/server or embedded systems.

The MySQL Database Software is a client/server system that consists of a multi-threaded SQL server that supports different backends, several different client programs and libraries, administrative tools, and a wide range of application programming interfaces (APIs). We also provide MySQL Server as an embedded multi-threaded library that you can link into your application to get a smaller, faster, easier-to-manage standalone product.

A large amount of contributed MySQL software is available.

It is very likely that your favorite application or language supports the MySQL Database Server.

WAMP SERVER:

WAMP5 (WAMP means Windows Apache Mysql PHP) is a platform of Web development under Windows. WAMP is a form of mini-server that can run on almost any Windows Operating System. WAMP includes Apache 2, PHP 5 (SMTP ports are disabled), and MySQL (phpMyAdmin and SQLitemanager are installed to manage your databases) preinstalled.

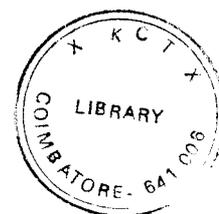
WampServer is a Windows web development environment. It allows you to create web applications with Apache, PHP and the MySQL database. It also comes with PHPMyAdmin and SQLiteManager to easily manage your databases.

An icon on the taskbar tray displays the status of WAMP, letting you know if; a) WAMP is running but no services are opened (the icon will appear red), b) WAMP is running and one service is opened (the icon will appear yellow) or c) WAMP is running with all services opened (the icon will appear white). Apache and MySQL are considered to be services (they can be disabled by left-clicking on the taskbar icon, guiding your cursor over the service you wish to disable and selecting "Stop Service").

The files/web pages that are hosted on your WAMP server can be accessed by typing *http://localhost/* or *http://127.0.0.1/* in the address bar of your web browser. WAMP must be running in order to access either of the above addresses.

UNICODE FORMAT :

Unicode provides a unique number for every character,
 no matter what the platform,
 no matter what the program,
 no matter what the language.



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Fundamentally, computers just deal with numbers. They store letters and other characters by assigning a number for each one. Before Unicode was invented, there were hundreds of different encoding systems for assigning these numbers. No single encoding could contain enough characters: for example, the European Union alone requires several different encodings to cover all its languages. Even for a single language like English no

single encoding was adequate for all the letters, punctuation, and technical symbols in common use.

These encoding systems also conflict with one another. That is, two encodings can use the same number for two different characters, or use different numbers for the same character. Any given computer (especially servers) needs to support many different encodings; yet whenever data is passed between different encodings or platforms, that data always runs the risk of corruption.

Unicode is changing all that!

Unicode provides a unique number for every character, no matter what the platform, no matter what the program, no matter what the language. The Unicode Standard has been adopted by such industry leaders as Apple, HP, IBM, JustSystems, Microsoft, Oracle, SAP, Sun, Sybase, Unisys and many others. Unicode is required by modern standards such as XML, Java, ECMAScript (JavaScript), LDAP, CORBA 3.0, WML, etc., and is the official way to implement ISO/IEC 10646. It is supported in many operating systems, all modern browsers, and many other products. The emergence of the Unicode Standard, and the availability of tools supporting it, are among the most significant recent global software technology trends.

Incorporating Unicode into client-server or multi-tiered applications and websites offers significant cost savings over the use of legacy character sets. Unicode enables a single software product or a single website to be targeted across multiple platforms, languages and countries without re-engineering. It allows data to be transported through many different systems without corruption.

NHM writer – The ultimate Tamil typing software

NHM Writer is a never-seen-before tool for Tamil typing.

Features of NHM writer:

1. Free-of-cost
2. Downloadable. An online version of NHM writer will be launched soon.
3. This makes your Windows system Tamil ready on installing this. So you will be able to read, write Tamil well in all Windows applications. This is cool, as every other software would require you to do some additional tweaks in the system.
4. Extendable. You can use NHM Writer to include new encodings, keyboards for any language of your wish. You just need to insert an xml file. To make this xml file, there is a developer kit for NHM writer which will be released soon.
5. Speed of the conversion as conversion takes place at client side. We used NHM converter for the Tamil Dictionary Automation project and it helped us convert font encoding of large MB files with ease.
6. Auto detect encoding
7. Extendibility
8. Sometimes it will be helpful, if you want to type in a 8 -bit encoding without any font. (another usage of font embedding feature)
9. Customizable. You can edit the existing key map files to make changes according to your needs.
10. . Embedded fonts. You don't need to install any fonts.
11. Visual keyboards. You have visual keyboards to guide you learn the layout for novice users

And all this comes in a less than 1 MB software which is really nice.

