

SHIV NADAR

UNIVERSITY

CHENNAI



BUS TRACKING SYSTEM



TEAM MEMBERS:-

Client : Deepesh kumar A.S.

Developer : Krithiga Ravikumar

Tester : Harshath U.

Business analyst : Adhyuth Charan

ABSTRACT :-

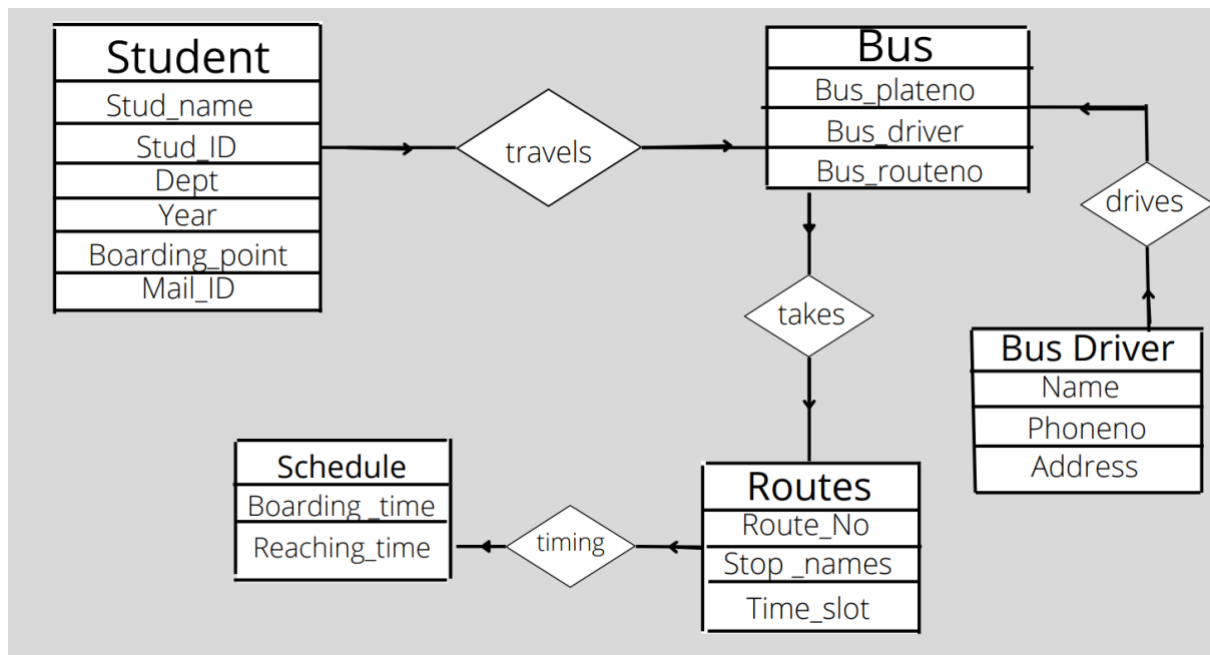
College bus Tracking System (BTS) is the technology used to determine the location of a vehicle using different methods like GPS and other radio navigation systems operating through satellites and ground based stations. By following triangulation or trilateration methods the tracking system enables to calculate easy and accurate location of the vehicle. Vehicle information like location details, speed, distance traveled etc. can be viewed on a digital mapping with the help of a software via Internet. Even data can be stored and downloaded to a computer from the GPS unit at a base station and that can later be used for analysis.

The present generation requires the information time to time. The use of technology have been increasing day by day. So we are planning for the combination of present technology with the requirement of information transmission, we planned for the creative approach of "Vehicle or the college bus Tracking System using GPS and GSM with arduino and a web application portal ". To overcome the drawbacks of the previous old methods of paper based and we introduce a project to track our college bus using GPS and GSM. This college bus 'Tracking System' can also be used as a vehicle tracking system with a big application , Soldier Tracking System and many more, by just making few changes in hardware and software and widely in tracking Cabs/Taxis, stolen vehicles, etc;

DESCRIPTION :-

The user(parent/student/staff) is first required to login to the bus tracking website using his/her login credentials. If he/she has not registered before, then he is required create an account first in order to have access to this website. After logging into the website, he could choose the bus route he wishes to track by selecting the route number from the given list of numbers. After doing so, it navigates the user to another page which displays the bus number which travels via that route number, its current location, the personal details of the bus driver, the boarding and the reaching time of that bus, details of the students travelling by that bus, the names of bus stops,etc.

ER DIAGRAM :-



SOFTWARE REQUIREMENTS :-

- 1) HTML
- 2) FTP FILES TO UPLOAD
- 3) ARDUINO IDE
- 4) microsoft axure
- 5) things speak iot
- 6) WEB BROWSER

PROJECT FUNCTIONALITIES:

This research is based on Bus Tracking System, The main objective of this work is to make a GPS tracking application which would be able to track college buses more accurately and efficiently than present bus-tracking systems. We got the motivation for our project by observing how much precious time of the students studying in our college is wasted by just waiting for the bus on their particular route, and also there is a lack of information for the buses which are traveling on their particular route for the students who have already missed their particular bus.

SCOPE:-

The main goal of the proposed work is to improve the Bus Tracking system by adding the necessary features to our project, like projecting accurate bus timings, presenting correct

bus numbers and by adding a GPS tracker into it for accurate locations. For future enhancement, we can develop a vehicle monitoring system using GPS & GSM module with high speed processor. The system can be installed in buses, cars and trucks, hence this project is having a wide scope. Along with this we can create a bus ticketing system where the user can actually buy a digital ticket just like the UTS app in the mumbai railways. in which app take the current location of the user ask for the destination and calculate the fare we will also provide pay option from various third party app such as Paytm , PayPal etc. We can generalize the project to common man where he can implement the hardware part to the personal vehicles which will help them to track their location after it has been stolen it will also police. We can also extend it to private travel agency to track there bus.