

Minor Project Report for the of Bachelor of Computer
Engineering

Temple Visitor Management System



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Dedication

This project is dedicated to future generations of researchers, innovators and problem solvers who will build upon our work to create a better internet society.

Declaration

We hereby declare that the project entitled “TEMPLE VISITOR MANAGEMENT SYTEM” is based on our original work. Related works on the topic by other researchers have been duly acknowledged. We assume all liabilities related to the accuracy and authenticity of the data and any other information included herein.

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Date:

September 20, 2023

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Abstract

TVMS (Temple Visitors Management System) is a web application-based project to manage the records of visitor of temple digitally to replace the traditional method of paper-based data management system. On our frequent visit to ISKCON Temple we used to observe the use of paper-based data management system to manage the record. So, this project is intended to solve this time consuming and tedious process of manual data management with digital web application-based data management system using technologies like HTML, CSS, JS, Apache Server etc.

Keywords: ISCKON, TVMS, Management, records, project etc.

Table of Contents

Dedication	ii
Declaration	iii
Acknowledgements	iv
Abstract	v
List of Figures.....	vii
Acronyms and Abbreviation	viii
Chapter 1: Introduction	1
1.1 Background.....	1
1.2 Statement of Problem.....	1
1.3 Objective.....	2
1.4 Application.....	2
1.5 Limitations	3
Chapter 2: Literature Review	4
2.1 Introduction.....	4
2.1 Case Study	4
Chapter 3: Methodology:	6
3.1 Flow of project.....	6
3.2 System Design.....	10
3.4 Testing and Maintenance.....	15
Chapter 4: Result and Discussion.....	16
4.1 Data Collection and Preparation	16
4.2 Web Development	16
Chapter 5: Conclusion and Future Enhancement	22
5.1 Conclusion	22
5.2 Future Enhancement	22
5.4 Problem Faced	22
5.5 Budget Analysis.....	23
References	24
Appendix	26

List of Figures

Figure 1: Flow of project TVMS (Group Study)	6
Figure 2: TVMS ER-Diagram (Group Study).....	10
Figure 3: Level 0 Data Flow Diagram (Group Study)	11
Figure 4: Level 1 Data Flow Diagram (Group Study)	11
Figure 5: Level 2 Data Flow Diagram (Group Study)	12
Figure 6: Use Case Diagram (Group Study)	13
Figure 7: System Flowchart (Group Study)	14
Figure 8 : Landing Page	16
Figure 9: Login Page	17
Figure 10: Registration Page	18
Figure 11: Admin Dashboard	19
Figure 12: Book Stock Page.....	19
Figure 13: User detail page	20
Figure 14: Visitor Entry.....	20
Figure 15: Database of TVMS project	21

Acronyms and Abbreviation

AI	Artificial Intelligence
CSS3	Cascading Style Sheet 3
DFD	Data Flow Diagram
ER	Entity Relationships
G2C	Government to Customer
HRCE	Hindu Religious & Charitable Endowments Department
HTML	Hyper Text Markup Language
ISKCON	International Society for Krishna Consciousness
ITMS	Integrated Temple Management System
JS	Java Script
MS Word	Microsoft Word
MySQL	My Structured Query Language
NET	Network Enabled Technology
PHP	Hypertext Preprocessor
RAM	Random Access Memory
SSD	Solid State Drive
TVMS	Temple Visitors Management System

Chapter 1: Introduction

1.1 Background

Temple Management System is a web based computerized system that provides a platform for the temple organizing committee to manage the temple record through online medium. It provides online facility to register or make entry of new visitor of temple remotely who attends events or classes of temple. It also provides the facility of filtering the data from visitor record which will be beneficial to invite last visitor to recall them in temple [1].

Temple Management System has main motive to digitalize the database of temple which previously is being maintained by manual paper works. It is mainly focused to provide efficient method for making data entry and manipulation. This web-based design will make easier for administrator of temple for keeping the record digitally. In this current world of modernization, it is hard to take care of huge data in an emerging organization like ISKCON temples without the use of latest technologies [2]. Thus, this project will help the management system to be easier and increase visitor experience too.

Visitor visiting or planning to visit the temple can register for courses conducted or going to be conducted by temple. These kinds of user have limited access over the system. User cannot delete or publish any data of database system [3].

Temple Administrator have the access to control the official package/offers or to add/delete/update information of the database.

1.2 Statement of Problem

During early period of time temples were created at those places where people find the indicated the presence of gods or sprits. The oldest temple of Turkey i.e., **Gobekli Tepe** is estimated to be around 11,500 years old. It is found that the temple used to have larger room for the public function which indicates that there used to large number of visitors of temple. Which was found to be in temple of Mesopotamian Temple, The Temple in Judaism and in temples in China and India [4].

Management of religious organization depends on denomination, size as well as structure of organization. During the visit to ISKCON Temple of Chitwan at Baseni we could observe huge number of visitors seems to be attending visitor at event. But records of huge number of visitors are being collected manually using paper notebooks which seems to look like tedious process [2].

A huge amount of data will be collected even in future days respectively. This will result in a big data management issue. The term “Big Data” has recently grown in prominence as a way of describing the phenomenon of growth in data volume, complexity and disparity. In case of increasing number of visitors their data management will not be feasible in processes like creation, deletion and manipulation [5].

1.3 Objective

Our project on Temple Management System: A Case Study of ISKCON Chitwan is being developed to provide web interface-based data management system to temple administrator with much more effective services. Following are the objectives of temple management system project:

- To create web-based data entry, delete and update system of temple visitors.
- To view analytical data of visitor for comparing progress of temple.
- To improve the quality of database records in temple.

1.4 Application

Our project can be implemented in several temple organization for different purposes. Although this project won't have all the features required to manage huge big data's but, it will still manage to handle important feature of data management system which is able to make data entry, edit, delete and filter data as per admin's operator need. Temple management admin will have access and manage the records of book and visitor related databases.

