ONLINE BUS PASS SYSTEM

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Abstract: ONLINE BUS PASS SYSTEM is mainly helpful for the student who are facing problem with the current manual work of bus pass registration and generate as well as getting bus pass online and renew online without any irritating process.[1] User can find all the bus pass generation related information online without going to the bus station. The project allows users to register and generate or update bus pass through application/website and communicate online to manage or create account to perform online transaction. Verification of user will be done through Aadhaar card. It can also track the bus pass using GPS system. Track of particular bus status will be users will know from the web application. It also include big data processing for the storing the big database of passengers. It use Hadoop Framework to process and store the database.Online bus pass system is helpful as it reduces the paper work, time consumption, corruption-lessand come out from irritating process tomakes the process of getting bus pass in simple way.

Keyword- Digitalization, Aadhaar card verification, Reduce man power, secure

1. Introduction

Today's world switching to technical world and every system of the technical world are based on digitalized system. For digitalization and rapid process online system is required. Now a day's bus pass generation is done by manually. Todo rapid work and reduce manual work this online bus pass system is useful. This system allows getting online information about roots and it also gives current location facility.For the verification, security and proper authentication it use the Aadhaar card Number. These systems use the hadoop for analysis and processing the huge amount of data. In future we can link smart card for the online payment.

2. Literature Survey

In 1974, American airlines were the first to use an- automated booking system, which was still almost manual. Technology grew, and a computer reservation system was developed.
This project aims at providing a better solution for maintaining and managing Bus pass information using a database. This system is allow to perform functionalities like getting basic information for verification and provide Bus pass for the users. [2]

Fig.2.1[2]Aztec code

The official in the bus would be able to verify the authenticity of the passengers by scanning the Aztec code. That Aztec code will provided on the passengers pass with that code verification will done to check authorized user.[2]

This project provides an effective solution for managing bus pass information using a database.This system provides web application as well as android application for people to get their Bus passes and generation of pass online. This system provides security option for user. The conductor in bus would be able to verify the pass by scanning the QR code provided on the pass with a recommended device. After the generation of pass user will notified by message on their register mobile.Here Buss pass is working like a digital information of user which Scan by conductor but it not generating online Digital pass.[3]

Online bus ticket Reservation system is a web based application that works within a centralized network. This project of online bus ticket reservation having software program that should be used in bus transportation system also it use to cancellation of reservation, a facility which is used to reserve seats and different types of route enquiries used on securing quick reservations.[4]

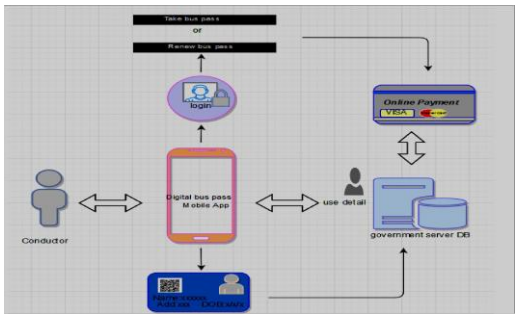

Fig.2.2[3] System Architecture

In this current situation, online booking and reservation system has improved the operations of various sectors of a nation's economy deploying this system.Online Bus Ticket Reservation System is a web based system that ensures that the company would be able to transform processes are carried out in the easy way, error-free and easy to use operations in the organizationespecially in the area of transportation, also it would be able to generate report for the management decision purpose.[5]

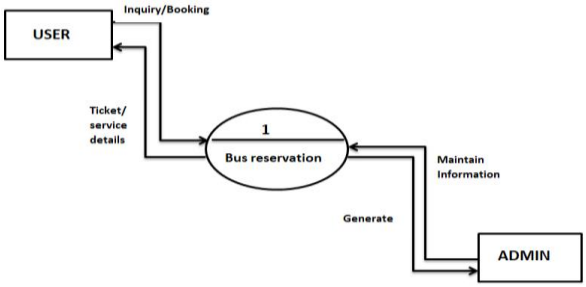

Fig.2.3[5]Process Diagram

In today's technological and rapid Country where everyone is in faster to reach at their destination. In this case they don't want any type of waiting for anything. So, they have no time for collecting ticket every day. The real time location of bus has to know for those people who are travel by public transports. Also they have to know how much time taken by the bus to reach their bus stop. This application/website is use by people and it helps people for making better travel decisions. For public transport system this application gives major challenges, various approaches to manage intelligently. GPS devices integrated on the bus for getting current position of the bus and these are sent by GPRS service provider through GSM network to devices. On the tracking device GPS devices are enabled and they are sending this information to control unit which is centralized. They receive RF signals directly when bus stops. Each of segment has the historical average speed with integrated systems are used further. Segment is done to improve the accuracy which includes some factors which are volume of traffic, day and time, crossing in each segment.[6]

