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# Online Quick Bus Ticket Reservation System

Souvik Ghara<sup>1</sup>, Twinkle Saha<sup>2</sup>, Arunima Ghosh<sup>3</sup>, Diya Biswas<sup>4</sup>, Mrs. Arnima Das<sup>5</sup>

<sup>1, 2, 3, 4</sup> Student, Department of Electronics and Communication Engineering, Narula Institute of Technology, Kolkata

<sup>5</sup> Assistant Professor, Department of Electronics and Communication Engineering, Narula Institute of Technology, Kolkata

**Abstract:** Online Bus Ticket Reservation System is a web-based application that works within a file. one network. This project introduces an update to the software program “Online Bus Ticket Reservation System ”as it should be used in the bus system, the area used for reserved seats, booking cancellations and various types of route inquiries used for quick booking. This project addresses the study and development of an Online Bus Ticketing System web portal that enables making an online bus ticket purchase, ticket cancellation. which also acts as an operational tool for bus ticketing companies to operate their organization effectively. The use of bus traveling is a large growing business in India and other countries where huge population is a factor; the manual use of bus reservations is presently very strenuous and also consumes a lot of time by having to stay in a long queue.

**Keywords:** Bus Ticket Reservation, No to Queue, Efficient, Works 24\*7, Time saving

## I. INTRODUCTION

The Online Bus Ticket Reservation System is a web-based program that allows customers to check bus ticket availability, purchase bus tickets, and pay for bus tickets all in one place. This method was created with busy customers in mind and makes traveling simple for them. This system is established for all the home users after gaining access from the administrator. Online Bus Ticket Reservation System provides a bus transportation system, a facility to reserve seats, cancellation of seats, and different types of enquiry that need an instant and quick reservation. This system can be used by the users in performing online reservation via the internet for their all-business purposes. Users can use this program directly on their websites and there is no need to install it. This service is available to customers and travellers 24 hours a day, seven days a week, and can be used to make online reservations for commercial purposes. Users can access this program directly from the website.

## II. METHODOLOGY

### A. Research Methodology

Data can be collected or conducted a practical study for example management research can be considered strategies and methodology for the implementation and management of change.

### B. Choice of methodology:

The SDLC identifies four phases: Planning, Analysis, Construction and Implementation In order to develop this project, the approach will be used by the System Structured Analysis and Design Methodology

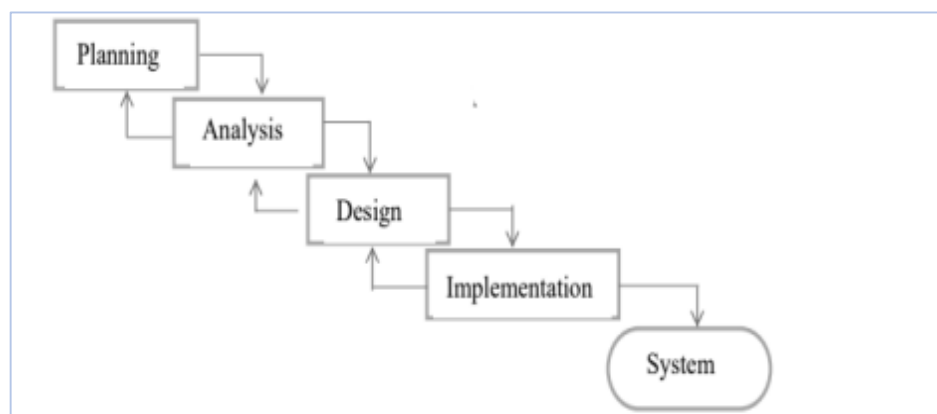


Fig 2.1: The Waterfall development Methodology Diagram

### C. Data Flow Diagram

The data flow diagram (DFD) is represented by a graphic "flow" of data through the information system, modelling its process processes. DFD indicates what type of information will be entered and exited from the system, where the data will go in and out, and where the data will be stored. Deal development of DFD'S is done at several levels. Each process in low-level drawings may be reduced to a detailed DFD to the next level. High-quality painting is often referred to as contextual drawing. It contains a single process, which plays a key role in studying the current system. The process in graphic content level exploded into another process at the first level of DFD.

