

A' BAD TRACKING – AMTS BUS TRACKING APP.

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Abstract- A' bad tracking is iOS (iPhone operating system) based mobile application that tracks AMTS bus and gather the distance to each station along its route. Current position of the bus is acquired by integrating GPS tracker device in the bus. This device works based on an IOT concepts. We can gathering data and providing the bus services then how many people are traveling to which particular destination for daily basis. People can see the live bus on their route as same like as Uber. We use APIs in this mobile application, so by entering the bus I'D or number through user in this application, then they get all types of information about that bus. There will be three main modules on which this application works. The first one is passengers, second is driver and third one is admin.

Keywords- Mobile application, Tracking, GPS tracker, IOT concept.

I. INTRODUCTION

Those people who have to use amts bus for daily purpose, then they have to suffered many problems like traveling with standing position, suffering with too much rush, crowded atmosphere. Sometime many people are traveling in bus for first time at that time they don't have any idea about bus stops or bus route. So using this application, these problems are solved very easily.

This application works on iPhone mobile and making only for Ahmedabad municipal transportation companies buses only. So the people having interest in traveling with amts bus then they can use it. It is obvious application will be for iPhone users only.

Main aim of this application is that We can gathering data and providing the bus services then how many people are traveling to which particular destination for daily basis. People can see the live bus on their route as same like as Uber. We can see frequency of travellers for particular destination also people can see frequency of available buses.

II. PROPOSED SYSTEM

Well there are many application available for tracking purpose, but they all are not supported in iPhone mobile. Also they all application do not show live bus on their route. Those application only provide current location. Those application

users does not show current bus stop, when they are already sitting in bus.

We are hoping that our system may solve this issue, in this iPhone application.

Advantages:

- This application is easy to understand and handle.
- This application gives response very quickly.
- People who have to travel with amts for daily basis, then they have to face number of problem with amts like delays of buses, does not reach to destination with proper timing, too much rush in bus. All these problems are solve using this application.
- User doesn't need to deep technical knowledge to operate the application as it consists of very simple operating hierarchies. It is designed in such a way that it operates on few commands and require less commands.

III. METHODOLOGY

This mobile application tracks AMTS bus and gather the distance to each station along its route. Current position of the bus is acquired by integrating GPS tracker device in the bus. This device works based on an IOT concepts.

In this concept, first we have to see accurate location of the bus so all the data are coming as a latitude and longitude. This data will put in our application. So for that we have to integrate one device in bus called GPS tracker device. In this device, one hardware is available. This hardware reads the current satellite latitude data and store in their memory. So this device have current latitude-longitude. As a developer i will put this data in our mobile application so in between them on program is installed in server. Which will send a request to the GPS device and device send data through internet. Server has their own IP address so and also they are in device so they accept the request and give response. Overall every second they read data and store in database like php5.6. This data will put in application through APIs. Here we use rest APIs.

We can gathering data and providing the bus services then how many people are traveling to which particular destination for daily basis. People can see the live bus on their route as same like as Uber. We use APIs in this mobile application, so by entering the bus I'D or number through user in this application, then they get all types of information about that bus.

Modules:

1. Passenger :

Users should be able to receive all details regarding bus by entering bus number.

Details includes bus arrival time, accurate location, bus name, company name, speed of that bus, company details, driver name and details.

- ✓ Registration
- ✓ Verify Account via email or OTP
- ✓ Login or Login with Facebook or Login with Google
- ✓ Edit Profile
- ✓ View bus details.
- ✓ View Drivers details.
- ✓ View Route details.
- ✓ View Notifications.
- ✓ Logout

2. Driver :

A Driver app for just tracking purpose. The tracking will be done using GPS tracking device. No other features required.

3. Admin :

Admin has access to all features. We should be able to know which passenger use which bus frequently. Daily, weekly, monthly statistics.

Admin will allow client to add unlimited users, drivers etc.

Real time tracking: buses using system, speed, review, complaint.

- ✓ Login
- ✓ Edit Profile.
- ✓ Manage Users.
- ✓ Manage Buses
- ✓ Manage Locations.
- ✓ Manage Drivers.
- ✓ Manage Notifications.
- ✓ Logout

SPECIAL FEATURES:

- The users should know precisely where the bus at any time and monitor the progress toward the boarding stop or to the destination with speed.
- Users should be able to get bus list with arrival time, current location and reaching time by entering destination.
- Set customized alerts and know exactly when then the bus will be at the stop. Users should be able to remember favourite stop and route so that passenger can access them with a single tap.
- The passenger should be able to give feedback and raise complaints about bus or driver or about travel at the end of the journey.
- While finding the bus to a particular place and while traveling, the passenger should be able to see available bus stops in the route, estimated time of reaching and speed of bus.
- After getting down they should get a message like “thank you for travel. Would you like to choose another journey.”
- Passenger should be able to see frequency of buses and view live bus on their route.
- We can see frequency of travellers for particular destination also people can see frequency of available buses.

IV. CONCLUSION

After envisaging the future aspects, we can conclude that this project is going give efficient & more effective results in comparison of current application in android, because this is iPhone application and with the help of this application people who have to travel with amts for daily basis then they travelling very easily. This application is very simple and easy to use also very convenient for users.

This project has been implemented on iOS. Also different attributes have been added to the project which will prove to be advantageous to the system. Using the GPS system, the application will automatically display bus lists, schedules, send feedback, get message, bus speed, location of different route and also track the bus location and send in mobile application using APIs. It uses basic measurement of distance between two locations and provide necessary details of each and every route for people to easily pick up buses or any other conveyance possible on the specified route. Specific location details are provided to the user along with bus number. So that the person can identify the bus correctly. It uses php 5.6 up as database, Due to this the records can be easily manipulated on the device itself and the server burden gets reduced.

REFERENCES

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- [3] https://www.youtube.com/results?search_query=mobile+application+of+bus+tracking+system+on+ios
- [4] we have taken the reference from various books acted as our online tutors which we would like to mention in this section.

Sr. No	Book Title	Authors	Publisher (Year)
1	Swift Pocket Reference	Anthony Gray	O'Reilly Media, Inc.
2	Apple Developer Documentation	Apple Developers	Apple Inc.