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TABLE BOOKING BY 3D TOUR

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Abstract: Long wait time for tables can turn customers away or can be an uncomfortable experience. Therefore, we intend to aid in a comfortable experience by bringing in a restaurant tour through our website. This involves a complete tour of the ambiance and the tables. This tour is not just looking at normal pictures of the restaurant's ambiance to get a glimpse; it is a complete 360- degree view that helps the customer to book a table with one click. People are always running short of time and custom table booking fits right into their hectic schedule which solves the problem of waiting time. Also, this type of feature is favorable to restaurants as it saves an ample amount of time and helps in getting more customers to visit. In conclusion, a 3D tour makes booking a table easier and convenient with easy accessibility. The use of hardware tools like an android phone and a tripod will help in capturing images; programming languages like HTML, CSS, JavaScript will be used; tools like the Google Tour platform and Google Street View app will be used for producing the 360Degree video of the restaurant; and software tools like MongoDB, NodeJS, Express JS will help in building the restaurant website using Visual Studio Code.

Keywords: Table, Customers, Website, Tour, 360-degree, HTML, CSS, JavaScript, MongoDB.

1. INTRODUCTION

1.1 About the Project

Every hotel's goal is to sell more rooms and make a profit. Yet, without an online booking system, you will have to rely on phone calls and walk-ins only to make reservations. An online booking platform is a necessity. That's why we would like to point out the key benefits every good hotel booking system should bring you. The main motivation of this project is to help customers to get the tables reserved at their comfort and it is also useful for the restaurants to manage the guests accordingly. An elegant way of booking a table for the customers providing with a high ranged view of how their dining tables would actual feel, than just look.

1.2 Objectives of the Project

This web application is developed to provide the best dining services to the customers and staff. We have

developed restaurant management system to provide a table booking option where a customer can find their tables by 3D view of the ambience according to their choice.

The main objective of this web application is we are using 3D view for a restaurant through which the customer understands the views of the table and future can select any table of choice and reserve it for him. This system also helps promote responsible and interesting 3D view of the aura so that people can enjoy their food to the most by reserving the table accordingly.

1.3 Scope of the Project

We have introduced 3D Tours to fit the time of customers. The modality of table reservations helps restaurants to estimate demand in a more accurate way, and therefore, to improve sourcing and staffing, and to manage costs more efficiently. By managing workflow in a better way, through reservations, the restaurant will be able to deliver a better quality of service. It is an advantage for the customer to know in advance that he will not have to go through the trouble of waiting until a table is available, or being put on a waiting list, or in the worst case, needing to find another place to eat, because the one chosen won't be able to serve them. For the most part, diners don't have to put down a deposit to reserve a table and the check is settled after the meal has ended.

Fig.1. Pool view of the tables in the restaurant

The figure shows how the outdoor seating in the restaurant is arranged with the pool view.

Fig.2. Indoor seating view

The image shows how the indoor seating of the restaurant is arranged.

1.4 Advantages

1. The project helps customers to book their table of the restaurant they choose.

2. This website provides 3D tour of the surroundings of the table which is very helpful in choosing the right table according to their choice.

1.5 Disadvantages

1. Changes in the ambiance of the place after being uploaded on the website might disappoint the customers.

2. Spending time of a customer at the place is not calculated which might create issues for the next customer wanting the same table.

1.6 Applications

The website is developed for business purposes, allowing the users to book their favorite table before heading to the restaurant. Which is useful for both customers, for booking their favorite table which is the exciting part and owners for attracting customers to their restaurant which becomes indirect business for them.

This system also helps promote responsible and interesting 3D view of the aura so that people can enjoy their food to the most by reserving the table accordingly.