1.5 Limitations

This project is limited to only management of visitor who visit ISCKON Chitwan temple and books taken by the visitor. This project cannot handle data of other management related information like schedule of temple.

Chapter 2: Literature Review

2.1 Introduction

The literature review section of this proposal report focuses on the observations and conclusions made as per the several research papers that we went through related different case studies and other things related to our approach. Online temple management system is a web application that permits the management of temple visitor. It is time consuming to keep records of visitors/devotee manually and cannot be manipulated or updated easily. A lot of research has been done for this project by our team on online temple management system and here are some of the study's results:

2.1 Case Study

2.2.1. Kshethrasuvidham

Kshethrasuvidham is an application software for Temple Administration, it makes administration of any temple easier, effective and accurate to automate and streamline all the accounting/administrative activities at the Temple. It makes computerization at any Temple a simple process. Computerization improves services to devotees in terms of speed, efficiency, accuracy, neatness and saves a lot of time. A special feature of the software is that it is highly user friendly with the support of MALAYALAM/TAMIL Panchangam with Birth Stars, Tithi etc, which supports all Indian Languages like Malayalam/Tamil/Hindi/Telungu/Kannada and Local Calendar (Sun based and Moon Based). This software is the first of its kind which integrates in all the areas of Temple administration and provide native language interface [6].

2.2.2 3ioNetra temple management system

3ioNetra's All-in-One Temple Billing and Resources Management software has been developed under wise control of experienced Technology professionals, Pandits &

Temple administrators. Various kinds of Seva bookings, cash, and in-kind donations can be managed and monitored. Temples can manage and track financial incomes and expenses of their day-to-day operations. Bookings and managements can be done with the help of this system [7].

2.2.3 Integrated Temple Management System

ITMS is an integrated Portal that dynamically creates Bi-lingual Websites for all the 44,300+ Temples under HRCE Department, Government of Tamil Nadu for dissemination of Temples' Information and enabled various Online Temple Services, Publishing of Temple Properties, Budget, day to day events etc. to the Public(G2C). Also, Facilities the module for capturing of Temple landed Properties, Demand Collection and Balance of Temple Properties, Idols and Icons Information, Monitoring of Thiruppani (Construction / Renovation) Works, GIS Integration for Desiminating Temple Information and Temple Properties, Mobile Apps for capturing of Geo-Locations of the Temples/Properties, QR Code Verification, Tickets Booking, Desimination of Temple Information etc. [8].

2.2.4 Chakra4temples

Chakra4temples is all in one Hindu Temple Online Management Solution developed by temples, for temple since 2004. Which have more than 100 thousand users. Which is a secured role-based system with custom privileges able to accept donation, manage Managers, Priests, Devotees etc. This software has additional facilities like calendars, schedule events and other settings [9].

2.2.5 Buddhist temple Management for Religious tourism

This research was done to investigate temple management for religious tourism at Tham Khao Roop Chang temple situated on the Thai-Malaysian border. After completion of this research recommendation for government to pay more attention for proper temple management to increase tourism development [10].

Chapter 3: Methodology:

Methodology refers to the overall framework of principles, practices, and procedures used in a particular field of study or research. It encompasses the systematic approach employed to collect, analyze, and interpret data, as well as the techniques and tools utilized to address research questions or solve problems within a given discipline [11].

3.1 Flow of project

A project flow diagram as shown in **Figure 3.1** a visual representation that outlines the sequence and dependencies of tasks or activities in a project. It illustrates the flow of work from start to finish, highlighting the order and relationships between different project components. The diagram helps stakeholders understand the project's timeline, milestones, and critical paths, facilitating effective project planning, coordination, and communication [12].

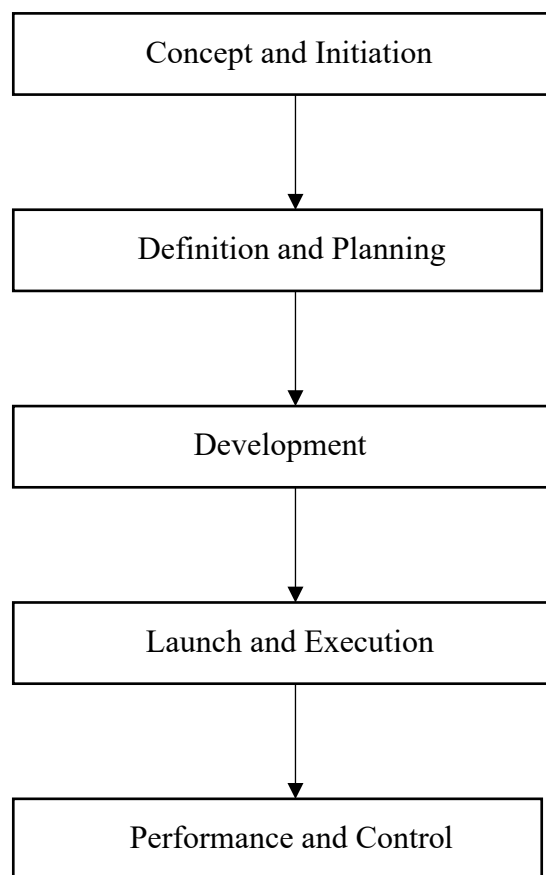


Figure 1: Flow of project TVMS (Group Study)

3.1.1 Concept and Initiation

Concept and initiation of a project involve the early stages of defining project objectives, scope, and stakeholders, as well as assessing feasibility and potential risks. It sets the foundation for project planning and execution. The concept and initiation of a project are widely recognized and discussed in project management literature and various methodologies. [13]

3.1.2 Definition and planning

Definition in research refers to clearly identifying and formulating the research problem or question, specifying objectives, scope, and boundaries, and defining key terms and concepts. Planning involves developing a systematic strategy, including research design, methods, sampling, timeline, and resources. [14]

3.1.3 Development

Development tools for projects encompass a wide range of software applications, frameworks, and utilities that aid in the creation and management of project deliverables. These tools streamline development processes, enhance collaboration, and provide features for code editing, version control, testing, and project tracking [15].

