INTELLIGENT PUBLIC TRANSPORT SYSTEM USING INFORMATION FORENCICS AND SECURITY

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ABSTRACT :-

Intelligent public transportation system is an effective way to improve the quality of our country transportation . Wireless sensor network is a novel technology made by the convergence of sensor technology , micro electro mechanism technology , wireless telecommunication technology and network technology.It is suitable to transportation scenarios for the characteristic of rapidly deployed and self organized. An improved solution combined the wireless sensor network and Internet technology is presented in the article.It effectively solves three critical problems of the wireless sensor network, including energy saving, localization and communication distance. By using the low cost and high stability microchip, a high reliability and low cost intelligent public transportation system based on wireless sensor network can be easily established. The Intelligent Sensor Information System (ISIS) is described. ISIS is an active CCTV approach to reducing crime and anti-social behavior on public transport systems such as buses.

KEYWORDS:-

Robust,OTP,Empower,Gains ,Dynamic Location finder

INTRODUCTION :-

"Intelligent public transport system with information forensics and security"is a Web-based JSP application. It has most of features of the Networking . It's a user friendly system. It can manage the various activities of Public Bus Transport. It has a visual interface between the user and system. It provides significant interface advantage to both users and administrator . "Intelligent public transport system with information forensics and security" provides easy to use user interface so that no difficulties arise.

The mobile devices have been widely used to provide easily access to the web content. We presented a wireless Public Transport System based on web services over a wireless integrated wide area network, which will implement wireless data access to the servers and IPTIS system functions through both desktop PCs and mobile devices.

SYSTEM OBJECTIVE :-

The objectives of this project are as follows :

a] Helping passengers in Transport Information System using Mobile application.

b] Designing and Implementing data access points and client applications for transport information system on web based application.

PROJECT IDEA :-

This System is divided into a three user environment .The three users basically are the three levels of security."Intelligent public transport system with information forensics and security" provides following features :

A) Administrator

B) Conductor

c) Guest

ADMINISTRATOR:-

- All Bus related operations
- All Route related operations
- Create or remove bus stop
- Creating new users(Conductors)
- Managing this Users
- Implemented A Live Search for Bus Tracking.

CONDUCTOR:-

- Login into a Bus.
- A single button interface for Conductor just to mark the currect stop of the Bus.

GUEST:-

- Search Fuctionality which uses Live Search to Display Buses between two Stops.

MOTIVATION OF PROJECT :-

The Intelligent Public Transport Information System will be specifically developed for Bus Transport. In this System passenger can get information about all buses, routes, timings of buses and all stops in any particular route.

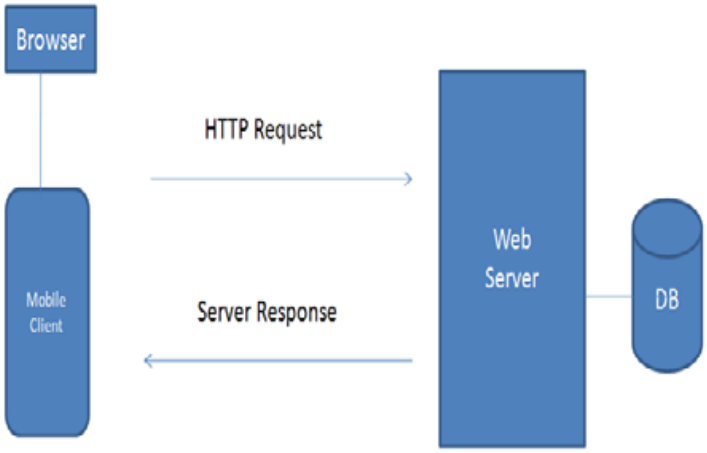
This project includes two phases. One is for user and other for administrator. At user side, user can request for information about all buses, routes, timings of buses and all stops in any particular route using Wi-Fi or GPRS technology.

DESIGN OVERVIEW AND IMPLEMENTATION:-

Intelligent Public Transport Information System can be developed using ethernet and J2ME technology. The system architecture includes the following components:

a] Mobile Application will be written using J2ME technology for a Wi-Fi/GPRS enabled device and its communication with a centralized database located on a server and Wi-Fi/GPRS enabled device.

b] A Centralized Relational Database (CRD) developed using MySQL.