Smart Government Transportations are using cloud Security project to maintaining transport information using cloud. The system has two logins, one for user and other for admin. Get all the information of users form the web application and provide security to data using CCAF (cloud computing adoption framework).CCAF which has been customized for securing cloud data. CCAF can protect data in real time using multi layered security which has three layers of security.[7]

At the bus stop LEDs, SMS, web applications/android applications are those resources from where people can trace information.GPS sends current location of the bus to centralized server where algorithms of arrival time estimation are applied using the speed of historical patterns. Segment is done to improve the accuracy which includes some factors which are volume of traffic, day and time, crossing in each segment.

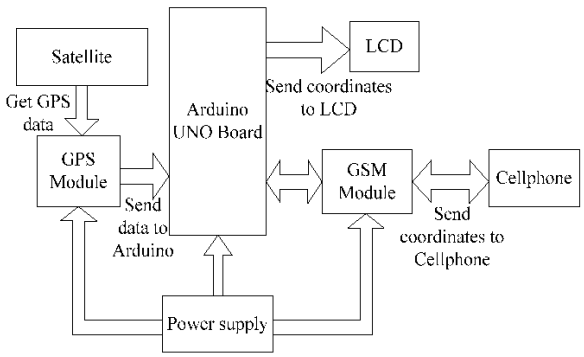

Fig.2.4[8] Block Diagram of Tracking System

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In this system new addition for tracking also notifies to passengers through the mobile phones on the way topping up credit in theirs smart tickets which enabled with radio frequency identification for traveling and reaching on time. According toJamaican Urban Transport an intelligent mobile bus tracking system is expects into consideration. From their case study corporation has been proposed passengers toward tack the bus which passenger choose with their reaching time. The System will validate using android for this research that allows passengers knowing arrival time and get the tack of expected bus.[11]

Millions of people using the system among whole India, in this the industry of bus travel is high fragmented but unorganized. This unstructured system will take a while for innovations in ticket industry. The events of the transformation and impact by focusing on RED bus which is largest bus ticketing company operating for attempts to explore as well as evaluation is suggested in this paper.The nature of bus travel industry alongside the challenges faced by the Indian bus travel industry it discusses in first part of this model paper. The second section includes an enumeratesof this paper enumerates the challenges encountered by 'redbus' which presently covers geographically 80% of the overall market. Subsequently, this paper examines a growth model in existence for 'redbus' which would provide a sustainable growth in the long term.[14]

Performance & Accuracy model – The Project is design with the aim to generating bus pass online and provide all the facilities to passengers like, to know current location of bus any time, can reserve and get pass any time. So, according to Online Buss ticket reservation system manpower is decrease with increasing growth of performance or efficiency and it optimally use timing of the users.

Fig.3.5 is shows analysis of online bus system performance and increasing growth of efficiency. This performance is predicted from the online ticket reservation system.