1.7 Hardware and Software Requirements

SOFTWARE

Front End: HTML, B5, CSS, Java Script

Back End: Express Js, Node Js

Database: MySQL, MongoDB, Mongoose

Operating System: Windows

Web Browsers: Google Chrome

HARDWARE

Tripod

Android phone(camera)

Processor- 2.0 GHZ (Minimum specification)

RAM –2GB (Minimum specification

2. LITERATURE SURVEY

2.1 Existing System

Any restaurant that provide an online web application only have images of the ambience of the restaurant and customer is not able to identify if he will be able to get the same view from the table he has reserved to enjoy his food with the view. Moreover few of the web applications charge an advance amount payment for reserving the table to the customer.

2.2 Proposed System

3D virtual tours allow users to look at imagery and experience what it might be like to move through a property. we have proposed an application that will help customers do table reservations to save time and make it a more

memorable experience by 3D tour.

This will also benefit the restaurants by gaining loyalty from the customer due to convenience and time saving. This application will be a simplest application with ease of use. It will contain real time updates about the restaurant.

3. PROPOSED ARCHITECTURE

The architecture of this website includes,

1. Data Flow Diagram
2. Use case Diagram
3. Activity Diagram

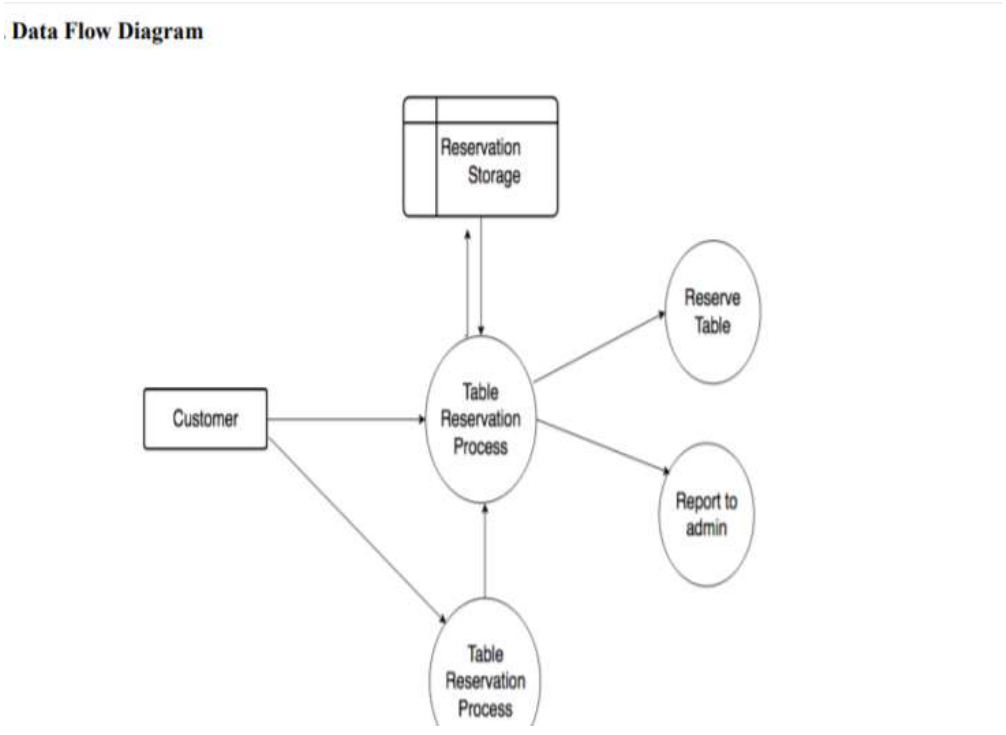

Fig.3. Data Flow Diagram

Data flow diagram is used to represent the flow of data in a Business information system. The above data flow diagram consists of customer who uses the web application to reserve the table and the next process shows the flow of reservation and storage of data.