#### LEVEL 1

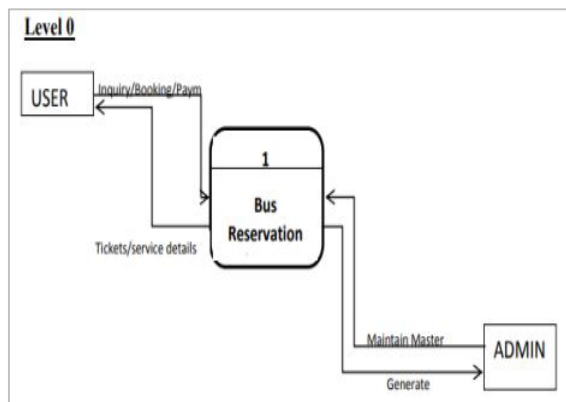


Fig 2.2: Context View of the System

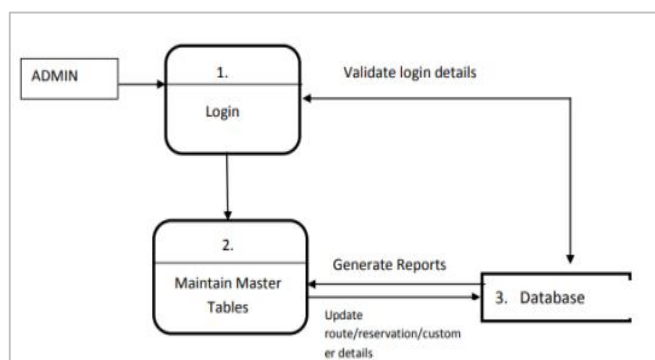


Fig 2.3: Admin view of Online Bus Ticket Reservation System

#### LEVEL 2

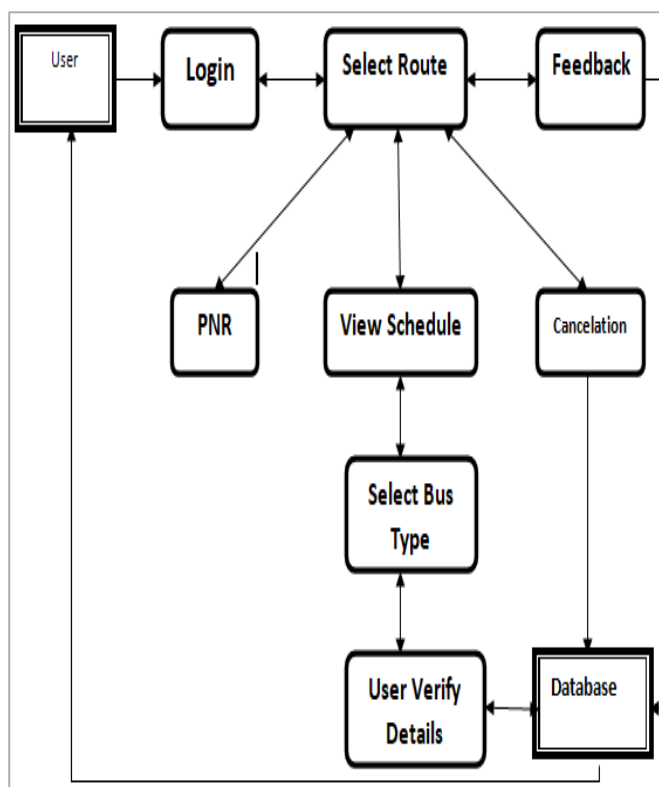


Fig 2.4: User view of Online Bus Ticket Reservation System

#### D. Use case Diagram For user And Admin

A usage case is a description of the behaviour of a program as it responds to a request from outside that program (user). In other words the use case refers to “who” can do “what” with the system in question.