CHAPTER 4

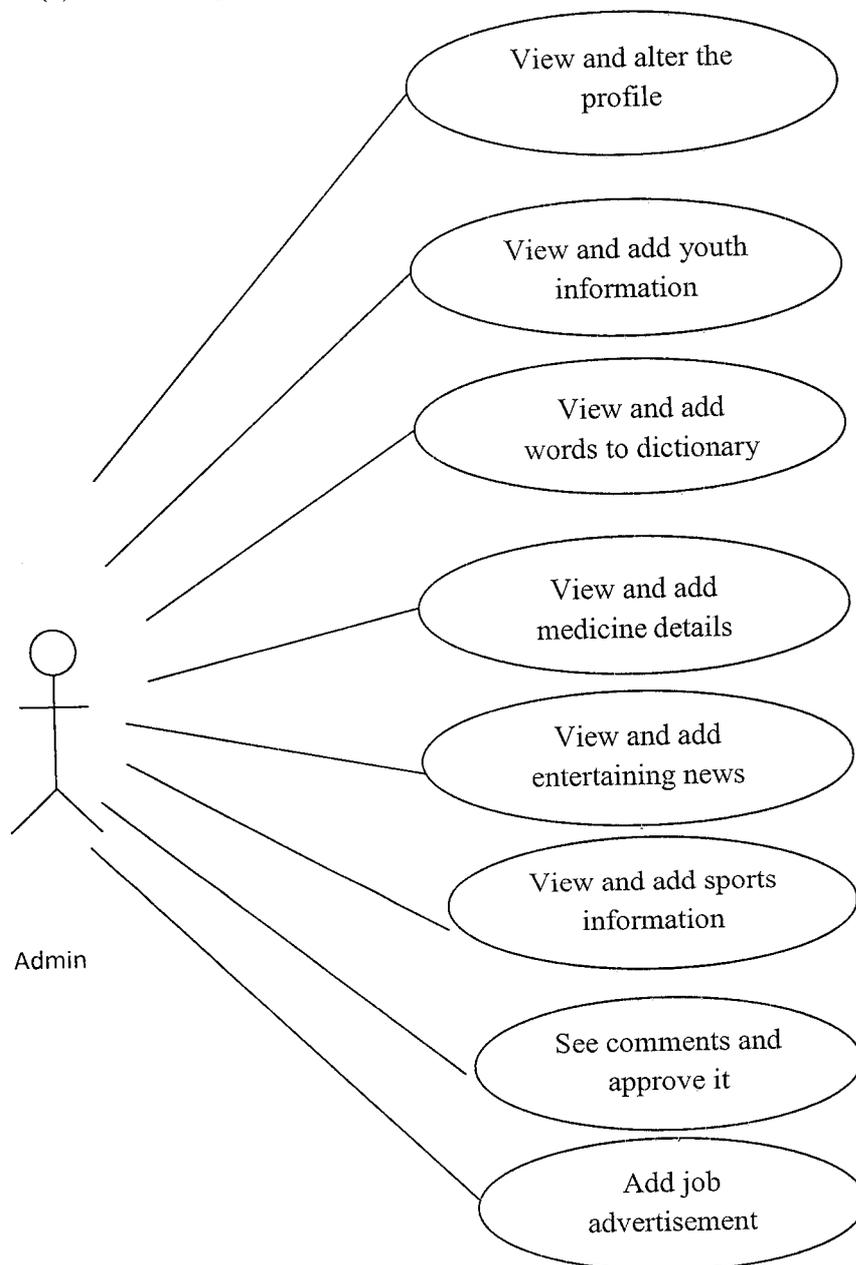
SYSTEM DESIGN

4.1 DIAGRAMS

4.1.1 USE-CASE DIAGRAMS

A use case diagram in the Unified Modelling Language (UML) is a type of behavioural diagram defined by and created from a Use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals, and any dependencies between those use cases. The main purpose of a use case diagram is to show what system functions are performed for which actor.