1. **HTML** - HTML is the standard language for creating web pages. It uses tags to structure and format the content and elements on a webpage [16].
2. **CSS3** - CSS3 is the latest version of the CSS language, introducing new features and enhancements for web page styling, including transitions, animations, and advanced layout capabilities [17].
3. **Tailwind CSS** - Tailwind CSS is a utility-first CSS framework that provides a set of pre-defined classes for rapid and efficient web development, enabling easy styling and customization of user interfaces [18].

4. **JavaScript** - JavaScript is a programming language used for adding interactivity and dynamic behavior to websites. It enables client-side scripting and manipulation of web page elements and content [19].
5. **PHP** – PHP (Hypertext Preprocessor) is a server-side scripting language widely used for web development, allowing for dynamic content generation, database integration, and server-side processing of web forms [20].
6. **MySQL** - MySQL is an open-source relational database management system that provides a robust and efficient platform for storing, managing, and retrieving structured data for web applications and other software systems [21].
7. **Apache Server** – Apache Server, commonly known as Apache HTTP Server, is an open-source web server software widely used to serve web pages over the internet. It provides a reliable and flexible platform for hosting websites and delivering content to clients [22].
8. **XAMPP** – XAMPP is a free and open-source software package that provides an easy-to-install and configure cross-platform server environment for web development. It includes Apache HTTP Server, MySQL database, PHP, and Perl, enabling users to create a local server for testing and development purposes [23].
9. **VS Code** - VS Code is a free and open-source source code editor developed by Microsoft. It provides a highly customizable and lightweight environment with extensive language support and a wide range of extensions for efficient coding and development [24].
10. **MS-Word** - MS Word (Microsoft Word) is a widely used word processing software that allows users to create, edit, and format text documents. It offers a range of features for document formatting, spell checking, and collaboration [25].

3.1.3 Launch and Execution

After completion of development phase our product will be launched at ISKCON Chitwan situated at Baseni where this application will be working in real time environment.

3.2 System Design

This portion of paper contains the architecture design of Temple Visitors Management System based on the information collected in earlier portion of document. It contains diagrams like ER diagram, DFD and Use Case Diagram.

3.2.1 ER Diagram

An ER diagram, short for Entity-Relationship diagram, is a graphical representation of the entities, attributes, and relationships within a database system. It provides a visual tool for designing and understanding the structure and relationships of the data in a database [26].

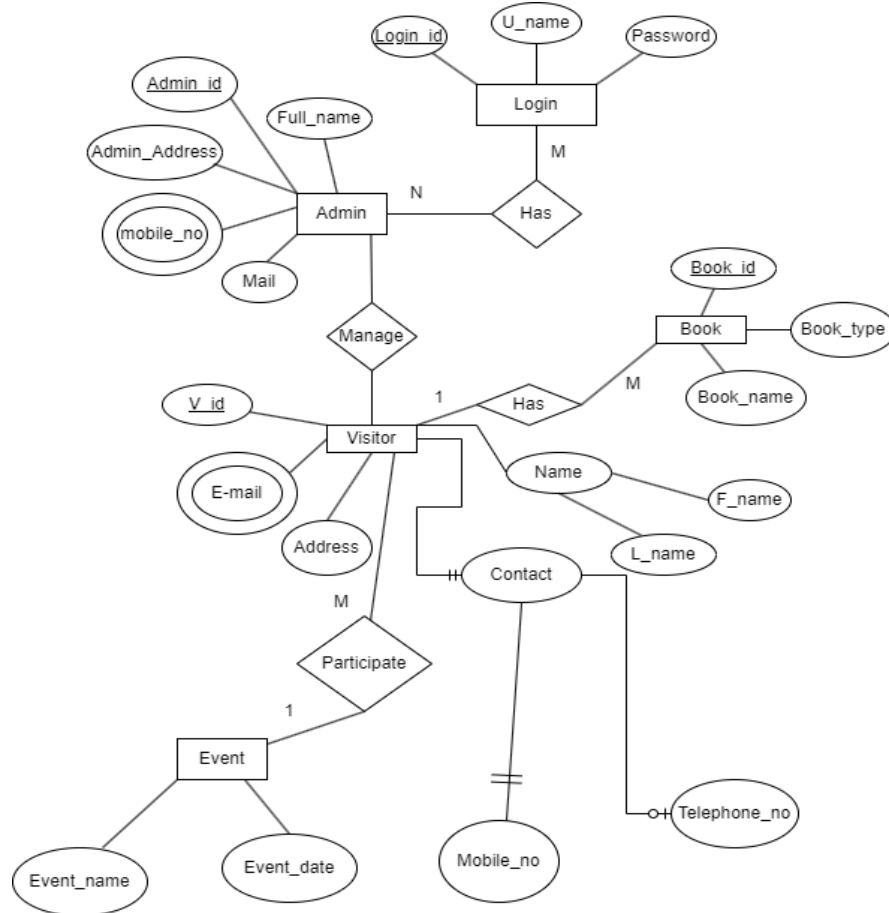


Figure 2: TVMS ER-Diagram (Group Study)

3.2.2 Data Flow Diagram

A Data Flow Diagram is a visual representation that illustrates the flow of data within a system, showing data sources, processes, data stores and data flows. A data flow diagram can dive into progressively more detail by using levels and layers, zeroing in on a particular piece. DFD levels are numbered 0, 1 or 2, and occasionally go to even Level 3 or beyond [27].