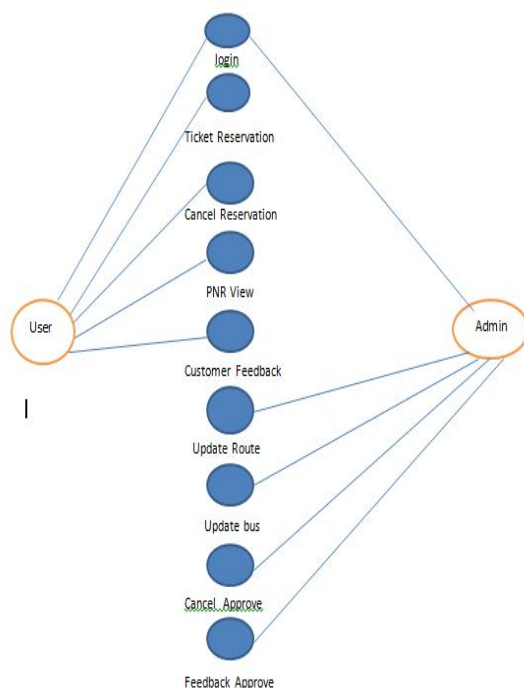


Fig 2.5: Admin view online Bus Ticket Reservation System

### III.DEVELOPMENT TOOLS

#### A. HTML

HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It can embed scripts written in languages such as JavaScript which affect the behaviour of HTML web pages.

#### B. CSS

All web pages use CSS style sheets to describe their presentation. CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colours, and fonts.

#### C. JavaScript

It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed.

#### D. PHP

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. While PHP originally stood for Personal Home Page, it now stands for PHP: Hypertext Pre-processor, a recursive acronym. PHP code is interpreted by a web server with a PHP processor module, which generates the resulting web page: PHP commands can be embedded directly into an HTML source document rather than calling an external file to process data.

#### E. MySQL

My S-Q-L", officially, but also called “My Sequel” is the world's second most widely used open-source relational database management system (RDBMS). Free-software-open source projects that require a full-featured database management system often use MySQL.

#### F. Ajax

Ajax is an acronym for Asynchronous (JavaScript and XML) is a group of interrelated web development techniques used on the client-side to create asynchronous web applications. With Ajax, web applications can send data to, and retrieve data from, a server asynchronously (in the background) without interfering with the display and behaviour of the existing page.

#### G. WampServer

WampServer is a Windows web development environment. It allows you to create web applications with Apache2, PHP and a MySQL database. Alongside, PhpMyAdmin allows you to manage easily our database.. The meaning of the wamp acronym depends on which specific components are used as part of the actual bundle:

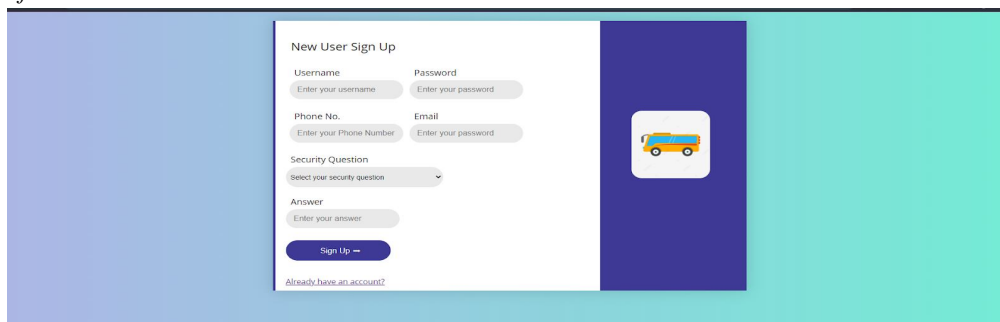
#### H. System Requirements

- 1) A Computer is required in which windows 10 operating system should be installed.
- 2) We build this project on Visual Studio Code .
- 3) For database we use Msql WorkBench.
- 4) We run our project in WampServer.
- 5) To display the project output Web Pages we use Google Chrome.

### IV. WEBSITE INTERFACE

The presentation is based on the interface of the system and the outputs from the back end and the website interfaces consist of various windows that enable different categories of users to interact with the system. This includes some of the user pages, administrative pages and their respective outputs.

#### A. Sign Up Interface



The image shows a 'New User Sign Up' form. It includes input fields for Username, Password, Phone No., and Email. There is also a Security Question dropdown and an Answer input field. A 'Sign Up' button is at the bottom, and a link 'Already have an account?' is below it. The form is set against a background with a blue and green gradient and a bus icon.