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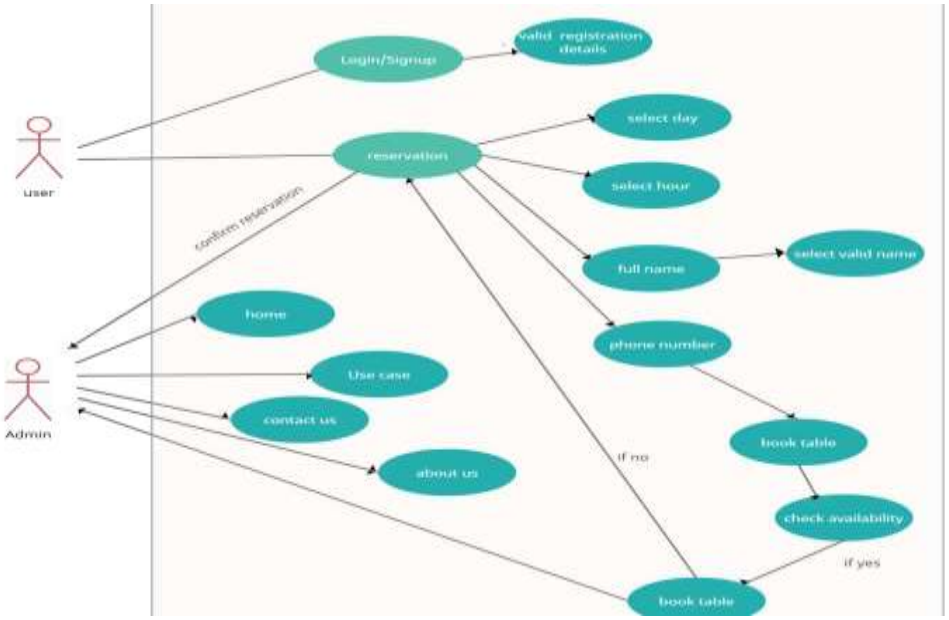

Fig.4 Use case Diagram

Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor. Use case diagram can be useful for getting an overall view of the system and clarifying who can do and more importantly what they can't do.

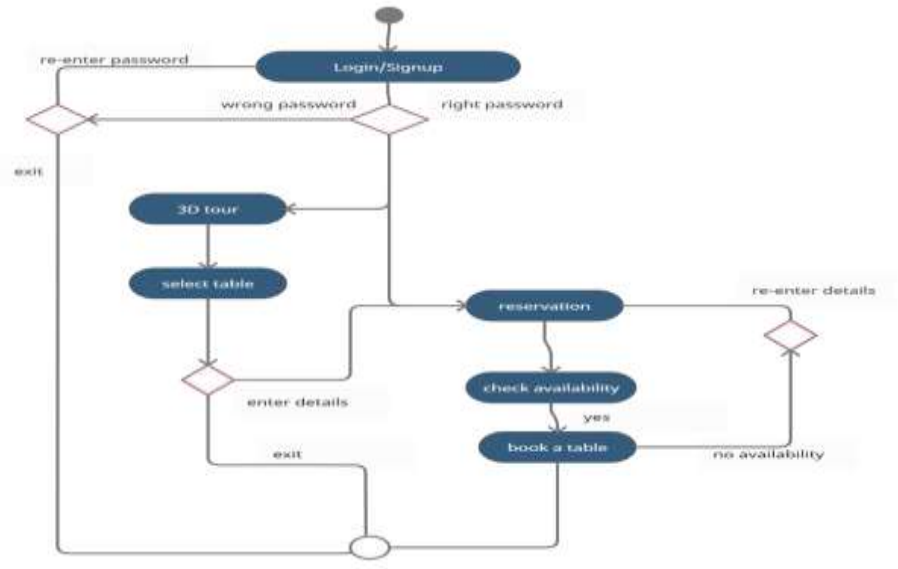

Fig.5. Activity Diagram

We use Activity Diagrams to illustrate the flow of control in a system and refer to the steps involved in the execution of a use case. We model sequential and concurrent activities using activity diagrams.

4. CODE IMPLEMENTATION

4.1 Prerequisites: HTML 5, CSS, VS code

HTML stands for Hyper Text Markup Language. It is used to design web pages using a markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. A markup language is used to define the text document within tag which defines the structure of web pages.

Cascading Style Sheets, fondly referred to as CSS, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each web page.

