

# BUS INFORMATION LIVE MONITORING SYSTEM

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**Abstract** - Bus Monitoring and Tracking System software is a globally deployable, integrated, workflow based end-to-end system starting from searching bus routes to gathering entering details of the BUS. This is a complete application for Students as well as Transportation Staff. Vendors provide the information like, available routes, timings, etc. Students will have facility to view all the BUS details under college transportation. There is also scope to measure the user satisfaction regarding the BUS selection..

## 1. INTRODUCTION

### Existing System

- Current system was analyzed to identify the potential drawbacks.
- The analysis was carried out in an environment where BUS details are going to be added manually.

This existing system is not providing secure registration and profile management of all the users.

- This manual system gives us very less security for saving data and some data may be lost due to mismanagement.
- The current system posed several challenges with respect to entering the BUS details in the register and maintaining the BUS timings.
- When the number of BUS and their ROUTS increased it became extremely difficult to maintain the registers as they were more prone to manual data entry errors.

### Proposed System

- The system provides different access rights and login for the users such as administrator and registered members.
- The proposed system helps the Administrator to configure the basic settings details.
- The system also provides facility for entering the bus details such as bus type bus model and adding new bus.

- User friendliness is provided in the application with various controls provided by system rich user interface.
- System also tracks the Bus details from the database which can be visible to students directly.

### **The benefits of proposed system are**

1. Heavily reduces the human workload
2. Useful for Transportation staff to maintain the bus details.
3. Useful for student to view the college buses and their routes.
4. Fast information Retrieval.
5. Prohibition of illegal data extraction by providing access rights

## **2. OVERVIEW OF THE SYSTEM**

### **STUDY OF THE SYSTEM**

In the flexibility of uses the interface has been developed a graphics concepts in mind, associated through a browser interface. The GUI's at the top level has been categorized as follows

1. Administrator Interface Design.
2. User Interface.
3. Security Authentication.
4. Reports.
5. General end-users.

The administrative user interface will maintain the different users details, the interface helps the administration with all the transactional states like which users sending the mails, and which users

receiving wishing mails, users details information history. And the statistics of the system in difference strategies.

### **NUMBER OF MODULES**

The system after careful analysis has been identified to be presented with the following modules:

1. Administration Module
2. Student Module
3. Bus Management Module
4. Security and Authentication module.
5. Report module.

### **MODULES DESCRIPTION:**

#### **Administration Module:**

In this system administrator is one of the end user. he is a non restricted user in this system. Administrator can add the bus details and also he can add services from where to where. He can modify the bus details as well as services details also. He can take back up to provide the security for user data.

#### **Student Module:**

In this module Student can view the BUS details, BUS Routes and BUS driver details.

#### **Bus Management Module:**

In this module admin can add the bus details and admin can update bus details also. And administrator has a facility to delete bus details and as well as Services details also.

**Security and Authentication Module:**

The user details should be verified against the details in the user tables and if it is valid user, they should be entered into the system. Once entered, based on the user type access to the different modules to be enabled / disabled and

Individual user can change their default password or old password.

**Report Module:**

In this Module the User and Administrator can generate the different types of Reports according to their access.

**Functional Requirements:**

1. A system/software requirement that specifies a function that a system/software component must be capable of performing.
2. These are software requirements that define behavior of the system, that is, the fundamental process or transformation software and hardware components of the system perform on inputs to produce outputs.
3. User login name and password are functional requirements for login into the system.
4. User must give proper credentials while registering into this system.

**Non Functional Requirements:**

1. Software requirement that describes not what the software will do, but how the software will do it, for example, software performance requirements, software

external interface requirements, software design constraints, and software quality attributes.

2. **24x7** days available is one of the non functional requirements.
3. Performance - Response Time, Throughput, Utilization.
4. Scalability, reliability.