Fig 3.1: This is the sign-up window for new customers

#### B. Home Page Interface (User & Admin)

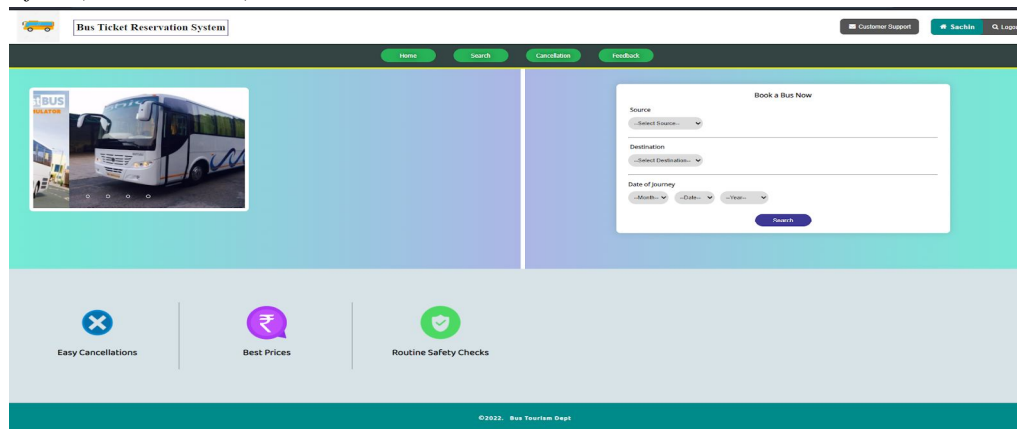


Fig 3.2: How the User home interface is expected to appear



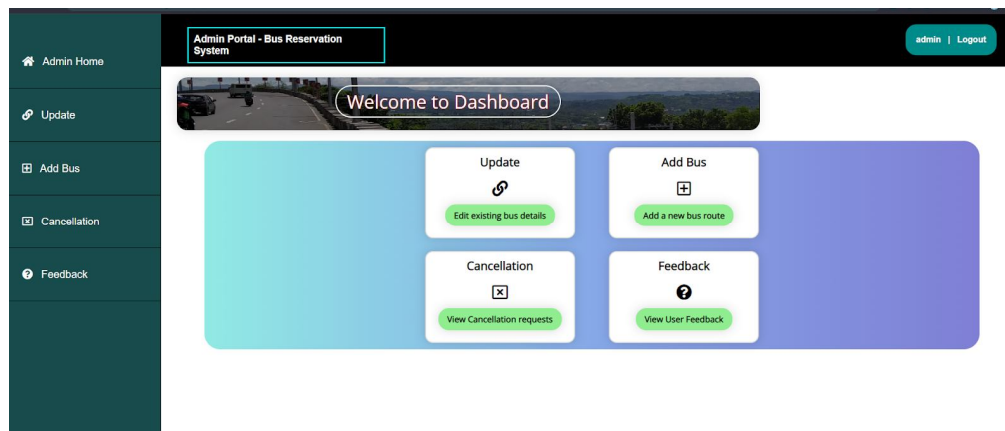


Fig 3.3: How the Admin home interface is expected to appear.

## V. DATABASE

The relational database was adopted because is made up of a group of logically connected tables. Therefore, establishing a relational database management system is a great way to increase data integrity, efficiency, ask questions, sort and filter data, provide stronger security, and share information, ease of use, data independent among others.

Some user and database table are shown in this section.