Visual Studio Code is **a streamlined code editor with support for development operations like debugging, task running, and version control**. It aims to provide just the tools a developer needs for a quick code-build-debug cycle and leaves more complex workflows to fuller featured IDEs, such as Visual Studio IDE.

4.2 Algorithm

1.We write a html code for our web application which mainly includes the following tags. Everything to be shown on the screen in written in this code pattern.

<html>…</html> ; <head>…</head> ; <title>…</title> ; <body>…</body> etc.

2.We write another code which is for the styling of the above html code using CSS.

3.Both the codes are executed using Visual Studio code.

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5.RESULTS

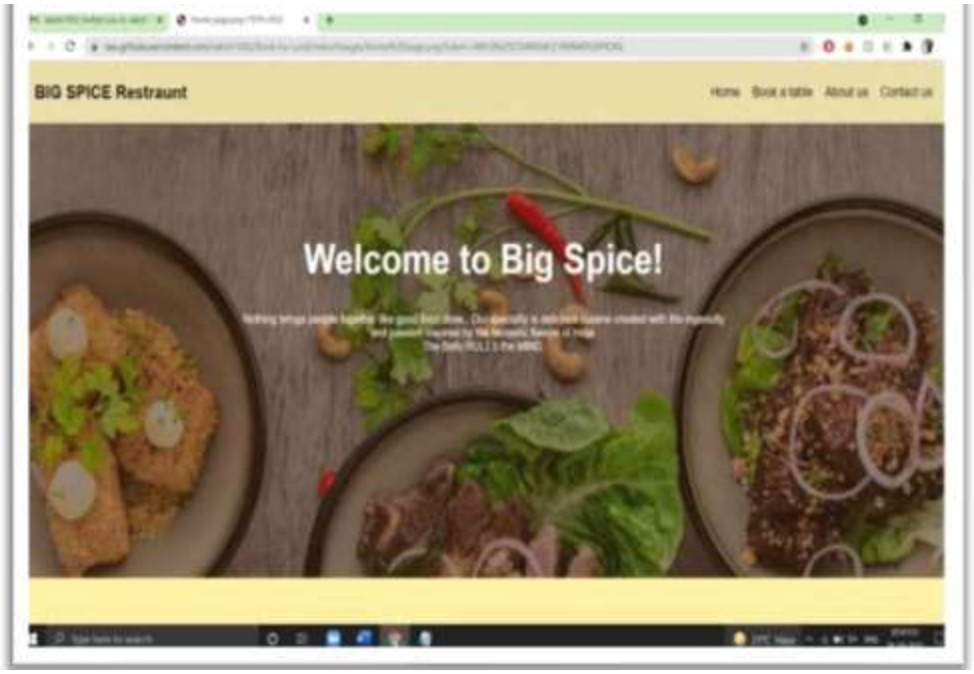

Fig.6. Screen 1

Screen 1 of the web application shows the restaurant details that includes the title followed by the contact details.

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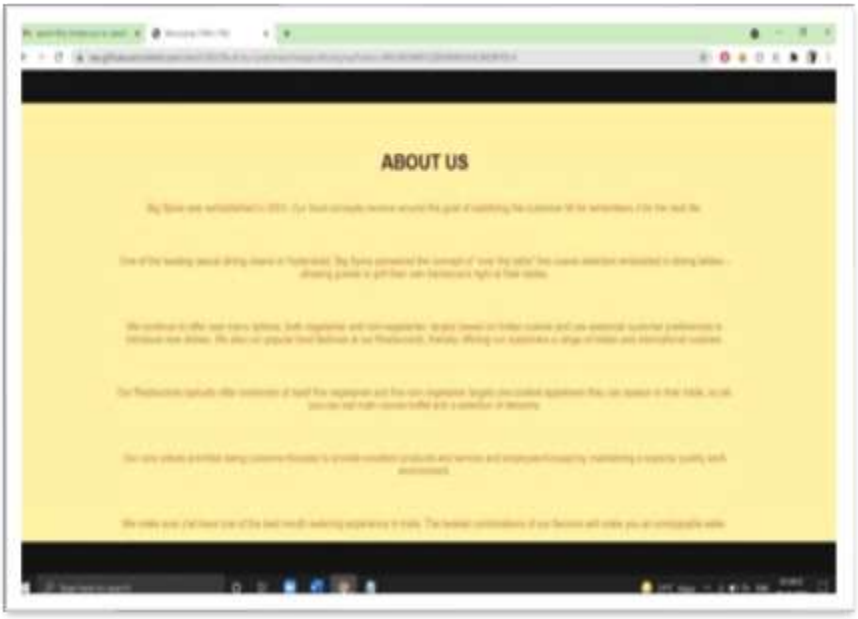