Fig 4.1(a): Admin login Use case Diagram:



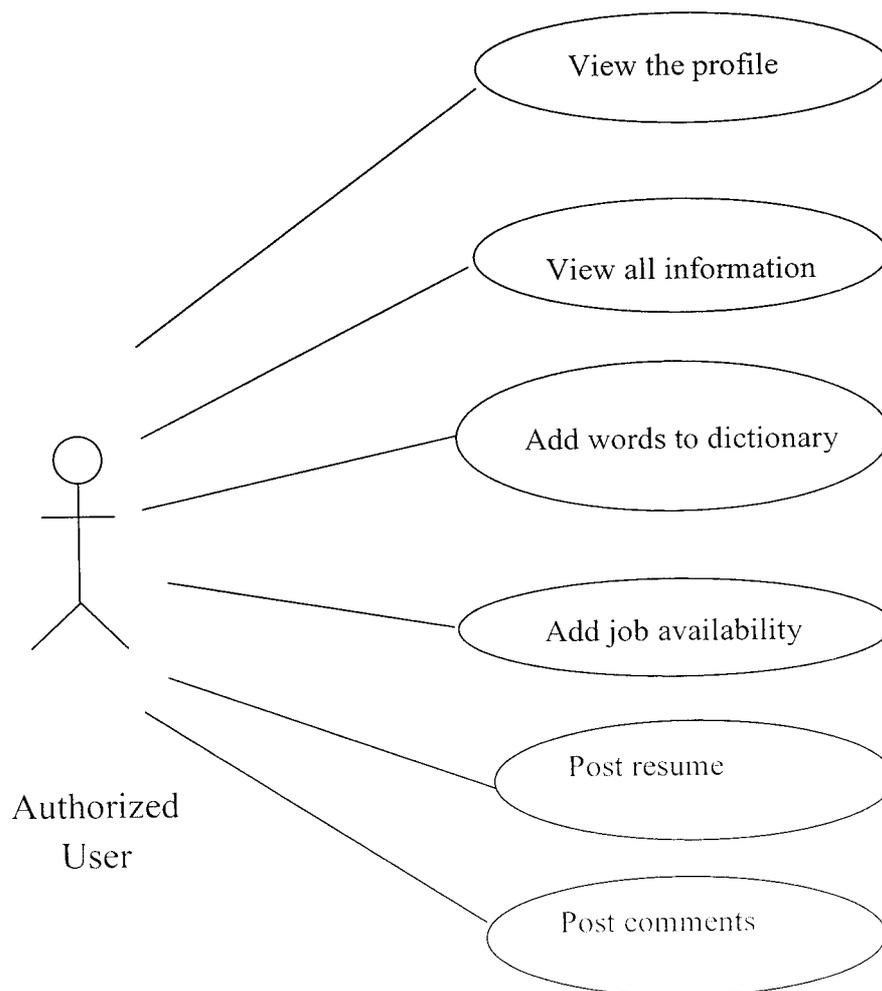
Brief Description:

Admin user has specific set of operations that can be carried out after logging in with valid username and password.

Initial Step by Step Description:

1. Administrator adds new words to dictionary and information about the site.
2. If a profile is added, his/her number is saved in the login table to make him/her as an authorized user of this system.
3. Administrator maintains all the static and dynamic details in the site.
4. Job provider will contact admin to display their job details.

Fig 4.1(b).Authorized Use case Diagram:

**Brief Description:**

The authorized user can view all the pages and can use the facilities provided.

Initial Step by Step Description

Before this use case can be invited, the user has to register in the mytamilthai.com site.

1. The user needs to login to view all the pages.
2. Once he logged in, he can view all the pages.
3. Then the user can see the jobs available.
4. User can also add words to dictionary.

4.2 ELEMENTS OF DESIGN

System Design is the most creative and challenging phase in the development of a software system. The first step is to determine what input data is needed for the system and then to design a database that will meet the requirements of the proposed system. The next step is to determine what outputs are needed from the system and the format of the output to be produced.

During the design of the proposed system some areas where attention is required are:

- How are the inputs required and the outputs produced?
- How should the data be organized?
- What will be the processes involved in the system?
- How should the screen look?