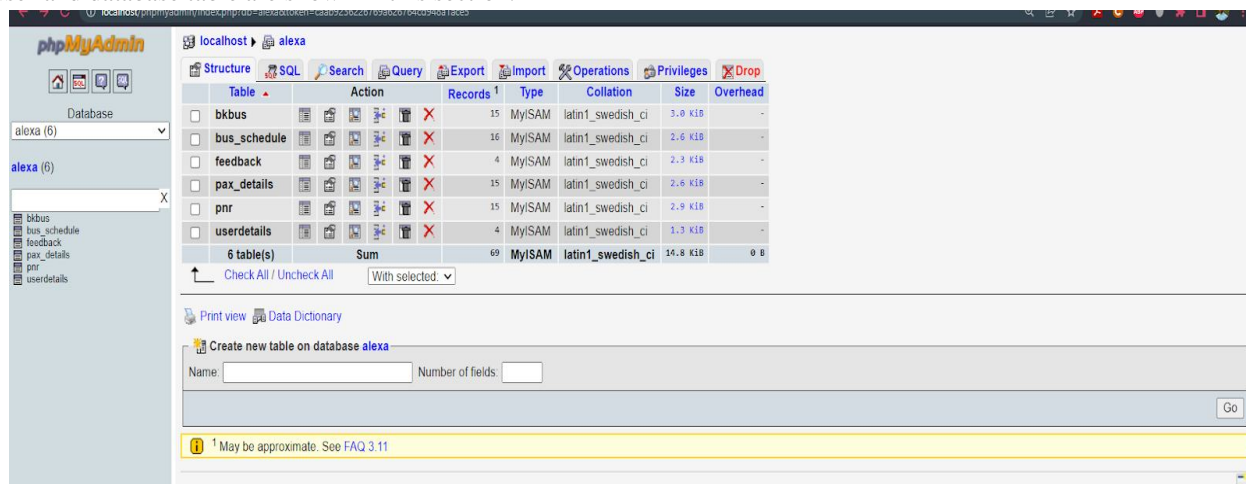


Fig 4.1: Showing all the Tables

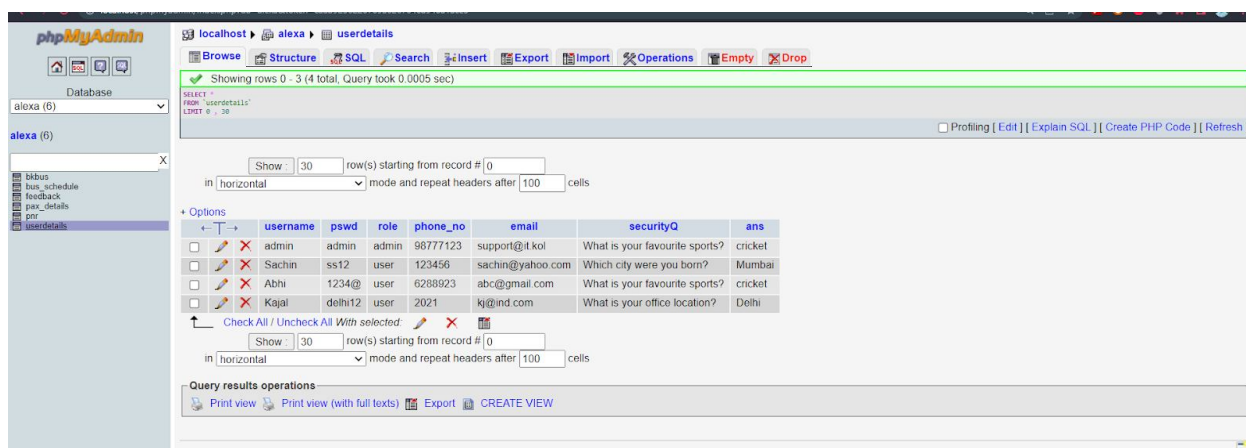
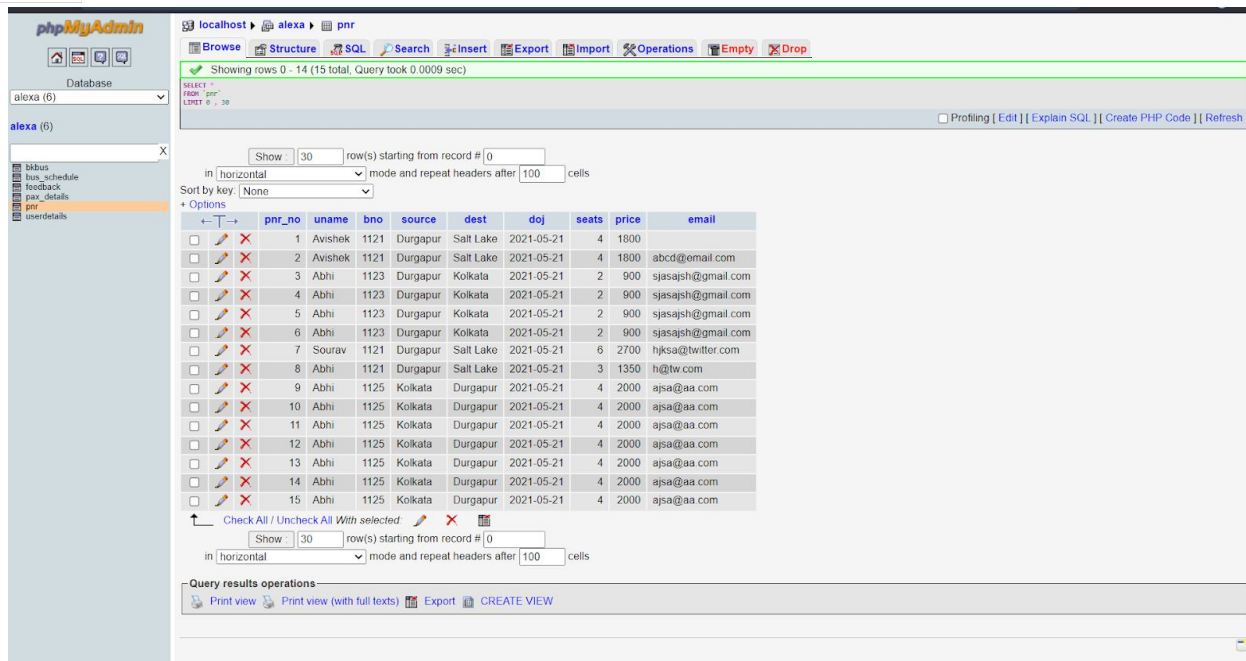


