E Bus Pass System with GPS Tracking for DR.MGR Educational and Research Institute

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Abstract: **Online Bus pass is helpful for students who are dealing with issues with the current manual work of transport pass enrollment and reestablishment. The students need to enroll by presenting their subtitles through on the web. After enlistment an OTP code will be send to student's mail. The executive will check the students subtitles and on the off chance that they are fulfilled, they will support transport pass. The pass will be created and send to students mail. The student can login with their college id number and secret phrase and afterward restoration can be performed. In the existing system student needed to do every single cycle physically, however our task assists student with making their work quicker and simple. student can purchase the transport through the web. This framework is likewise utilized to save the student's time. The student can pay to purchase transport pass through Credit Card and Net banking.**

Keywords: **Online Bus Pass, Registration, Renewal, Manually, Internet, Credit Card and Net Banking.**

1. INTRODUCTION

We are in the advanced technologies; it is very easier to get the entire bus pass generation to online. It is much easier and also more efficient when compare to the existing bus pass generation. Old method is taking a very long time and have to manage a lot of details in physical form. It is very difficult to transfer that much of information in physical form [1]. we are using passes for travelling by a bus. There are different types of passes such as student passes, private passes, etc. This method has taken long time to stand in the queue for getting the pass. In sometime the pass issuer is not available so we return back. Such

type of pass creation is not only time consuming but also not reliable always.[2] E-bus pass registration is a real time project that is beneficial for the customers like students, senior citizens and handicapped persons. This project will implement an energetic solution for storing the data and to conserve the info related to bus pass. [3] To provide a safe reliable time saving and affordable services for people although the cost for providing the service has been substantial. In the existing system we have drawbacks that is everything done in manually. We got the idea to get the pass through online that will help more users comfortable. Student can register for the Bus Pass over the Internet, Furthermore, customers no need to pay cash to buy bus pass because they can pay the amount using Credit Card Because of the drawbacks that are present in the existing system, we got this idea that would help people in a better way.[4] Student can pay the bus fees that is updated by admin and get the bus pass over the Internet, If the student can know about the current location, where they are travelling .This system is available for 24 hours a day throughout the week. Hence, there is a need of reform of the system with more benefits. This Proposed method eliminates most of the limitations of the existing system [5].

2. LITERATURE REVIEW

1. Efficient Bus Pass Generation and Authentication using QR Code[1]

The main goal of the project is giving the bus pass in the effective way by using the QR code. In this project has is full controlled by the online to get the bus pass. There are four members need to generate the Pass. If the person applies the

bus pass means its seen by the school admin, the admin approves. If the bus conductor can check the pass in the given device. In this system has some issues because the device is not working correctly means its show the information and also, we have more no of peoples to Issue the pass.

2. Online Bus Pass Generation &Inspection Using Website & Android App[2]

In this project has implemented the solution for the real time problem who all are getting the pass by standing the queue, it take more time .So we developed the android based application for getting the bus pass .These system get three modules to get the pass, admin, user and conductor .If the student apply the pass ,admin can check and issue after that conductor can check by the ID card .So it process take a more time to verify and the student get their bus pass and also student need a android mobile for getting the bus pass.

3. E Bus Pass Registration & Renewal System[3]

This system will perform their functionalities such as verifying the retrieving information and the commuters allow to get their pass without standing in the queue. In this project the commuters book the pass through online. Admin can verify and the send the notice through their mail id. User need not to go verify the pass in the bus stop. In that notice we have some time limit to end the commuter's validity. Admin will cross check the user's detail after that user can allow to get the pass. These has some time to cross check the user details, if the commuters not get the mail or forget to saw the mail means it will invalid within time period.

4. Development of an Effective Online Bus Pass Generation System for Transportation Service in Karnataka State[6]

These methods have mainly focused on the effective way to get data base. The admin can give the pass by the user requirement and the user can get the pass through online and refill the information to extent the pass validity date. If the admin can store all the data for issue the customer. But the admin hasn't properly maintained the database means there is leakage of information and the information get lost.

5. Online Bus Pass System[7]

This online bus pass registration method will help candidates to their bus pass and renewal without standing in a line for hours near counters. User can register their basic information through online after that administrator will verify the user's details and if they are satisfied, they will approve bus pass. The user can get the pass through online and renewal process is carried by paying the money using the credit card. If the user forgets to take the renewal process means it will be expired and newly user can register the account.

6. GPS supported city bus tracking & smart ticketing system[8]

Now a days the usage of the vehicle should be more and more. So, in this project we introduced the smart card for the passenger who travelling in the public or private transports. This method user can get the smart card through the register their online. If user can travel after swapping the card, but if the user missed or failed to bring the card means, they don't travel the particular places. It also takes time to register and get another card.

3.   EXISTING SYSTEM

In the existing method the transport pass enlistment and restoration measure are completed physically. The individual needs to visit the counter and need to present the subtitles and afterward they need to sit tight for endorsement. For every single cycle there is time limit determined assuming the individual neglects to go on schedule, every one of the exchanges will be dropped. In that method was utilized to transport subtitles keep up through document. Also, after transport data are put away to modernize, the Project Metrics needs to enter every one of the subtitles of venture, archives, and assignments. What's more, additionally the upkeep group data and furthermore endeavours assessment. For this reason, the association keep up the update the data about colleague's subtitles physically. Which is quite a bit of tedious interaction and all the more significantly it is mistake inclined.