The steps carried out in the design phase are as follows:

- Input Design
- Output Design
- Database Design

4.2.1 INPUT DESIGN

- Input design is a part of the system design and hence must be carefully designed which otherwise lead to serious errors in the later stages of development. Inaccurate input data is the most common cause of errors in data processing. The main objective of designing input focus on
 - Controlling the amount of input required
 - Avoiding delayed responses
 - Keeping process simple
 - Controlling and avoiding errors
- OUTPUT DESIGN

Output generally refers to the results and information that are generated by the system. For many end-users, output is the main reason for developing the system and the basis on which they will evaluate the usefulness of the application.

Most end-users will not actually operate the information system or enter data through workstations, but they will use the output from the system. When designing output, system analysis must accomplish the following.

- Determine what information to present
- Decide whether to display, print or speak the information and select the output medium
- Arrange the presentation of information in an acceptable format.
- Decide how to distribute the output to intended recipients.

The arrangement of information on a display or printed document is termed as layout. Accomplish the general activities listed above will require specific decisions, such as whether to use pre-printed forms when preparing reports and documents, how many lines to plan on a printed page or whether to use graphics and colour.

The output design is specified on layout performs, sheets that describe the location characteristics, and format of the column headings and pagination.

The output must be provided in a format easily understandable even by a novice user. After analyzing the operations of the system, output information required for each jobs are determined. In addition to this, these outputs may be in format suitable as inputs for subsequent processing.

4.2.3 DATABASE DESIGN

A database is a collection of inter-related data stored with minimum redundancy to serve many users quickly and efficiently. The general objective of database design is to make the data access easy, inexpensive and flexible to the user. An elegantly designed database can play a strong foundation for the whole system.

The details about the relevant data for the system are first identified. According to their relationship, tables are designed through the following method.

- The data type for each data item in the table is decided.
- The tables are then normalized.

The tables are normalized so that they can provide better response time, have data integrity, avoid redundancy and be secure.

DATABASE STRUCTURE:

This system uses some of tables to store the user information ,dictionary information and job advertising information.

4.3(a): Table name: dictionary

This table consists of the data about dictionary.

Field Name	Field Type	Width	Description
id	Int	100	Primary key
englisword	Varchar	50	English word
tamilword	Varbinary	200	Tamil word
Tamil_sen	Varchar	1000	Explanation in tamil
English_sen	text	-	Explanation in Tamil

4.3(b): Table Name : login

This table contains the list of users who are registered in the site.

Field Name	Field Type	Width	Description
id	Varchar	11	User Id
password	Varchar	50	User password
username	Varchar	50	User name
Con-pass	Varchar	50	Conform password
location	Varchar	50	Place/country
dob	Date	-	Date of birth
postalcode	Varchar	30	code
Field Name	Field Type	Width	Description

4.3(c): Table Name: jobprovider

This table contains the information about jobs available.

Field Name	Field Type	Width	Description
jobid	Varchar	20	Job id
title	Text	-	Title of the job
Link	Text	-	Link to the reference page
description	Text	-	Description about job

4.4(d): Table Name: people comments

This table contains the information about user's comments about the site.

Field Name	Field Type	Width	Description
id	int	20	id
name	varbinary	100	name of the user who posts the comments
comments	varbinary	1000	people comments about the site

4.2.4 MODULAR DESIGN

Modular design — or "modularity in design" — is an approach that subdivides a system into smaller parts (modules) that can be independently created and then used in different systems to drive multiple functionalities. Besides reduction in cost (due to lesser customization, and less learning time), and flexibility in design, modularity offers other benefits such as augmentation (adding new solution by merely plugging in a new module), and exclusion.

This system is also modularized to reduce the complexity of the system. This contains modules as follows.

A) User Modules:

User modules are modelled based on the users of the system. This module contains three users:

i) Admin

- administers the entire system.
- can add words to dictionary
- can remove words in dictionary
- will communicate with user to post their job advertisement in the site.
- allows the users comments to display n the site else reject it.

ii) Authorised user

- Registers his/her details in the site
- Adds the new words to dictionary.
- can view the details of site.
- can post their comments in the site.

iii) User

- can view recent news update.
- can add comments in the site.
- can register in the site.