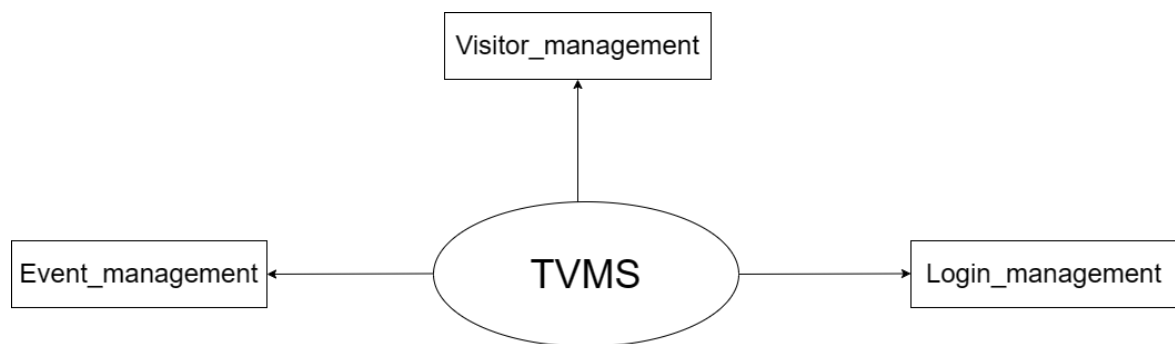


Figure 3: Level 0 Data Flow Diagram (Group Study)

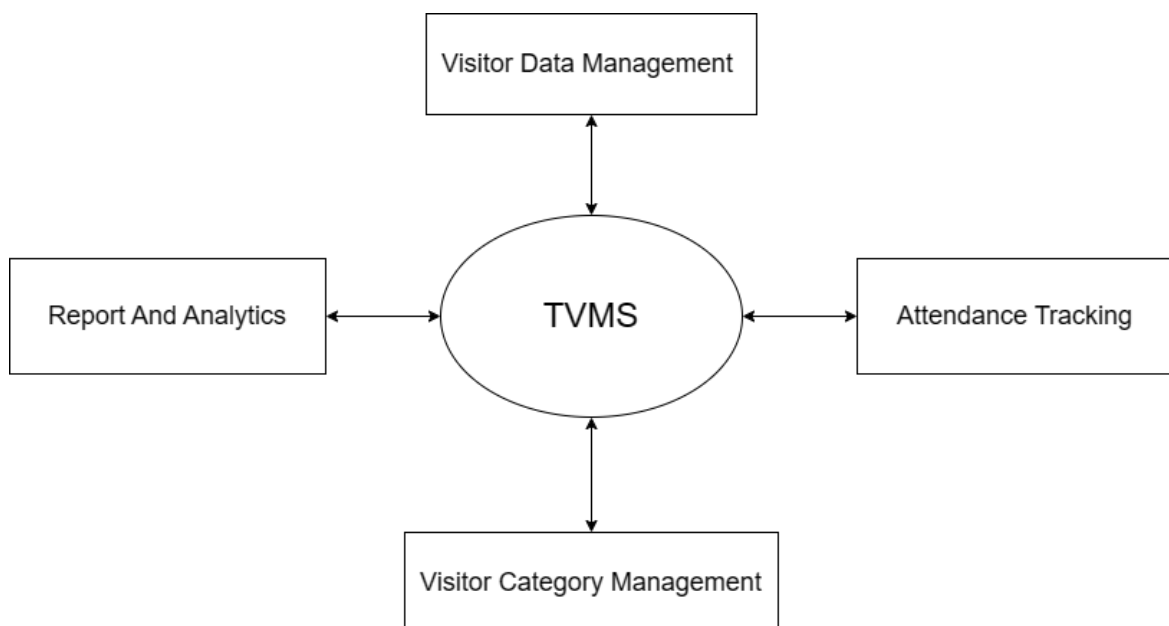


Figure 4: Level 1 Data Flow Diagram (Group Study)



Figure 5: Level 2 Data Flow Diagram (Group Study)

3.2.3: Use Case Diagram

A use case diagram is a visual representation that illustrates the interactions between actors and use cases within a system, commonly used in software development to capture functional requirements [28].