CENTRALISED DATABASE DESIGN :-

We use MySQL as database. The mobile client will communicate with the database to get the information for the system. It contains the table to store data and the graphical user interface to access the database. Database is organized as relational database.Bus no details table , Bus route details table , Bus stop details table , Helpline Details table are used to store data.

ADMINISTRATOR SIDE DESIGN :-

Administrator stands for Depot Manager.This side is developed as web based interface so that it can be hosted on internet and passengers can use search facility through their mobiles. This is developed using JSP (Java Server Pages) and Java Servlets are used to handle database operations and automatic response generation in case of search option.

PASSENGER/GUEST SIDE DESIGN :-

Passenger side is a mobile application developed using J2ME. User should install this application in his mobile to make use of the system.

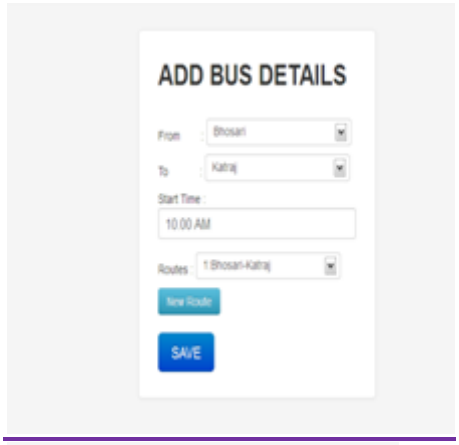
USER SCREENS :-

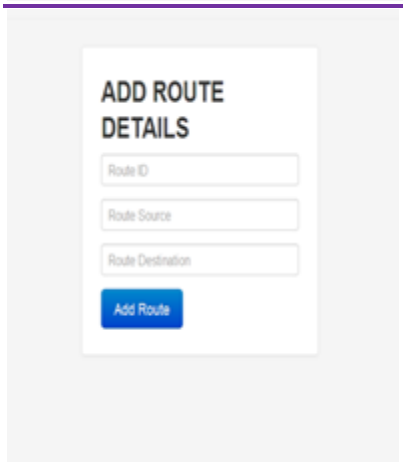
ADMIN LOGIN FORM :-

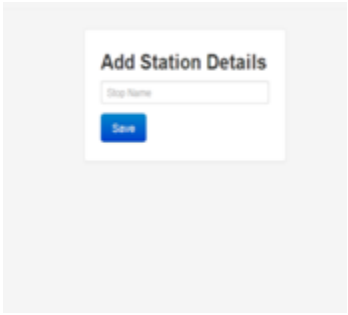
The first page is authentication page to limit the access to required people only .Without writing Correct username & password the next page will not be opened & the system will display the message “wrong username/password” . Its GUI is as shown below:

BUS/ROUTE/STATION ENTRY FORM

This is to enter route into the database. Depot Manager has to enter route for every new bus added to the depot . The forms for adding buses, stops are designed and options for deleting, updating are provided.







SEARCH OPTION FORM :-

This form asks the user to enter source and destination of his interest and then sends the data to server for further processing .If the Bus is available for the required route then , the bus code & that particular route will be displayed to user. Its GUI is shown below.

LIMITATIONS :-

After configuring the equipment, the testing was done successfully using one mobile only. Testing using more than one mobile is not possible. GPS server is not an accurate distance finder , but an appropriate one.

APPLICATIONS :-

Applications of this project are :

a) Increasing the productivity and profit gains of the public transport system .
b) Aid the naive passengers get information without a word of scold.
c) Empower the city bus transport system with the newest technology.
d) Will improve the city bus transport system, especially required for pune & pimpri- chinchwad bus transport system.

CONCLUSION AND FUTURE WORK

Overall, the project design will achieve its objectives. The project will provide a client/server application for public transport system and can successfully built using J2SE, J2ME software. It will provide a more convenient and accurate method for retrieving the information about bus details. Users will have all the information about bus details on their finger tips.

The mobile devices have been widely used to provide easily access to the web content.We presented a wireless Public Transport System based on web services over a wireless integrated wide area network, which will implement wireless data access to the servers and IPTIS system functions through both desktop PCs and mobile devices. The system will be based on secure web service architecture and can increase efficiency for transport system by reducing human errors and by providing higher quality customer service.

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