CHAPTER 5

SYSTEM IMPLEMENTATION

5.1 IMPLEMENTATION

The system is implemented using Unicode (NHM-converter), PHP and MYSQL. System implementation is the part of the software engineering life cycle, where the design artifacts are converted to a working application. Coding is done in this stage using a framework and programming language, which would solve the specific problem the best way. Once the design is coded into a working application, it is verified and tested in detail. The tested product is successfully developed and yet to be implemented in the user environment.

5.1.1 Implementation of Business Logic

The business logic is implemented using in Unicode format. Unicode is the general and accepted format to save the project if it is written in Tamil. By using NHM writer and Alagi keyboard, Tamil fonts are typed in phonetic language.

5.1.2 Implementation of Database Communication

For database communication, MYSQL is used along with PHP. MYSQL is the most popular Open Source SQL database management system. MYSQL has many inbuilt functions to carry out the operations with database. These functions are used as a part of PHP file. Using these functions the queries are executed and the operations on database are carried out.

5.2 SYSTEM VERIFICATION

System Verification is the process of evaluating software to determine whether the products of a given development phase satisfy the conditions imposed at the start of that phase. Verification is ensuring that the product has been built according to the requirements and design specifications- i.e., you built it right. Verification is the assurance that the products of a particular development phase are consistent with the requirements of that phase and preceding phase(s).

In this website, Unicode format is followed to ensure they are acceptable. In data access, it verifies whether the right data is being accessed in terms of the right place and in the right way such as in dictionary.

5.3 SYSTEM VALIDATION

System Validation is the process of evaluating software during or at the end of the development process to determine whether it satisfies specified requirements. Validation checks that the product design satisfies or fits the intended usage (high-level checking) — i.e., you built the right product.

This is done through dynamic testing and other forms of review. Validation ensures that the product actually meets the user's needs, and that the specifications were correct in the first place.

In this project, validation checks whether the user is following the correct Unicode format. Each field in registration form are validated such that the right username, password, etc., is added. Any wrong entry display error messages or warnings. The login form is validated such that the valid registered user only can login to new page. Fields which are in Unicode entries should be saved in Unicode format. Validation is checked Validation also determines if this project complies with the requirements and performs functions for which it is intended and meets the organization's goal and user needs.

CHAPTER 6

TESTING

Testing is a critical element of software quality and assurance and represents the ultimate review of specification design and coding. It is a vital activity that has to be enforced in the development of a system. This could be done in parallel during all the phases of system development. The feedback received from these tests can be used for further enhancement of the system under consideration. The testing phase conducts test using the Software Requirement Specification as a reference and with the goal to see whether the system satisfies the specified requirements.

The main types of tests carried out on website testing are:

- Unit Testing
- Integration Testing
- Validation Testing
- System Testing

6.1 UNIT TESTING

Unit testing focuses verification effort on the smallest unit of the software design the module. The local data structure is examined to ensure that data stored temporarily maintains its integrity. Boundary conditions are tested to uncover the errors of the module within the boundary. The testing's required for debugging the code are:

Values that break the code:

All data submitted by a browser to the Web server is formatted as strings. Also defined the range of values and then tested the application with values that fall outside these ranges. Proceeding to this, it is tested to check whether the values entered falls into the right range of values, and then performing more tests to make sure it is actually the right length and perhaps even that it contains some special characters pertinent to the kind of data it's supposed to be.

Basic Error Types:

Runtime errors are an application's inability to find or open a file or connect to a database. They occur while the program is still running.

Logic error, which occurs when the program has no syntax errors, runs fine, and produces an incorrect response or answer.

PHP detects these errors programmatically and generates error messages for them.

Syntax Errors:

Simple typos: It's easy to type a semicolon or a curly brace instead of a colon or square bracket. Spelling and syntax are checked while typed.

Not properly closing statements: All the braces in the statements are checked and verified to be correctly given.

Forgetting to end a statement with the semicolon: Every statement in the project is checked to make sure it is ended with semicolon.

Misspelling the name of a function: Transposing, omitting, or adding letters to a function name are checked to avoid errors.

Forgetting the closing quotes for a string, or incorrectly mixing single and double quotes: The closing quotes on a string, especially when constructing long strings with lots of variables interspersed are checked.