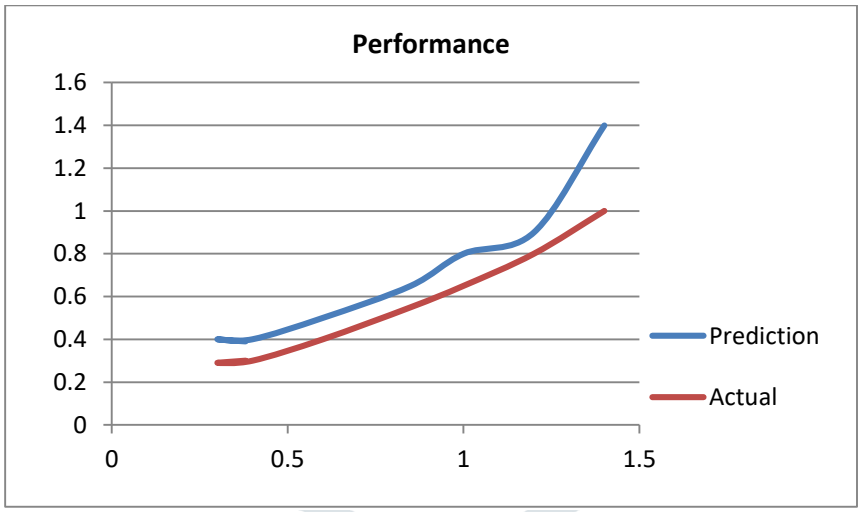

Fig.2.5 Performance & Accuracy model

Despite being used by millions of people, the bus travel industry in India is highly fragmented as well as unorganized and it took a while to witness some innovations in the bus ticketing industry in India. This paper attempts to explore as well as evaluate the extent of the transformation and its impact by focusing on 'redbus' which is the largest bus ticketing company operating in India. The first section of this paper discusses the nature of bus travel industry alongside the challenges faced by the Indian bus travel industry. The second section of this paper enumerates the challenges encountered by 'redbus' which presently covers geographically 80% of the overall market. Subsequently, this paper examines a growth model in existence for 'redbus' which would provide a sustainable growth in the long term. Despite being used by millions of people, the bus travel industry in India is highly fragmented as well as unorganized and it took a while to witness some innovations in the bus ticketing industry in India. This paper attempts to explore as well as evaluate the extent of the transformation and its impact by focusing on 'redbus' which is the largest bus ticketing company perating in India. The first section of this paper discusses the nature of bus travel industry alongside the challenges faced by the Indian bus travel industry. The second section of this paper enumerates the challenges encountered by 'redbus' which presently covers geographically 80% of the overall market. Subsequently, this paper examines a growth model in existence for 'redbus' which would provide a sustainable growth in the long term centralized network. This project presents a review on the software program "Online Bus Ticket Reservation System" as should be used in a bus transportation system, a facility which is use reserve seats, cancellation of reservation.

3. Proposed System

The proposed system is intended to come out from the major drawbacks of the currently existing manual system. This system is simple and easy to design or implement. It will work in all the configurations. So, Online buss pass system is use to generate online buss pass& give the Digital buss pass at home. It will verify by Aadhaar card and User-id.

It can also track the bus pass using GPS system. Track of particular bus status will be users will know from the web application. It also include big data processing for the storing the big database of passengers. It uses Hadoop Framework to processing large data sets. It use to secure data and it provide efficient use of the memory.

SQL Server or MYSQL use to store and maintain passenger's information. For efficient storage of data into memory we use big data processing (Hadoop) Framework. In this project users are first register their details on the website & login when they want to update or select any root.
Verification of right user is done by photo id and Aadhaar card, GPS is provide live track of buses, Big data processing frame work is also include efficient use of memory and stori0ng user information in proper manner.The project allows users to register & generate bus pass through application/website and communicate online to manage and maintain their account.

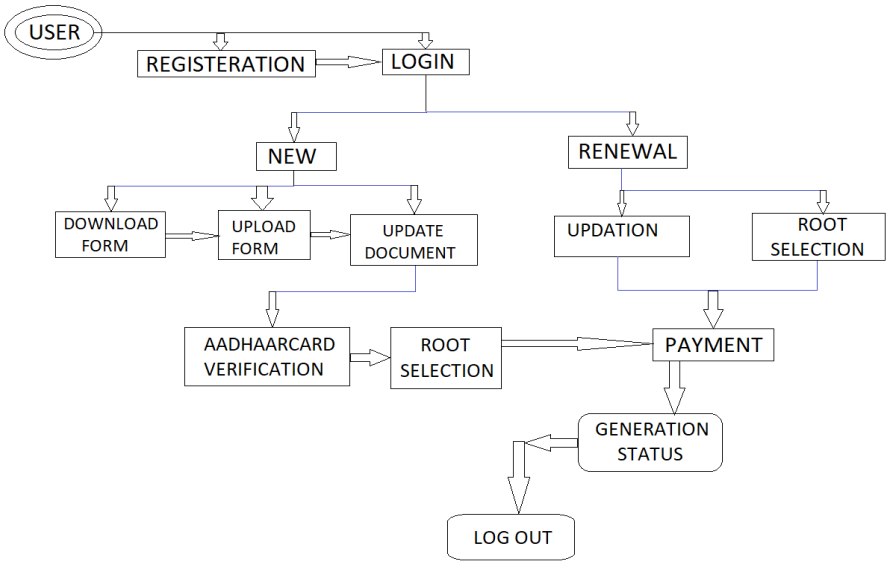

Fig.3.1Block diagram of online buss pass system

It can also track the bus transports using GPS system. Track of particular bus status will be users will know from the web application.So, this project provide download the form online & upload a forms and documents for verification. For the Renewal or updating theuser have to choose Root and online payment method.

