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**BUS TRANSPORT MANAGEMENT SYSTEM**Miss Dongare T\*<sup>1</sup>, Hande shweta<sup>2</sup>, Pawar Megha<sup>3</sup>, Jadhav Pooja<sup>4</sup> & Jadhav Sonika<sup>5</sup>\*<sup>1-5</sup>Computer Engineering, Jaihind Polytechnic, Kuran, Pin-412403, India

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**ABSTRACT**

The Bus Management System is being developed to provide a tool for the different colleges to easily maintain the college bus information. In this project it specifies regarding how the bus transport management software works in the institute where the project highlights the sequential procedure in the software. This project also focuses the problem statement of existing transport system. Bus transportation facility is important for school and collage for student safety and efficient transportation. As bus transport management system is an important task for the operation in automation system. The work flow in educational terms is also a key point to provide services to the public sector. The proposed work also highlights the significant assurance towards the transport management and security in the institute. The project will be a relevant work for the real time implementation in the institute.

*Keywords: Student, Transport management ,Buses , Drivers*

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**I. INTRODUCTION**

In the existing system Colleges have to manually maintain information regarding College busses and routes. In our country there are various school and college. Many school and colleges are found in rural area[1]. In rural area transportation system is not available in efficient way. That's why students faces so many problems. for safe and efficient transformation many school and collages provide transportation facility[3]. So, there is need to manage transportation facility. In this system we have to try to manage bus records, drivers details, student information, pick up location[5]. In these system we have need information relating to student passengers and bus passes have to be maintained separately This project is a desktop system that enables efficient storage of student records pertaining buses, such as bus routes, timings, stops, fees and facilities like printing of bus receipts and passes. system is designed for any faculty member who would like to add data to the system or retrieve data from the system. The Bus Management System is a desktop system aimed at students, college administration to maintain bus facility. The system takes student information as input source and attempts to maintain the bus services. It allows flexibility during these processes.

**II. LITERATURE SURVEY**

In literature survey we study various educational transportation system[2]. In that survey we have study various conditions of transportation system. Many transportation system fail in rural area just because of improper management.

In previous system small rural school districts, student transportation is usually managed by school administrators who have additional, demanding responsibilities. As a result, these administrators often lack the time, skills, and tools needed to consider full-scale overhauls of their transportation system[4]. Instead, small, necessary changes are made to keep the system operational. They waste time to fill the record and can not manage properly.

**III. SCOPE OF WORK**

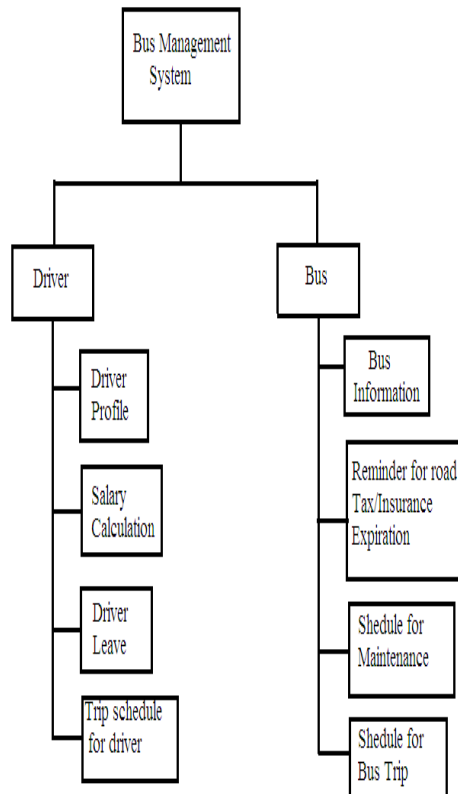
The Bus Management System is being developed to provide a tool for the different colleges to easily maintain the college bus information. The system will give an effective output for the Java & Microsoft excel given as input to the system. The compiled java program given as input to the system, after scanning the program will generate different reports[6].

At the start of the project setup, Microsoft Access provides an interactive part to store information about buses; different routs of buses, student information, and bus pass etc.

During the period of finalizing the idea of the system, the primary goal was to design the system i.e those who don't

know how to handle the software. As designing work began and things started taking shape, the system got developed to a stage where it would be used by entry level.

#### IV. SYSTEM ARCHITECTURE



*Figure 1.1overview of bus management system*

System can also generate records by using the system to keep records or document the expenditure. The figure 1.1 above shows the overview of bus management system[2]. There are two parts of management in this system. The first part is Driver management which is shown in the side of the figure. Driver management part is discussed more as the focus of bus management system. The second part is bus management. The driver management system consists of driver profile module, salary calculation, driver leave, and visit schedule driver. The second part consists of Bus information, Reminder road tax expiration, schedule for maintenance, and schedule for bus trip.

#### V. OTHER SECTIONS

##### System Requirement

- **Hardware:**
  - Processor: PENTINUM (R)(2.20 GHz)
  - Ram: 2 GB.
  - Hard disk: 80 GB
- **Software:**
  - Operating System: Windows 7
- **Front end:**
  - Visual Studio 2010(.net)
- **Back end:**

- Oracle Database.
- *Scripting Language:*
- VB.Net

#### **Advantage**

- A bus server which keeps of database of buses.\
- Relevant for the bus operator to keep all the real time data of the bus in his database.
- Easy to check the bus availability as per the bus route.
- Adjustment for the alternative staff can be done in the system

#### **Disadvantage**

- Data dependency states the work load of the project.
- A real time data validation must be provided to store a big data.

**Application:** College or Institute

## **VI. OBJECTIVES OF SYSTEM**

Develop software such that everybody working in colleges bus management can handle easily. Trainer can store & retrieve data easily. And hence, keeping these major target segments in focus, the system was developed.

The economic factors were also worked out keeping the target segments into focus. The objective of developing a tool for technical as well as non-technical user hence got achieved.

### **1. User Requirement**

Needs to have basic computer knowledge.  
Needs a little orientation to be able to use the software efficiently.

### **2. Feasibility**

Once the scope of the system is defined, we have to specify exactly how the system will look like which, leads to an estimate of the computer storage requirements that form the basis for the file design that is to be undertaken in the design phase of the project life cycle. Feasibility study is the test of system proposal according to its workability, impact on the organization, ability to meet user needs, effective use of resources.  
There are three aspects involved in the feasibility study.

### **3. Technical feasibility**

The technical feasibility study highlighted various differences in approaches and implementations of the Java programming language environment. Total flexibility in bus management makes easy to handle the information about student & bus.

### **4. Economical feasibility**

The economical feasibility of the system was given due attention as well, considering the emerging global market .The system, primarily aimed at academic and entry level personnel, works out to be a good prospective system, if positioned properly into the IT market. The system has been kept very compact initially in the college only and depending on the targeted market segment response additional GUI features could be added. The system hence, at present is economically feasible.

Operational feasibility means whether the new system performs its work efficiently and asks for the user needs. What are the facilities provided? What is the impact on the user?

We guaranteed that after developing the system it is 100% operationally feasible and very easy to operate. Also on-demand reports will give the users; the exact information that itself proves that the system is working perfectly.

## VII. CONCLUSION

The Transport Management System is the application developed to manage the transportation work easily keeping the transport in collage to date regarding the busses information. They have to record each and every busses of the vehicles to manage the transport system in collage. Admin keep records of every bus that has been taken by any student, transport system also record expenses incurred for a journey on a day. Transport management system automates this process by calculating the total amount of busses and also keeps records of dues on the dirver. Transport

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