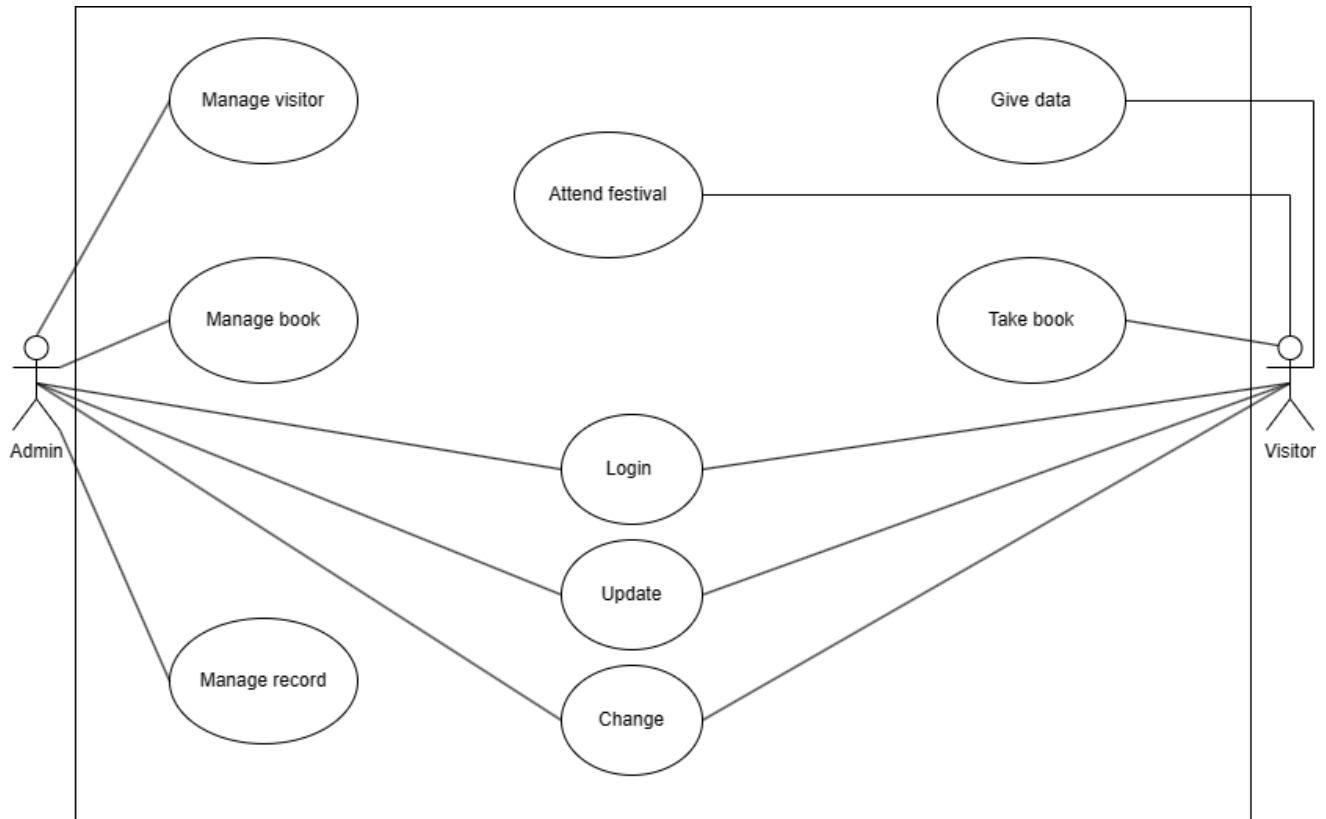


Figure 6: Use Case Diagram (Group Study)

3.2.4: System Flowchart

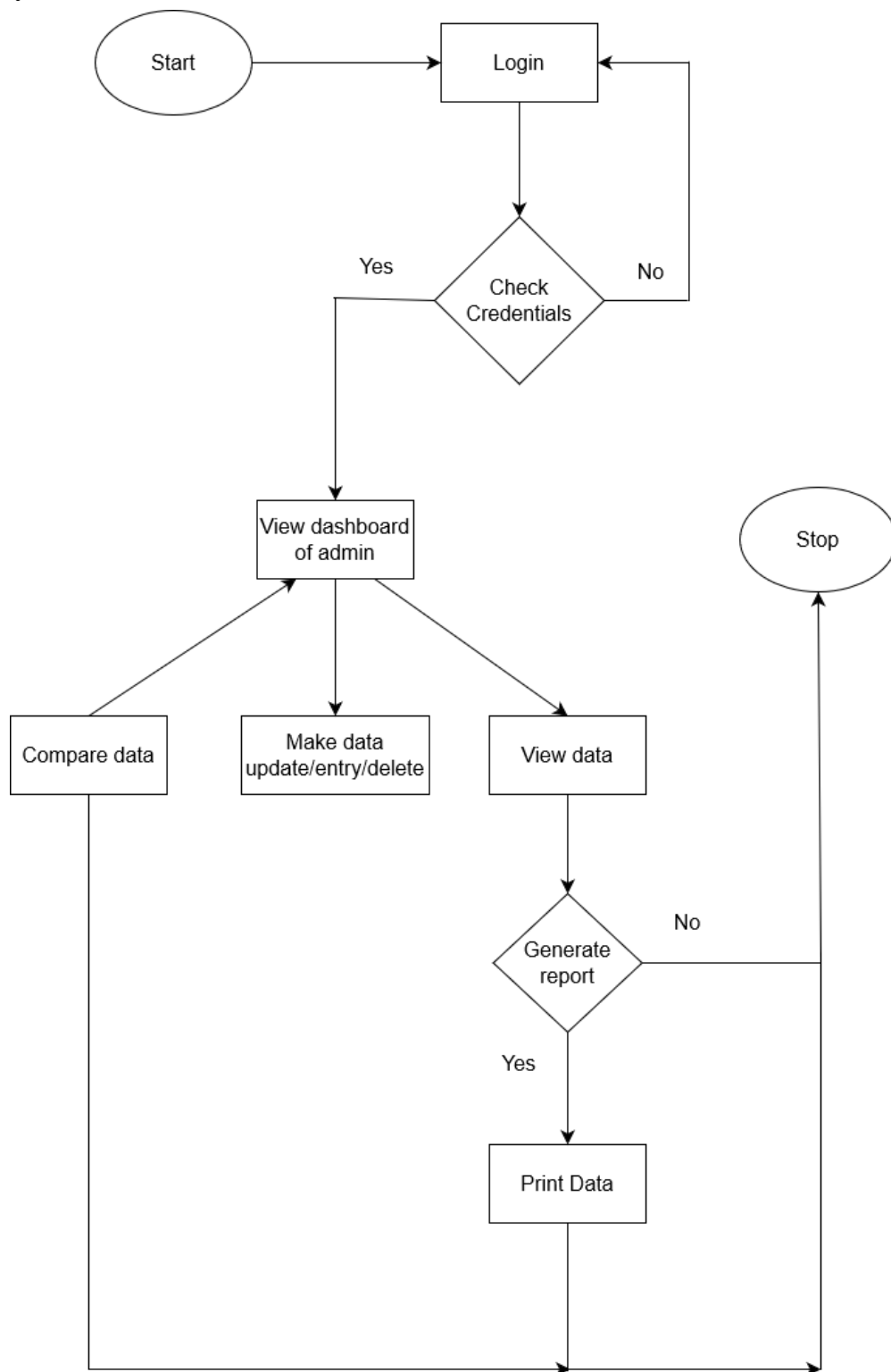


Figure 7: System Flowchart (Group Study)

3.4 Testing and Maintenance

For proper implementation of this web application. Application should be tested at developer side to ensure everything work properly [29]. We have done manual testing of our web application after completion of final project.