**3.SYSTEM DESIGN**

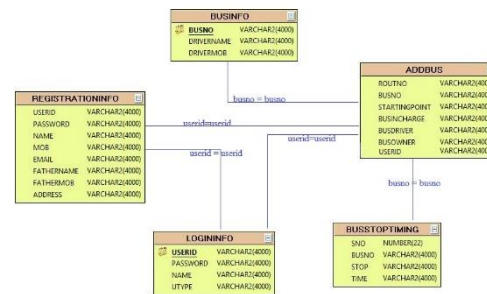


Fig 3.1: ER Diagram

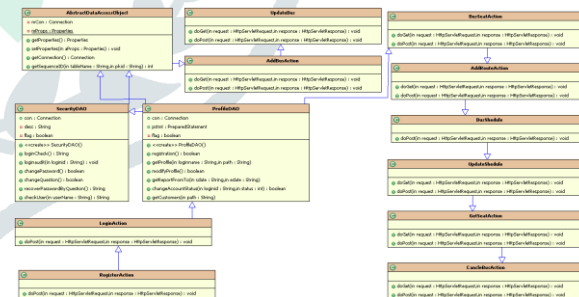


Fig 3.2: Class Diagram

#### 4. OUTPUT SCREEN SHOTS

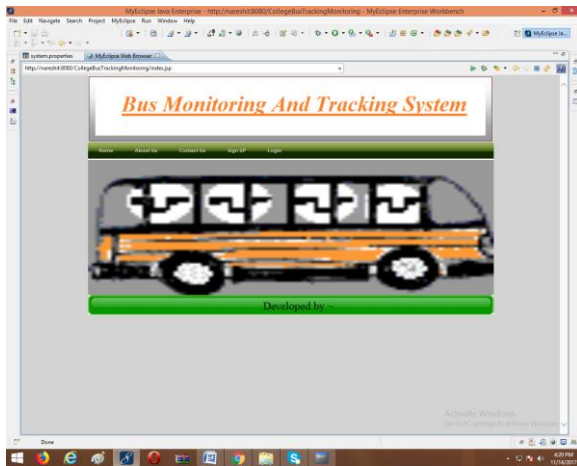


Fig 4.1: Home Page

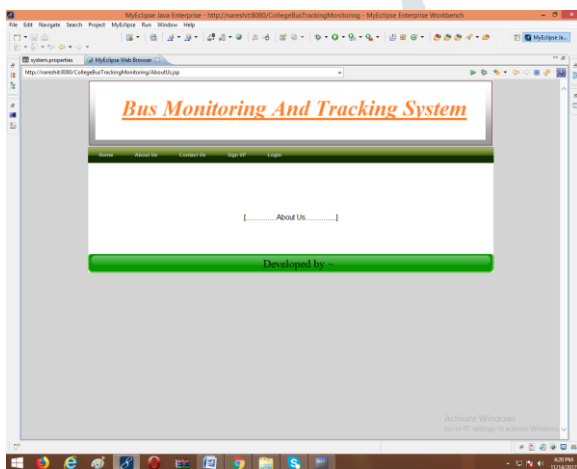


Fig 4.2: About us Page

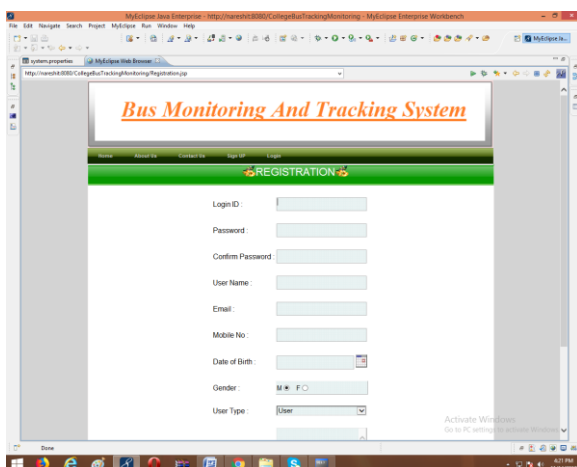


Fig 4.3: Registration Page

#### 5. CONCLUSION AND FUTURE ENHANCEMENT

It has been a great pleasure for me to work on this exciting and challenging Online application for the **Bus Information Live Monitoring System** project. It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

#### BENEFITS:

The project is identified by the merits of the system offered to the user. The merits of this project are as follows

- It's a web-enabled project.
- This project offers user to enter the data through simple and interactive forms. This is very helpful for the client to enter the desired information through so much simplicity.
- The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updating so that the user cannot enter the invalid data, which can create problems at later date.
- Sometimes the user finds in the later stages of using project that he needs to update some of the information that he entered earlier. There are options for him by which he can update the records. Moreover there is restriction for his that he cannot change the primary data field. This keeps the validity of the data to longer extent.

- User is provided the option of monitoring the records he entered earlier. He can see the desired records with the variety of options provided by him.
- From every part of the project the user is provided with the links through framing so that he can go from one option of the project to other as per the requirement. This is bound to be simple and very friendly as per the user is concerned. That is, we can say that the project is user friendly which is one of the primary concerns of any good project.
- Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a single database.
- Decision making process would be greatly enhanced because of faster processing of information since data collection from information available on computer takes much less time than manual system.
- Allocating of sample results becomes much faster because at a time the user can see the records of last years.
- Easier and faster data transfer through latest technology associated with the computer and communication.
- Through these features it will increase the efficiency, accuracy and transparency,

#### LIMITATIONS:

The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.

Training for simple computer operations is necessary for the users working on the system.

#### 6. REFERENCES

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#### About Authors:



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