Bus Tracking Management System

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Abstract **- BUS TRACKING MANAGEMENT is an advanced technology to manage the work automatically with a less manual power. It also enhance the great work quality and therefore the work automization with the assistance of some sensors, actuators ,GPS, control unit, transmitter and receiver.**

This paper is about tracking the live location of the bus. Here, the live location of the bus is tracked and therefore the location of the bus is shown on the mobile application. The GPS and therefore the application is integrated to point out the situation of the bus. The live location is shown on the appliance .

1.INTRODUCTION

In modern days, the people are busy with their schedule and that they aren't able to spend their time in expecting the bus or the other mode of transport to travel. If the situation of the transport is shared with the passenger, then the passenger can easily keep track of the transport and may be available at the proper time.

So, the scholars needn't await transport or miss the transport thanks to their schedule. They will plan accordingly and can be available for the transport. the situation of the bus is tracked with the assistance of some components like GPS modules.

The system is going to be fitted into the bus. So, when the bus gets started then the circuit gets power supply and starts processing. With the assistance of the web connection, the situation is going to be transmitted and therefore the user can see the situation .

All details regarding students are going to be uploaded. Staffs also can easily track the scholar details.

The RFID CARD READER here is useful for getting the details of the students who are becoming onboard and the students who are getting of the bus. Here there will be various modules like a login portal for both admin and the students. Database and connectivity for both are provided here.

In the given portal we will add the details of the scholars and edit it whenever required and therefore the basic details of a specific student or a gaggle of scholars are often displayed and edited efficiently. scholars waiting for the bus can ask for the situation of the bus and therefore the relative one the request alerts are done and the alert message are going to be send to the student's mobile .

2.LITERATURE SURVEY

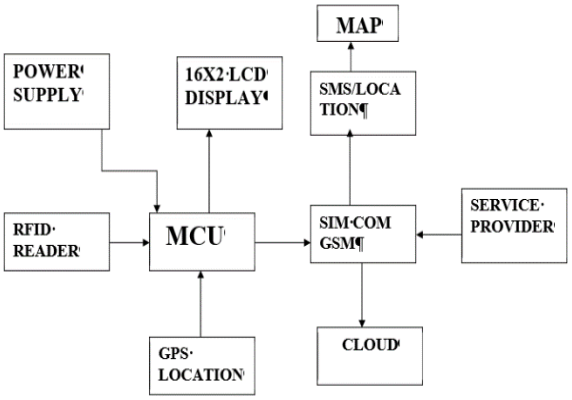
1. "Real Time Bus Tracking and Scheduling System" Using Wireless Sensor and Mobile Technology" [1], the general public bus transport system features a direct impact on the Vol-7 Issue-1 2021 IJARIIE-ISSN(O)-2395-4396 13715 www.ijariie.com 1564 economic development of the country. the most problem for any conveyance sector is scheduling, tracking and monitoring public bus transport.
2. "Real Time Bus Tracking and site Updation System", the general public transport system plays a crucial role in every aspect of life. it's having an enormous impact on the economic development of the country. Tracking, monitoring, scheduling, vigilance services are the most challenges facing this system .

3. "Developing an Android-based real-time bus tracking system", in this dynamic life, most are in a hurry to reach their destination. during this case, it's impossible to attend for the bus. people that believe public transportation should know things of the bus they're trying to seek out . With the advancement of technology, Android smartphones became global and affordable for all. Smartphones have important potential to provide rich user experience with interactive features 4.“Real Time Web Based Bus Tracking System” , The proposed system reduces bus waiting time for remote users. The system is employed to trace a bus anywhere at any time. All current information is stored on a server and retrieved to remote users through a web-based application. this technique could also be an internet based system but nowadays people use Android apps because they're more portable and smart phones are used more in today's world.

3.PROPOSED SYSTEM

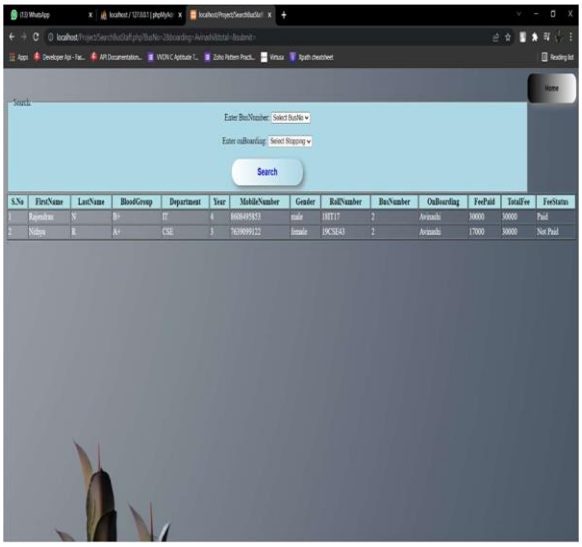
The proposed system is to manage the entire student's details traveling in the college bus and to share the live locations of the bus with the students. From the admin side, they can able to add/edit/delete the students' details. An admin portal will be given to the admin through that they can add and edit the details of the students. There they can able to maintain the fee status and attendance of the students. They also add the staff coordinator's details to the portal through that id will be generated to the staff. Using that id and password staff can able to check whether the student paid the fees or not and their basic details. Filtering options are also available in the admin portal they can see all the students boarding in a particular boarding point they have the access to view all their details through the portal. Admin can change the fee status if the fee were paid and it will be stored in the database and reflected in the portal. Through the admin portal, they can able to see the attendance of the students. While the students need to know the location of the bus they can make a call to the number provided by the admin the kit will terminate the call and reply with the current location of the bus through a link using that link students can easily locate the current location of the bus. While boarding the bus students need to place their RF id card provided to them the RF id reader reads and marks attendance for the respective students. while getting out of the bus once again they need to place the card on the reader it reads and marks the exit time and date from the bus. Admin will have the access to see the attendance.

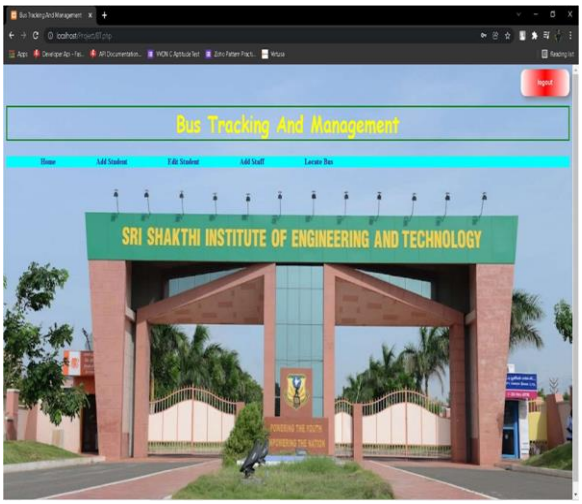
4.BLOCK DIAGRAM



Hardware Components
1.Arduino UNO
2.16*2 LCD Display
3.Transformer
4.Simcom GSM mode
5.RFID Reader
6.RFID Card

Software Components
1.PHP
2.HTML
3.CSS
4.My SQL





5.CONCLUSION

In this paper we've reviewed a various existing techniques of faculty bus tracking. By implementing this idea , we'll improve the transportation safety and thus the standard of services to the varsity buses. The system will have the latest technologies and optimized algorithms at a moderate cost. The system may specialize in accurate time of arrival and position of the bus.

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