

A STUDY ON BUS-NOW REAL-TIME BUS TRACKING SYSTEM

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ABSTRACT: *We present an application and website combined technique for Real time tracking of bus. Buses is the most important transport mode in all cities “ BUS-NOW ” real time bus tracking is a project that introduced the concept of tracking location of both the user and the bus and then we calculate the approximate time required by the bus to reach the stop including the traffic analysis. Our proposed system provides details like Bus type, Bus number, Bus route, Bus rush etc. Authentication for Admin, Driver, Registered Users. Four modules are used in our application. Administration module is for the administrator for updating the information. That is there in the server when required. Bus module is for the Bus ticket collectors. The very important module in this project is user module. The users of this module need to login with their Unique Id provided by the system. This project is based on the android application. As almost every citizen is familiar with the working of android phones there won't be any problem in using this application.*

KEYWORDS: *Real Time Tracking, Location, Traffic Analysis, Live Count of the passengers, Availability of system*

1. INTRODUCTION

The Bus-Now is based on the concept of real time bus tracking. The proposed system provides the exact location of the bus to the users from their location. Along with this also provides features like availability of bus in current location and to determine the bus in the route. This includes the position of bus in approximate time. Our proposed system also provides details like bus type, bus number, bus route, bus rush etc. This project is based on Android application. As almost every citizen familiar with the working of Android phones, there won't be any problem in using this application.

2. RELATED WORK

System Implementation is the final stage that is in putting the utility into action. The most crucial stage is achieving a new successful system and giving confidence in new system. That it will work efficiently. The software engineering methods which are used are for providing the system without skipping the validations and verifications. The system implemented only after through checking is done, if it is found working in order to the specification. It involves careful planning, investigation of the current system and constraints on the implementation, design of method to achieve. Implementation process begins with preparing a plan for the implementation of the system^[3] According to this plan activities are to be carried out discussion made regarding the equipment and resources has to acquire the implement the new system. The system can be implemented only after to testing is done, so this app also offer greater security. The most important task of the developer is to give training to bus Owner. All users aware about Android phone, so we just explain the working of Bus Now app. Also we will place the app in the play store.

3. PROPOSED WORK

The convenience of citizens an android application is proposed, which will track the location of both the user & bus, then calculate the approximate time required by the bus for each stop. This project we present is beneficial to the people.

The proposed System Provides:

- Exact location of bus
- Determine bus in the route
- Availability of bus in current location
- Current position of bus in approximate time
- Availability of seat
- Ticket charge
- View bus type, bus number bus route, rush etc.

The proposed system contains three modules:

1. Administration

- Bus Administration for Updating The Information.
- To Update Driver Name, Driver Contact no, Route, Stop, Etc...

2. Bus

- For the Bus Ticket Collectors.
- Send Location Details In Description.
- Send Location Details In Google Map.

3. User

- Track The Bus Location.
- View Near By Bus.
- View Running Bus Status.
- View Seat Availability.
- Feedback.

ADVANTAGES:

- Easy to use
- Reducing waiting time for bus
- High potential
- User friendly
- High efficient
- Easy to understand
- Easy to access with our android mobile phone

4. EXPERIMENTAL RESULTS

WEB PAGE

1. Minimum Charge Allocation

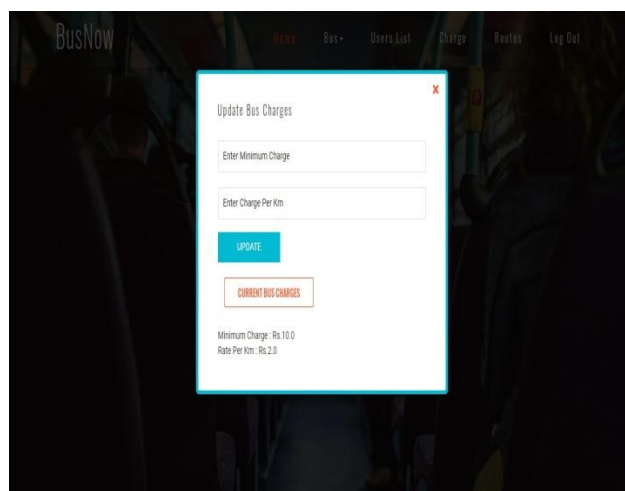
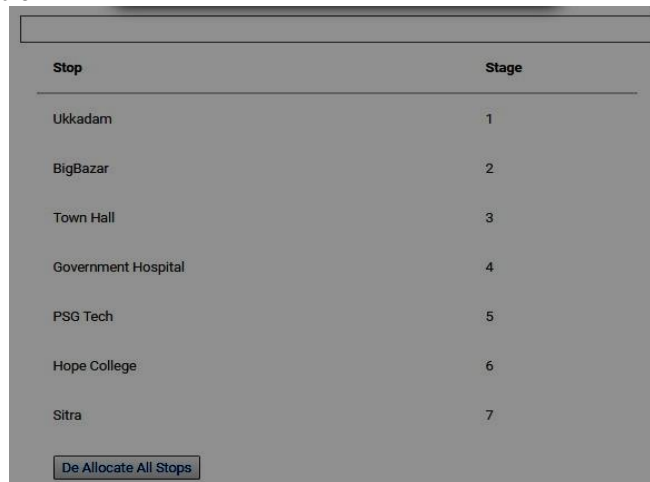
The image shows a web application interface for 'BusNow'. At the top, there is a navigation menu with links for 'Home', 'Bus', 'Users List', 'Charge', 'Router', and 'Log Out'. The main content area features a modal window titled 'Update Bus Charges' with a close button (X) in the top right corner. Inside the modal, there are two input fields: 'Enter Minimum Charge' and 'Enter Charge Per Km'. Below these fields is a blue 'UPDATE' button. Underneath the button is a button labeled 'CURRENT BUS CHARGES'. At the bottom of the modal, the current values are displayed: 'Minimum Charge: Rs.10.0' and 'Rate Per Km: Rs.2.0'. The background of the web page is dark with a blurred image of a bus.