Disadvantages:

- It is time consuming

- It consumes more Manpower

- It lacks of data security

- Retrieval of data takes lot of time

- Percentage of accuracy is less

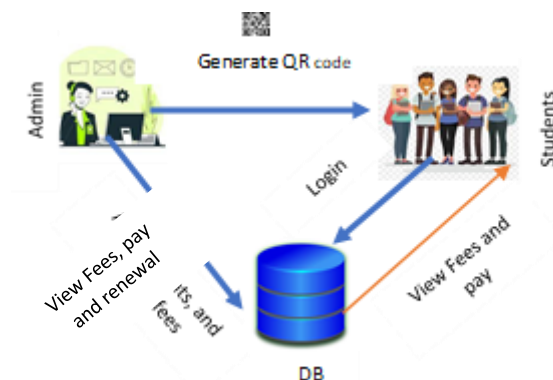- Reports take time to produce

4. PROPOSED SYSTEM

In our Proposed system, we introduced the new method for generating the Bus pass for the college students. There are some drawbacks of the existing system, so in our implementation we overcome all the drawbacks. Everything should be done in manually in existing, our project helps to the students pay the fees, get the pass through online DR. M.G.R. Educational and Research Institute. Admin can add the students, that information will show as QR code. Based on this code user can get all information about the fee's details and renewal details. This system verification can also be done by sending a confirmation to student mail. The admin sends the request for the fees based on that student, then the payment can also be done through net banking. The student can renewal the pass by the semester wise through online. This method also provides accurate location where the particular bus is traveling for the user and there is no data leakage all the student information stored in securely.

Advantages:

- Accuracy and the efficiency of this project is high.

- The proper maintains of the large data with safe and securely and it take less time.

- Easily apply the bus pass through the online

- Renewal process is very easy and User know about the location.

5. IMPLEMENTATION WORK

System Architecture:

E-bus pass system help to students get the pass through online. If admin can handle all the information about the students that is securely stored in the database in way of QR code. Student can know about the particular information means they Scan the code and they pay the fees through online use credit card to the get the bus pass and renewal the pass.

Modules:

The method of E-Bus pass has two Main Modules:

Admin: If the admin can all the particular students Information and send the username and password send through the student mail ID. The information is stored in the database in way of QR Code. View Students particular bus and update the fees for the particular Semester, after the payment is done by student, they get the pass through the QR code. The student attendance should be handling by the admin. For the renewal process, the fees are updated automatically by admin for the next semester.

Fig 5.1 Home Page

Student: If the students can login the account with the correct credentials. After the login, they get the QR code. Through that the code, they get the information about Fees. Students can put their attendance daily and pay fees through the online for get the pass and the renewal is should be updated for the Next semester's. This is more Comfortable for the students get and renewal the pass.
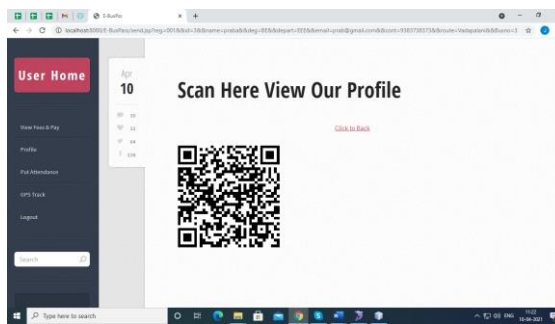

Fig 5.2 QR code

Based on these Modules students can get the pass and Renewal pass for the Student convenience.

This table compares the conflicts resolution between the manual and online process of bus pass system.

RESOLUTION	MANUAL	ONLINE
Time conception	It partially takes lots of time	It saves time
Payment	Payment process is tough	Payment process is easy
Attendance	In manual, it is hard	It is easy
Update	Update process is hard	Update process is easy
Location	It is impossible	It is possible

Fig 5.3 Responsive Table

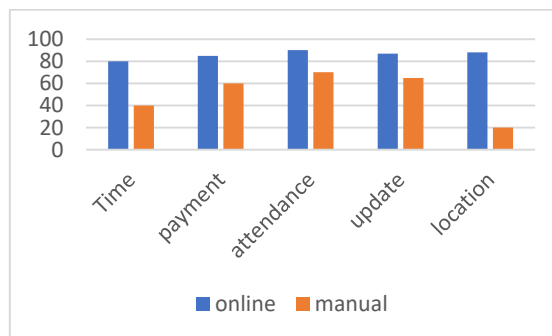This bar chart compares the online and manual method

Fig 5.4 Responsive Bar-Chart

6. CONCLUSION AND THE FUTURE ENHANCEMENT:

Bus pass Registration and Renewal System Project may be a real time project which is beneficial for the scholars who face problems with the present manual work of bus pass Registration and renewal. Our project is implemented successfully for getting and renewal the pass through the online for the DR. M.G.R. Educational and Research Institute Students. It also increases the validity period, frequently Warns to the scholar before completion of his validity period by website. His / Her Renewal or Registration are often done employing a voucher or maybe by a Mastercard. This online bus pass registration application will help students save their time and renewal bus passes without standing during a line for hours near counters. In furthermore this method should be applicable in all the Public and the Private Transport.

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