Fig.7. Screen 2

Screen 2 shows ABOUT US page of the web application. Communicate the story of restaurant. Describe the customers or the cause that the business serves.

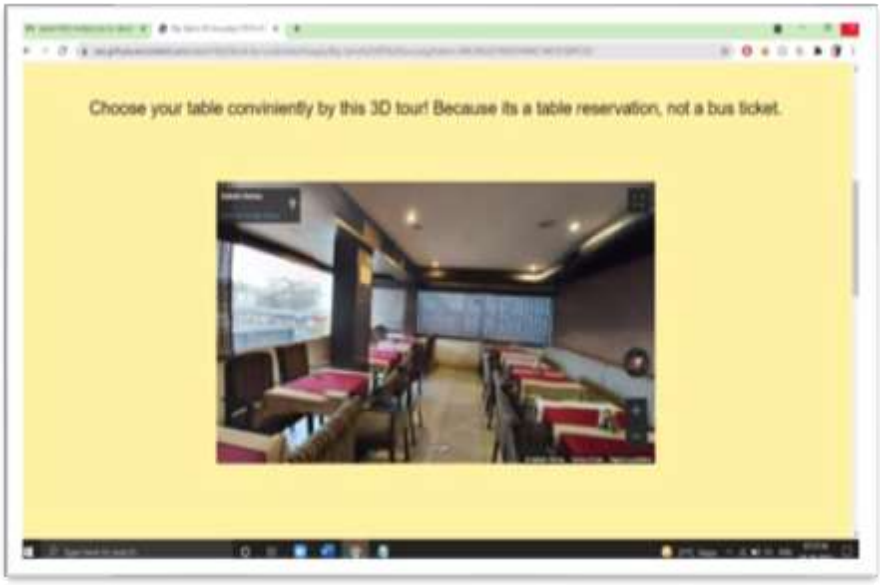

Fig.8. Screen 3

Screen 3 of the web application shows the 3D view to choose the table according to the customer choice.

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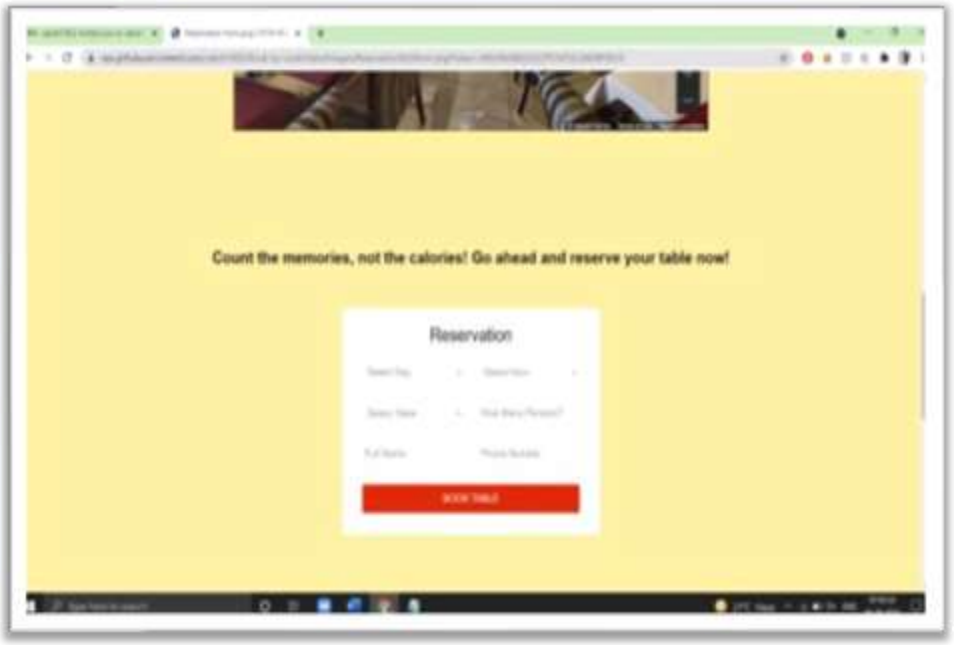