Fig 4.2: Showing the User Table



pnr_no	uname	bno	source	dest	doj	seats	price	email
1	Avishhek	1121	Durgapur	Salt Lake	2021-05-21	4	1800	
2	Avishhek	1121	Durgapur	Salt Lake	2021-05-21	4	1800	abcd@email.com
3	Abhi	1123	Durgapur	Kolkata	2021-05-21	2	900	sjasajsh@gmail.com
4	Abhi	1123	Durgapur	Kolkata	2021-05-21	2	900	sjasajsh@gmail.com
5	Abhi	1123	Durgapur	Kolkata	2021-05-21	2	900	sjasajsh@gmail.com
6	Abhi	1123	Durgapur	Kolkata	2021-05-21	2	900	sjasajsh@gmail.com
7	Sourav	1121	Durgapur	Salt Lake	2021-05-21	6	2700	hksa@twitter.com
8	Abhi	1121	Durgapur	Salt Lake	2021-05-21	3	1350	h@tw.com
9	Abhi	1125	Kolkata	Durgapur	2021-05-21	4	2000	ajsa@aa.com
10	Abhi	1125	Kolkata	Durgapur	2021-05-21	4	2000	ajsa@aa.com
11	Abhi	1125	Kolkata	Durgapur	2021-05-21	4	2000	ajsa@aa.com
12	Abhi	1125	Kolkata	Durgapur	2021-05-21	4	2000	ajsa@aa.com
13	Abhi	1125	Kolkata	Durgapur	2021-05-21	4	2000	ajsa@aa.com
14	Abhi	1125	Kolkata	Durgapur	2021-05-21	4	2000	ajsa@aa.com
15	Abhi	1125	Kolkata	Durgapur	2021-05-21	4	2000	ajsa@aa.com

Fig 4.3: Showing the Table of Passenger Name Record

## VI. CONCLUSIONS

The computer applications are very important in every field of human endeavor which is observed in daily basis. Here with this new system all the information about the customer making a reservation can be obtained by clicking a button, removing some of the difficulties that come with the manual system.

Online Bus Ticketing Reservation System is a web portal has been successfully built and has achieved and fulfilled the objectives and daily requirements that are stated in the project proposal. The use of web-based approach brings along many benefits include the ability to access information anywhere and at any time of the day. There is room for improvement on the suggested guidelines, study and implementation of Online Bus Ticketing System web portal.

## VII. ACKNOWLEDGMENT

A warm gratitude to the group members who work with me in the accomplishment, to my college Narula Institute of Technology, to our respected H.O.D (Head of Department) Dr. Anilesh Dey, our respected T.I.C (Teacher In Charge) Dr. Sangita Roy and to our mentor Miss. Arnima Das who helped us to collect resources and build up this project to a full fledged working system. To be honest, there are many external help taken as well from internet and other learning resources. To sum up this is an assembled product of many contributions which are the key factors for this publication successful. Thank you everyone.

## REFERENCES

- <https://www.vetbossel.in/bus-ticket-reservation-php/>
- <https://www.youtube.com/watch?v=uCSNR5k9uLI>
- <https://code-projects.org/online-bus-reservation-system-using-php-source-code/>
- <https://www.youtube.com/watch?v=uCSNR5k9uLI>
- <https://www.freeprojectz.com/php-mysql-project/bus-ticket-booking-system>



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