In this website development, each page i.e. each form is tested individually to verify that the detailed design for unit has been correctly implemented. Initially the flow of control and data through that page is checked. In a page, each control is further tested in unit testing. The process is done in all the forms of the system.

6.2 INTEGRATION TESTING

Integration testing is a logical extension of unit testing. In its simplest form, two units that have already been tested are combined into a component and the interface between them is tested. A component, in this sense, refers to an integrated aggregate of more than one unit.

In a realistic scenario, many units are combined into components, which are in turn aggregated into even larger parts of the program. The idea is to test combinations of pieces and eventually expand the process to test your modules with those of other groups. Eventually all the modules making up a process are tested together.

Beyond that, if the program is composed of more than one process, they should be tested in pairs rather than all at once. Integration testing identifies problems that occur when units are combined.

All forms in the system have communication between each other. This helps in testing integration testing. For ex: if the user logs in, first system should check whether he is a valid user and then it moves to the user requested page and display the details according to the users request.

6.3 VALIDATION TESTING

Users can, and will, enter anything and/or nothing in the HTML forms. Likewise, malicious users will deliberately enter oddball data to try to break your applications. Form validation on both the client and the server is the main defense.

One way to deal with this is to limit the values permitted in a certain text box. For example, the postal code text box can be limited to contain 6 letters as follows:

```
<input name="pcode" type="text" size="6" maxlength="6" />
```

Regular Expressions:

Regular expressions, called regexps, are like a mini-programming language for creating very powerful patterns. They use a special notation to form the patterns that are used to match the values that are provided.

For example, the following code is used to check whether the text field contains only numeric values:

```
if (isset($fields[$field_name]) && preg_match("[^0-9]", $fields[$field_name]))
    $errors[] = "The field " . $field_name . " should contain only numeric values";
```

6.4 SYSTEM TESTING

System testing is a critical element of software quality and assurance and represents the ultimate review of specification design and coding. It is a vital activity that has to be enforced in the development of any system. This could be done in parallel during all the phases of system development. The feedback received from these tests can be used for further enhancements of the system under considerations.

CHAPTER 7

CONCLUSION

7.1 CONCLUSION

Mytamilthai.com is developed to help all the people who need to know all the information at a single site. Here there is an availability of dictionary with English to Tamil as well as Tamil to English dictionary with glossary. So it is very useful for all people at different countries to the know the meaning for any word they wish. Recent updates are displayed and it will be updated daily.

People add words to the dictionary. Admin, checks the word and allow to store in database or else reject it.

People posts comments by admin permission and it will be displayed in the index page of the site.

To follow Unicode format, NHM writer and some other Tamil key boards can be downloaded from this site. As this is a website project, we included some useful links in each page of the site.

CHAPTER 8

FUTURE ENHANCEMENT

8.1 FUTURE ENHANCEMENT

This project has been developed as a Master's project and is constrained by time. There is scope for extending the system as per the need.

Job providers advertise for the job availability now. Job seekers at present can view just the job advertisement and need to contact separately by them selves with the information provided by the job provider. Further it is going to extend by job seekers to post their resume for the advertisement displayed in the site through this site directly.

Also now there is an availability of English to Tamil and Tamil to English dictionary only. Further it is going to enhance in different language according to users wish.

Also according to users authorised comments the site will be enhanced.

APPENDIX 1

SCREEN SHOTS

Tamil keyboard

Azhagi - Mappings Summary (Press 'Shift+F7' to invoke this table, at any time)																			
Following is only a summary. Click here to learn mappings in detail, including uyirney, intelligent, special and extended mapping																			
அ	ஆ	இ	ஈ	உ	ஊ	எ	ஏ	ஐ	ஓ	ஔ	ஔா	ஔி							
a	aa,A	i	ee,li	u	oo,U	e	E,ae	ai	o	O,oa,oe	ow,ou,au	q							
க	ங	ச	ஞ	ட	ண	த	ந	ப	ம	ய	ர	ல	வ	ழ	ள	ற	ன்		
k,g,c,gh	ng,nG	s,ch	gn,Gn,nj	t,d	N,nd	th,dh	n,nh,ndh,nth	p,b	m	y	r	l	v,w	zh,z	L	R,tr,dr	n,nH		
ஸ்ரீ	ஜ	ஷ	ஸ	ஹ	கஷ	ஃப	ஃஜ	ஃஸ	க	உ	ஊ	ச	ஞ	க	எ	அ	க	ஓ	க
shri,Mr	j	sh	s,S	h	ksh	f,ph	Z,z	x	Ma	Mb	Mc	Md	Me	Mf	Mg	Mh	Mi	My	Mz
sree	Grantham (Sanskrit Characters)					Special Mappings			Mappings for 9 Tamil Numerals corresponding to digits 1 to 9									Sp. Symbols	