Chapter 4: Result and Discussion

4.1 Data Collection and Preparation

The sample dataset was obtained from a primary source from ISKCON temple located at Chitwan with their due permission. We were provided with 15 data sample of visitors which was uploaded in database for the testing purpose of the web application locally.

4.2 Web Development

4.2.1 Frontend

The front-end environment for this project comprised of interactive, desirable and understandable web pages; Home page, Login Page, Sign-up page, Dashboard graphs and book listing pages are illustrated below:

Home Page

This is the first page that user sees when they land on web application.

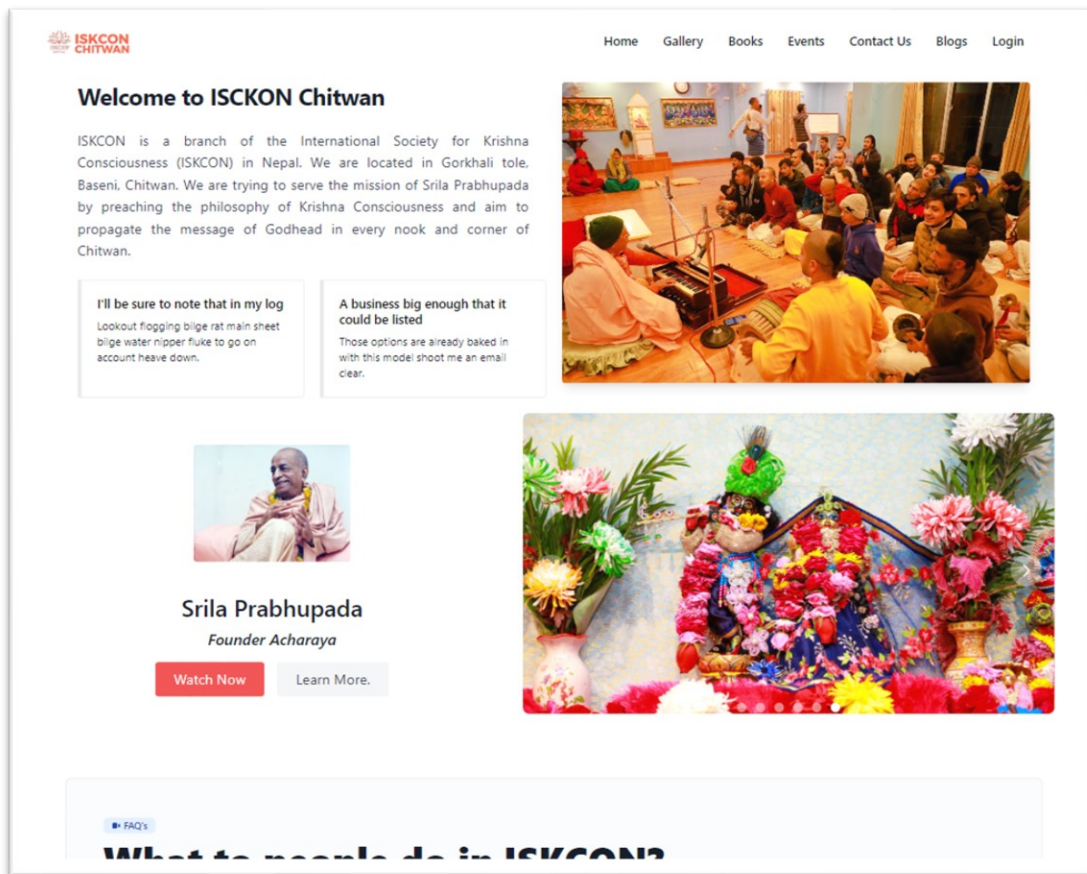


Figure 8 : Landing Page

Login Page

This is the page from where user and management administration can login.

ISKCON CHITWAN

ISKCON SOCIETY

Sign in to your account

Your email

name@company.com

Password

☐ Remember me [Forgot password?](#)

Sign In

Don't have an account yet? [Sign up](#)

ISKCON CHITWAN

[About](#) [Privacy Policy](#) [Licensing](#) [Contact](#)

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Figure 9: Login Page

Registration Page

Registration page is used to register new user as well as register the data of visitor.



[Home](#) [Gallery](#) [Books](#) [Events](#) [Contact Us](#) [Blogs](#) [Login](#)

Are You New User? Sign Up

First Name

Second Name

Date of Birth

ISKCON Center

Select Center

Select Gender

☐ Male ☐ Female ☐ Others

Email Address

Mobile No.

Permanent Address

New Password

Repeat Password

Figure 10: Registration Page

Admin Dashboard

This is what admin dashboard looks like:

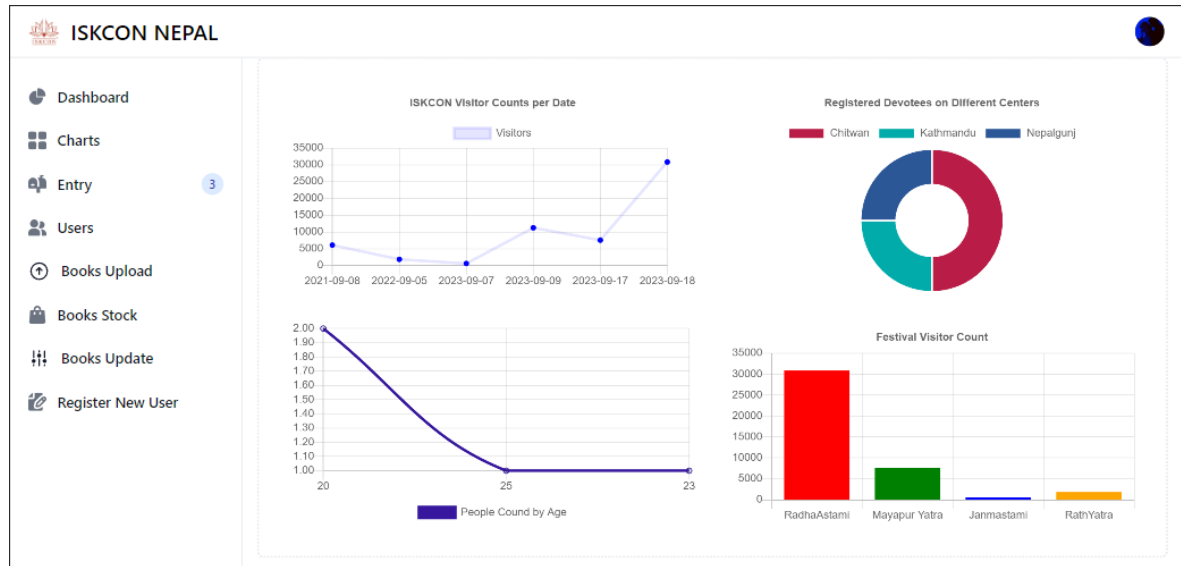


Figure 11: Admin Dashboard

Book Listing Page

This is the page from where management committee can track books records.

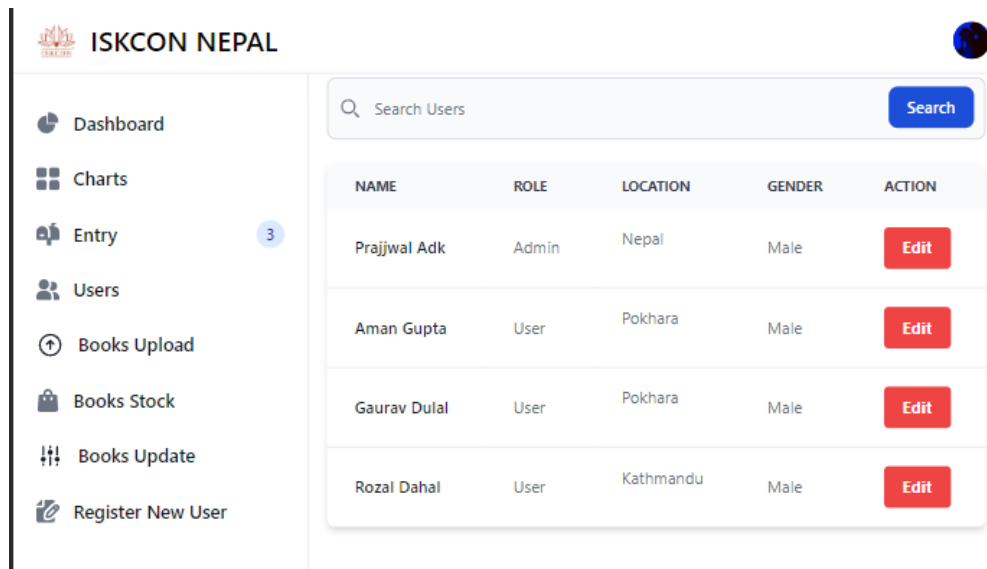
The Book Listing Page for ISKCON NEPAL features a sidebar with navigation options: Dashboard, Charts, Entry (3), Users, Books Upload, Books Stock, Books Update, and Register New User. The main content area displays a table of book records with a search bar and a search button.

BOOK NAME	TYPE	PRICE	LANGUAGE	ACTION
Bhagwat Geeta As It Is	Medium	700	Chinese	edit
Sri Caitanya-caritamrta, Adi-lila	Large	3200	Spanish	edit
Krishna Book	Medium	700	French	edit
Prabhupada Lilamrita	Large	600	English	edit
Srimad Bhagwatam Canto: 1	Large	1500	English	edit
Srimad Bhagwatam Canto: 10	Large	1500	English	edit
Srimad Bhagwatam Canto: 11	Large	1500	English	edit
Srimad Bhagwatam Canto: 12	Large	1500	English	edit
Srimad Bhagwatam Canto: 2	Large	1500	English	edit
Srimad Bhagwatam Canto: 3	Large	1500	English	edit
Srimad Bhagwatam Canto: 4	Large	1500	English	edit

Figure 12: Book Stock Page

User info page

This is what it looks like to see user information.