Fig.9.

Screen 4

Screen 4 of the web application shows the reservation of the required table to the customer.

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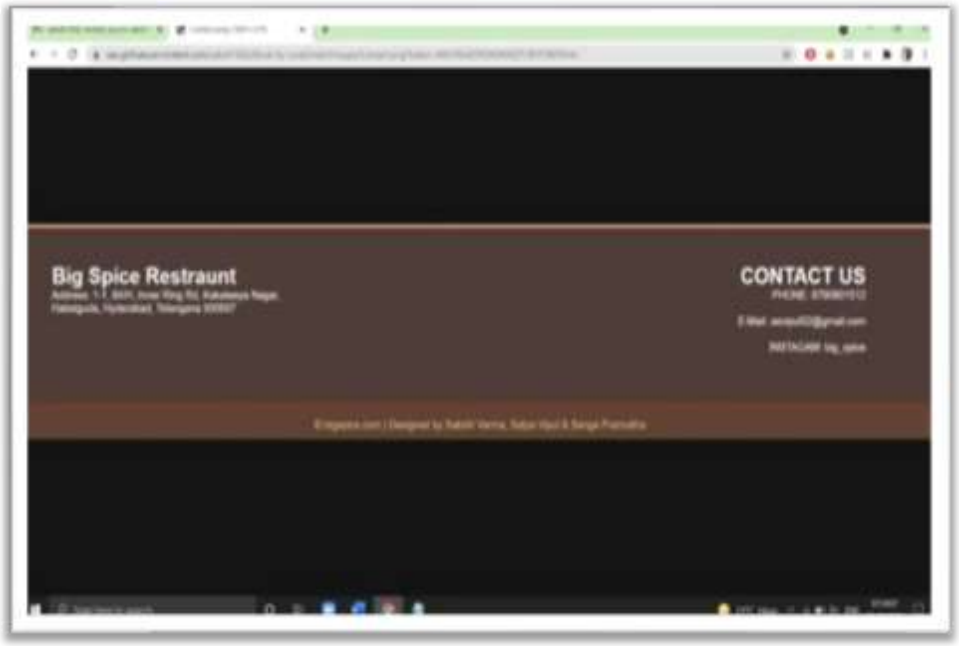

Fig.10. Screen 5

Screen 5 shows the direct contact details of the restaurant if in case the customer need any further communication with the staff.

6.CONCLUSION AND FUTURE SCOPE

Table booking system is an application where the customer can book a table online from anyplace. Customers can also interact with the table booking website to know any other details they want. Online table booking system has been developed successfully. System performance is also found to be satisfactory. This is a user-friendly application. Through this application, the cost can be reduced and efficiency is increased. There are several tables that can be selected by customers. With the help of this web page customers can book tables, can know the status of table, can choose the time and day. Thus online table booking system target internal and external audiences. Online table booking system is very big to maintain but it always provides excellent facilities to accomplish the goal and help to reduce a complex paperwork process through a web page. This can be a benefit using online table booking system rather searching the restaurants in person. With the help of online table booking system records are maintained and the database is updated with time to time. Through Online table booking system, technologies and features have been introduced.

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