Tamil typing

The screenshot shows the Azhagi software interface. At the top, there is a menu bar with options like File, Edit, Color, Font, Mail/Chat, Tools, Preferences, Contacts, and Help. Below the menu bar, there are several toolbars and buttons for screen appearance, keyboard layout, and preferences. A central text area contains the Tamil text 'அம்மா அப்பா'. A floating window titled 'Azhagi - Mappings Summary' is open, displaying the same table as shown in the previous screenshot. The table provides a summary of the English-to-Tamil key mappings, including vowels, consonants, and special characters. The interface also includes a status bar at the bottom showing the current keyboard layout as '1. Phonetic (Transliteration)' and other options like '2. Tamil Typewriter', '3. Tamilnet99', and 'Important Note'.

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வணக்கம் - Mozilla Firefox

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http://localhost/mytamilha/

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Email Notifier Weather

மை தமிழ்த்தாய்

நடப்புச் செய்திகள்

பங்குச் சந்தை

தாசியல் பக்கம்

சிவ்மொ பக்கம்

பள்ளி விடைபாடல் வகுப்புகள் தொடர்

மாத்தாம வகுப்புகள் தொடர்

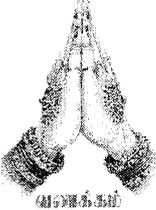
வெப்பநிலை விசேஷ

செய்தல் உரைகள்

விசேஷப்பாட்டு

என்னைப்பற்றி

வணக்கம்!!வணக்கம்!!



மைதமிழ்த்தாய்க்காய் என்பது அனைத்துச் செய்திகளை ஒரே தலையில் காணும் வகையில் அமைக்கப் பெற்றது. மற்ற நாடுகளின் வலது தமிழ் பக்கங்களைப் பயன்படும் வகையில் இந்த

உள்ளே செல்ல

பெயர்

Password

Login

புதுசேர்க்கை

வேலை வாப்படி

wanted

கருத்தைசேர்

பயன்பெயர்

None

LOGIN PAGE

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Email Notifier Weather

மை தமிழ்த்தாய்

நடப்புச் செய்திகள்

பங்குச் சந்தை

தாசியல் பக்கம்

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பள்ளி விடைபாடல் வகுப்புகள் தொடர்

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வெப்பநிலை விசேஷ

செய்தல் உரைகள்

விசேஷப்பாட்டு

என்னைப்பற்றி

வணக்கம்!!வணக்கம்!!



மைதமிழ்த்தாய்க்காய் என்பது அனைத்துச் செய்திகளை ஒரே தலையில் காணும் வகையில் அமைக்கப் பெற்றது. மற்ற நாடுகளின் வலது தமிழ் பக்கங்களைப் பயன்படும் வகையில் இந்த

உள்ளே செல்ல

பெயர்

Password

Login

புதுசேர்க்கை

வேலை வாப்படி

wanted

கருத்தைசேர்

பயன்பெயர்

http://localhost/mytamilha/

USER COMMENTS

The screenshot shows a Mozilla Firefox browser window displaying a website. The address bar shows 'http://localhost:mykavitha/index.php'. The page content includes:

- A header with 'வலை உலகம்' and 'நினைவாட்டி'.
- A central image of hands in a prayer gesture with the text 'வணக்கம்' (Namaste).
- A paragraph of text in Tamil: 'மைதமிழ்தாயகம் என்பது அனைத்து செயதிகளை ஒரு தலையில் காணும் வகையில் அமைக்கப் பெற்றது. மற்ற நாடுகளின் வறும் தமிழ் மக்களுக்கு பயன்படும் வகையில் இந்த தலையி் அமைந்துள்ளது.' (Maitamizhathayagam is a place where all activities are gathered in one hand. It is created to help the dry Tamil people of other countries. This head is arranged in a way that it can be used by the Tamil people of other countries.)
- A button labeled 'எனப்பையற்றி' (My Profile).
- An image of a stuffed animal with the text 'அனுகூலம்' (Anukoolam).
- A button labeled 'மக்கள்கருத்து' (People's Comments).
- A comment by 'priya' with the text: 'நன்றாக உலகம் பரிமாற இன்றைமேல் சிவகாம சோகலாம்ப'.
- A form on the right side with fields for 'English:', 'தமிழ்:' (Tamil), 'Description-english:', 'தமிழ்-விவாகம்:' (Tamil Review), and a 'Get' button.
- Another button labeled 'வேலைவாய்ப்பு' (Job Opportunity) with a 'wanted' field.
- A button labeled 'கருத்தை சொ' (Share Comment) with fields for 'name பெயர்:', 'முகம்:' (Profile), 'கருத்துக்கம்:' (Comment), and 'முகம்:' (Profile).

KAVITHI

The screenshot shows a Mozilla Firefox browser window displaying a website. The address bar shows 'http://localhost:mykavitha/index.php'. The page content includes:

- A header with 'வருக! priya! Logout முதல் பக்கம்'.
- A main title 'மை தமிழ்த்தாய்' (Maitamizhathayagam).
- A navigation menu with buttons: 'நடப்பு செய்திகள்' (Latest News), 'இளமை' (Youth), 'பெயர்கள்' (Names), 'நகைச்சுவை' (Humor), 'வினையாட்டு' (Quiz), and 'மருந்தகம்' (Pharmacy).
- A button labeled 'இளைங்கினே!' (Welcome!).
- A central text area with a poem: 'இனியவளே இனி யாரையும் நியமிர்ந்து பார் காதி; உன் கண்களையார் தீதே என்னுள் கண்டு பிடித்து விடுவார்கள்'.
- A button labeled 'எனப்பையற்றி' (My Profile).
- A footer with 'பிள்ள செல்'.

STORIES

LADIES

DICTIONARY

JOB ADVERTISMENT


```

<?php }?>
<!-- end header -->
<div id="wrapper">
  <!-- start page -->
  <div id="page">
    <?php if($_SESSION['uName'] != null){ ?>
      <div id="sidebar1" class="sidebar">
        <?php }else {?>
          <div id="sidebar1_index" class="sidebar">
            <?php }?>
            <ul>
              <li>
                <h2>நடப்புச் செய்திகள்</h2>
                <ul> <li>
                  <a href="pangu.php">பங்குச் சந்தை</a></li>
                  <li>
                  <a href="arasial.php">அரசியல் பக்கம்</a></li>
                  <li>
                  <a href="cinema.php">சினிமா பக்கம்</a></li>
                  <li>
                  <a href="twelve.php">பன்னி ரெண்டாம்
                  வகுப்புத் தேர்வு</a></li>
                  <li>
                  <a href="ten.php">பாத்தாம் வகுப்புத்
                  தேர்வு</a></li>
                  <li>

```



```

```

```
<p><strong>மைதமிழ்தாய்.காம்</strong>
```

என்பது அனைத்துச் செய்திகளை ஒரே தலதில் காணும் வகையில் அமைக்கப் பெற்றது. மற்ற நாடுகளிள் வழும் தமிழ் மக்களுக்கு பயன்படும் வகையில் இந்த தலம் அமைந்துள்ளது.


```
</div>
```

```
<div class="entry">
```

```
<p><strong></strong>
```

```
</div>
```

```
<div class="entry"><br><br>
```

```
<p><strong> எங்கள் தலத்தில் வேலை
```

வாய்ப்பு விளம்பரம் செய்ய அனுகவும் 9865151262

```
</div>
```

```
</div>
```

```
</div><!-- end content -->
```

```
<!-- start sidebars -->
```

```
<div id="sidebar2" class="sidebar">
```

```
<ul>
```

```
<?php if($_SESSION['uName'] != null) { ?>
```

```
<li><?php include('search.php'); ?></li>
```

```
<?php }
```

```
if($_SESSION['uName'] != null){
```

```
    }else{
```

```
        echo '<li><h2 class=admin>உள்ளே செல்ல</h2>';
```


APPENDIX 2

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