Figure1.1

The Admin can allocate the minimum charge for a particular bus. Each bus contains a certain amount of minimum charge.

2. Stops Allocation



Stop	Stage
Ukkadam	1
BigBazar	2
Town Hall	3
Government Hospital	4
PSG Tech	5
Hope College	6
Sitra	7

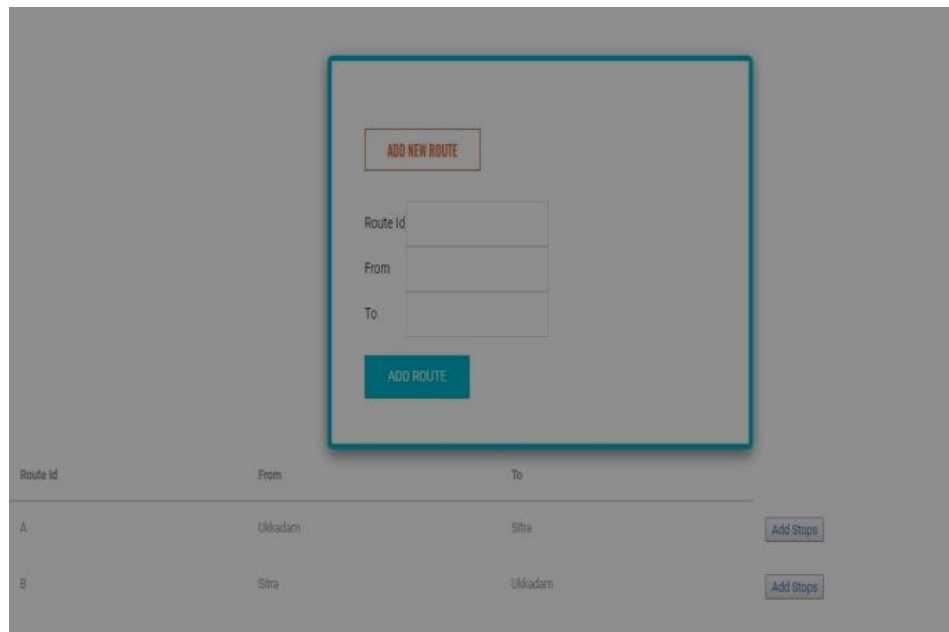
De Allocate All Stops

Figure 2.1

Stops Allocation in between the bus routes are categorized for the particular bus.

3. Route Allocation

The routes of the bus as forward route and backward route are also allocated by the admin.



ADD NEW ROUTE

Route Id:

From:

To:

ADD ROUTE

Route Id	From	To	
A	Ukkadam	Sitra	Add Stops
B	Sitra	Ukkadam	Add Stops

Figure 3.1

ANDROID APPLICATION

1. Buses NearBy

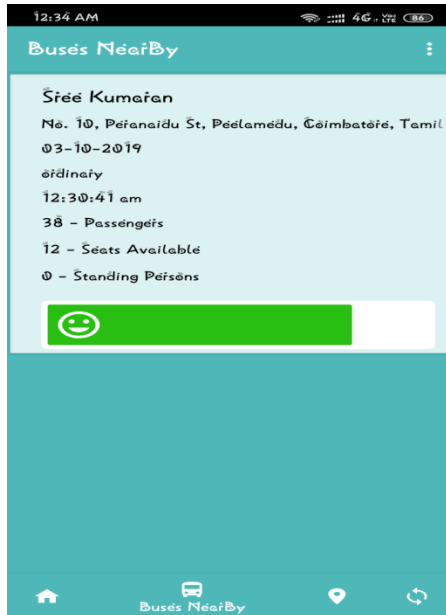


Figure 1.2

NearBy buses can be shown through the “bus now” android application.

2. Google Map

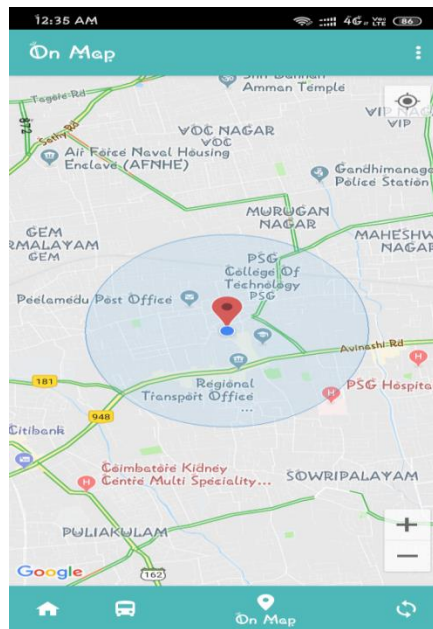


Figure 2.2

The Location tracking of the bus has been set and tracked by using Google maps.

CONCLUSION

The app created by us has introduced the concept of tracking location of both the user and the bus and then we calculate the approximate time required by the bus to reach the stop including the traffic analysis. In this software every attempt has

been made to satisfy the requirements of the user with the necessary study of the requirement of the system. This software does not exist. When it introduced to our society it will take a big change in all peoples. It's very useful to access the all facility associated with the application. We have one our project within our technical skills and have used real-time implementations. We have provided the most enhanced view of this service to the end users and have managed the data processing in a desirable manager. The system can be extended by appending much more functionalities by implementing new processing idea and schemes.

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