4. Implementation

The bus pass system is developed using Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), PHP Hypertext Preprocessor (PHP), Structure Query Language (SQL) and Java Script.

Database: SQL Server or MYSQL use to store and maintain passenger's information. The Relational database was taken because is made up of a group of logically connected tables (Data that is relation with other data). For efficient storage of data into memory we use big data processing (Hadoop) Framework.
In this project users are first register their details on the website & login when they want to update or select any root.
After login user need to choose he/she want generate new or renewal of existing pass. Then download the form of generation new bus pass.Renewal and update the bus pass can also be done online with the Aadhaar card identification that is provided after the login through registration is done by the user.

Fig.4.1 Login Page

Supposing for any cancellation services means if the student or any other type of passenger does not require the pass service anymore, he/she cancancel their registration.
After filling the form Upload that with the required documents like photo copy of user, Aadhaar card,upload signature other documents can be added.

After upload documents & form Verification is done by admin. Pass generation status will be available when verification process will be done. Online bus pass system is helpful as it reduces the paper work, can reduce corruption, reduce irritating process, time consumption and makes the process of getting bus pass faster way. System takes minimum time to processing submitted details for generating bus pass.
After generation of bus pass it can to track path from the web application. All the users information are store on the database so renewal of pass not much difficult.

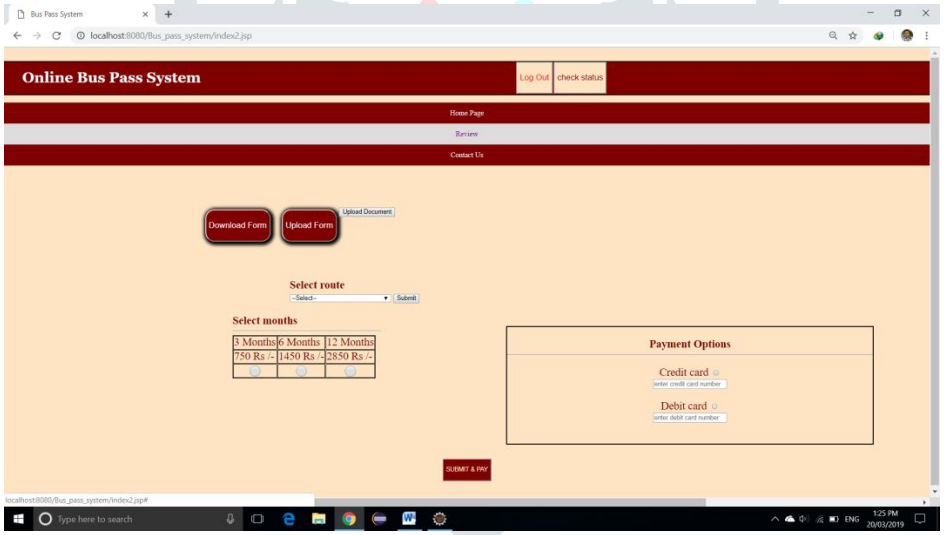

Fig.4.2 Process for pass generation

Storing and Maintaining such information of users is needed, These large data processing is done by the Hadoop.[11] It provide efficient use of memory and easy to maintain or generate pass with security.

5. Conclusion

From this system manually work is reduce and increase digitalizationOnline buss pass system will generate buss pass online and it also renew the pass from the user-id and verify by Aadhaar card. User can find all the bus pass related information online without going to any private or public offices. The project allows users to register and generatebus pass to get bus pass through application/website and interact online to manage their account.It can also track the bus pass using GPS system. It also include big data processing for the storing the big database of passengers. It uses Hadoop Framework to processing large datasets. It use to secure data and it provide efficient use of the memory.

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