Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau

Team Details

Team ID : LTVIP2026TMIDS34454

Team Size: 4

Team Leader:AMBATI KEERTHI

Team Members:LAM VIJITHA

HYMAVATHI LAVETI

SABBU RADHIKA

ABSTRACT

The project titled **"Tirupati Educational Trust Management System"** is a comprehensive web-based application developed to digitize and streamline the administrative operations of an educational trust. Educational trusts play a significant role in managing schools, colleges, and charitable institutions. However, many trusts still rely on manual methods for maintaining student records, trustee details, financial transactions, and administrative documentation. These traditional methods are time-consuming, prone to errors, and inefficient in handling large volumes of data.

The primary objective of this project is to design and develop a computerized management system that ensures accuracy, data security, transparency, and quick retrieval of information. The system enables administrators to efficiently manage student registrations, trustee information, expense records, staff details, and institutional reports. It provides functionalities such as adding, updating, deleting, and searching records, along with generating reports and exporting data for documentation purposes.

The application is developed using modern web technologies including HTML, CSS, JavaScript for frontend development, PHP for backend processing, and MySQL for database management. The system operates on a local server environment using XAMPP. By implementing this system, the trust can significantly reduce paperwork, minimize human errors, improve operational efficiency, and ensure better decision-making through structured data management.

This project demonstrates how the integration of information technology into institutional administration can enhance productivity, improve transparency, and modernize traditional trust management practices.

CHAPTER 1

INTRODUCTION

1.1 Introduction to the Project

Educational trusts are established with the purpose of promoting education and managing academic institutions. These trusts are responsible for overseeing student admissions, maintaining academic records, managing staff, handling finances, and ensuring smooth institutional functioning.

In many small and medium-scale trusts, administrative tasks are performed manually using paper-based registers and files. Such systems are inefficient and create difficulties in maintaining accuracy, retrieving records, and generating reports. As the number of students and institutional activities increases, manual systems become increasingly complex and unmanageable.

The “Tirupati Educational Trust Management System” is a web-based application designed to automate and simplify these administrative tasks. The system centralizes all important data into a digital database, allowing administrators to manage records efficiently and securely.

1.2 Need for the Project

The need for this project arises from the limitations of the existing manual system. The traditional method of maintaining records has several disadvantages:

- Data duplication due to repeated manual entries
- Difficulty in searching old records
- Increased paperwork and storage requirements
- Risk of physical damage or loss of documents
- Lack of transparency and accountability
- Time-consuming report preparation

In today’s digital era, institutions require fast and reliable systems to manage operations effectively. A computerized trust management system ensures data consistency, faster access, improved security, and enhanced administrative control.

Therefore, the development of a digital management system is essential to modernize trust operations and improve overall efficiency.

1.3 Objectives of the Project

The primary objectives of the Tirupati Educational Trust Management System are:

- To develop a centralized and secure database for managing institutional data
- To automate student registration and record maintenance
- To manage trustee and staff details systematically
- To maintain financial and expense records accurately
- To generate reports automatically for administrative review
- To reduce manual paperwork and operational delays
- To enhance transparency and accountability in trust management

The system aims to provide a user-friendly interface that can be operated easily by administrative staff without requiring advanced technical knowledge.

1.4 Scope of the Project

The scope of the project includes the development of a web-based application that manages administrative functions of an educational trust. The system can be used by:

- Educational Trusts
- Schools and institutions under the trust
- Administrative and management staff

The current version focuses on internal management operations. However, the system can be further enhanced in the future with features such as:

- Online fee payment integration
- SMS and email notification systems
- Cloud-based data storage
- Role-based access control
- Mobile application support

The project provides a scalable framework that can be expanded according to institutional needs.

1.5 Methodology

The development of this project follows the Software Development Life Cycle (SDLC) methodology. The main phases include:

1. Requirement Analysis – Understanding the needs of the trust and identifying system requirements.
2. System Design – Designing database structure, user interface, and system architecture.
3. Development – Coding the frontend and backend modules.
4. Testing – Verifying system functionality and identifying errors.
5. Deployment – Installing and running the system in a server environment.

Each stage was carefully executed to ensure the system meets the required standards of performance, reliability, and usability.

CHAPTER 2

SYSTEM ANALYSIS

2.1 Existing System

The existing system is primarily manual and paper-based. Records are maintained in physical files and registers. This approach creates several operational challenges:

- Difficulty in maintaining large amounts of data
- High probability of calculation and recording errors
- Lack of centralized data storage
- Time-consuming administrative procedures
- Limited data security

The manual system does not support real-time updates or quick data retrieval, making it inefficient for modern institutional requirements.

2.2 Proposed System

The proposed system is a web-based computerized application designed to overcome the limitations of the manual system. The key features of the proposed system include:

- Centralized database management
- Secure login authentication
- Easy record maintenance
- Automated report generation
- Quick search functionality
- Data backup capability

The proposed system is user-friendly, scalable, and efficient. It enhances data accuracy and ensures smooth management of institutional activities.

CHAPTER 3

SYSTEM DESIGN

3.1 System Architecture

The system follows a three-tier architecture:

1. Presentation Layer (Frontend) – User interface developed using HTML, CSS, and JavaScript.
2. Application Layer (Backend) – Server-side processing using PHP.
3. Database Layer – Data storage using MySQL database.

This layered architecture ensures modularity, maintainability, and security of the system.

3.2 Database Design

The database is designed to store structured information efficiently. The main tables used in the system include:

- Students – Stores student personal and academic details
- Trustees – Maintains trustee information
- Expenses – Records financial transactions
- Staff – Manages employee records
- Login – Handles authentication credentials

Relationships between tables are established using primary keys and foreign keys to maintain data integrity.

CHAPTER 4

IMPLEMENTATION

Technologies Used

Frontend Technologies:

- HTML for structure
- CSS for styling

- JavaScript for interactivity

Backend Technology:

- PHP for server-side scripting

Database:

- MySQL

Server Environment:

- XAMPP

The system is implemented in modules to ensure organized development and easy maintenance.

Key Modules

1. Admin Login Module – Provides secure authentication.
2. Student Registration Module – Manages student data.
3. Trustee Management Module – Handles trustee details.
4. Expense Management Module – Records financial transactions.
5. Reports Module – Generates administrative reports.

Each module is tested individually before integration.

CHAPTER 5

TESTING

Testing is an essential phase in system development to ensure reliability and performance.

The following testing methods were used:

- Unit Testing – Individual modules were tested separately.
- Integration Testing – Combined modules were tested for compatibility.
- User Acceptance Testing – The system was tested by end users to verify usability.

All identified errors were corrected, and the final system performs according to requirements.

CHAPTER 6

RESULTS AND DISCUSSION

The implemented system successfully automates the administrative processes of the educational trust. It provides fast access to data, reduces manual workload, and ensures accurate record management.

The digital system significantly improves efficiency compared to the manual method. Administrative tasks that previously required hours can now be completed within minutes. The structured database design ensures data consistency and security.

CHAPTER 7

CONCLUSION

The “Tirupati Educational Trust Management System” effectively achieves its objective of digitizing trust operations. The system enhances administrative efficiency, reduces paperwork, and improves transparency in institutional management.

By implementing modern web technologies, the project demonstrates how digital transformation can positively impact educational institutions. Future enhancements such as cloud integration, mobile access, and AI-based analytics can further strengthen the system’s capabilities.