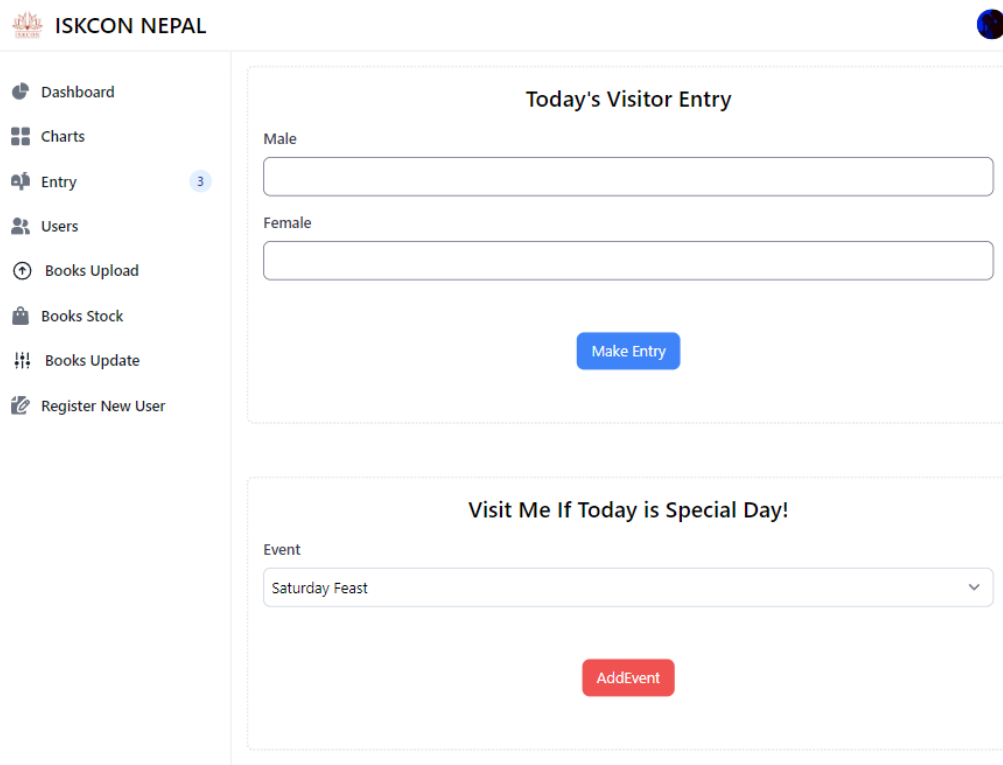


NAME	ROLE	LOCATION	GENDER	ACTION
Prajwal Adk	Admin	Nepal	Male	Edit
Aman Gupta	User	Pokhara	Male	Edit
Gaurav Dulal	User	Pokhara	Male	Edit
Rozal Dahal	User	Kathmandu	Male	Edit

Figure 13: User detail page

Visitor Entry Page

This is page where entry of every day visitor record can be made.



Today's Visitor Entry

Male

Female

[Make Entry](#)

Visit Me If Today is Special Day!

Event

Saturday Feast

[AddEvent](#)

Figure 14: Visitor Entry

4.2.2 Back End

To develop this project PHP was utilized as a backend technology. Coding implementation of this project is present in the GitHub repository provided in the appendix below.

4.2.3 Database

This project involves the utilization of SQL with XAMP server as the database technology. Database of this project is shown in the Figure below:

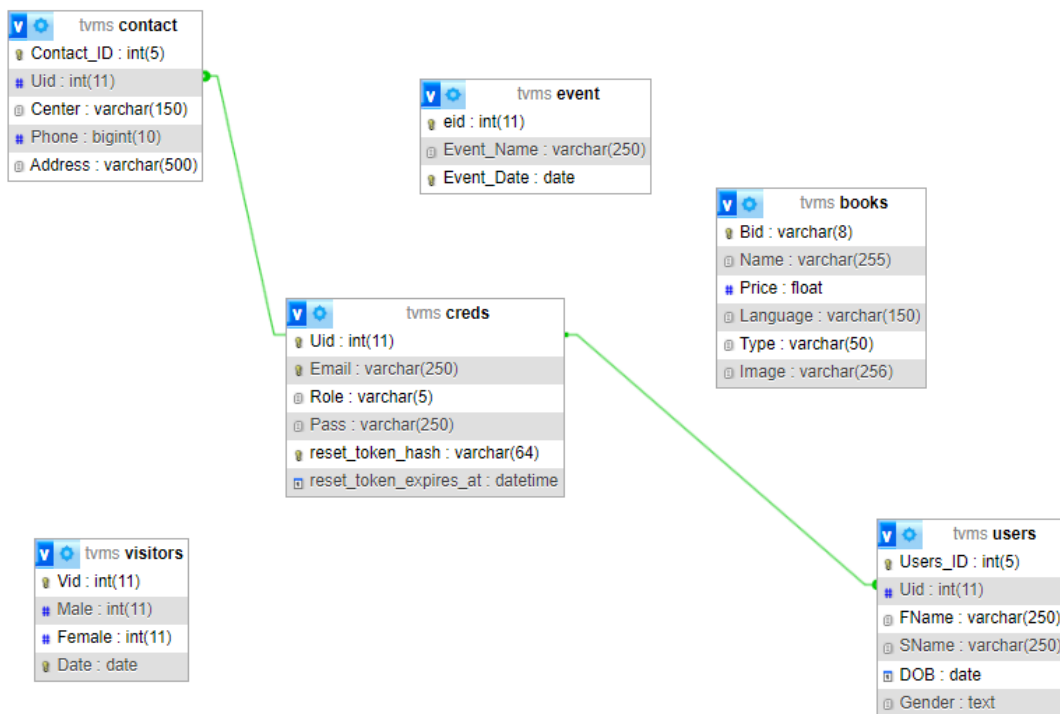


Figure 15: Database of TVMS project

Chapter 5: Conclusion and Future Enhancement

5.1 Conclusion

This project is capable of managing the raw data of the visitor of temples and presenting them in visually appealing manner as well as will be beneficial for the temple management committee to perform CRUD operation of data for the visitor record which they have. Which means their valuable time will be saved as well as they can be more efficient to manage temple. The best part of this web application is that it is compatible for the mobile devices, laptops, table and other large screen devices even Television.

5.2 Future Enhancement

Some Straightforward improvements that can be made to enhance this project further:

- **Localization:** Adding Support for multiple Language and region-specific adaptations to make the tools usable in various places.
- **Performance Optimization:** Performance of this web application can be boosted by use of more advance technologies.
- **AI:** Artificial Intelligence can be implemented to predict the temple visitor for the future event by observing the history of data.
- **Chat System:** Live Chat system with the visitor through web application can be implemented.
- **Online Payment for Book Sell:** Online Services like selling books, payment method can be integrated to make this system more advance.

5.4 Problem Faced

During the initial phase of this project development lack of proper technical knowledge was the major drawback in our team which forced us to spend more time to gain technical skills to meet our project objective. As this was the first project done by this group lack of time management and work management was faced at different stages of this project development due to which learning and deployment task was not being executed simultaneously.

5.5 Budget Analysis

Total cost for development of this project is mentioned below:

Name	Cost	Quantity	Sub Total
Printing	250	3	750
Human Resources	3000	4	1200
Internet Package	100	20	2000
Total Cost (NRs):			14750

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Appendix

The Source code for our project is present in the GitHub repository, and the link is provided here:

<https://github.com/prajjwallive/TVMS>