

FULL STACK PROJECT REPORT (2021-2022) On “Hotel Management System”

Submitted by

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Declaration

We hereby declare that the work which is being presented in the Full Stack Project “**Hotel Management System Website**”, in partial fulfillment of the requirements for Full Stack Project viva voce, is an authentic record of our own work carried by the team members under the supervision of our mentor Mr. Pankaj Kapoor.

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Semester: 5th

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Certificate

This is to certify that the above statements made by the candidates are correct to the best of my/our knowledge and belief.

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Project Coordinator

(Mr. Pankaj Kapoor)

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(Mr. Shashi Shekar)

About the Project

Our full stack project “**Hotel Management System Website**” is an online website which is developed for hotels those are using a manual system to handle hotel processes. There are three main users in hotel management system, administrator, Manager and receptionist. Administrator can maintain daily updates in the hotel records. This system will automate the major operations of the hotel. Administrator can access to all system functionalities without any restrictions. the main aim of the entire activity is to automate the process of day-to-day activities of hotel.

The booking feature is to keep track in room and hall reservation and check availability. Using this system user can check which room is reserved and which is available, and the service feature provides all the necessary services, he can check the room laundry service, food service, sweeping service from this module. the booking feature keeps track of the rooms or halls booked and keeping track of the activity of the hotel like Admission of a new customer, assign a room according to the customer’s demand, checkout of a customer and releasing the room and finally computing the bills. At checkout you can easily check the availability of rooms in the hotel. this system also checks the list of regular customers and feedback of the hotels customer.

Motivation

In hotels we observe there is a lot of man work to do but there is no need to assign too many people for the work that can be done online by just siting on a system the expenses that you pay to those workers can be reduced and the work done will be in more efficient manner the customers will not have to wait for the receptionist to check the room availability and for delayed checkouts and it will also be an ease to the hotel manager because the daily hotel record is stored in a hotel register but through this system manager can store all records online .Doing all the work manually and storing information on register takes much time and wastes much precious man hours. Manually calculation of bill is also error prone. If management wants any old information of room record then this task is tiresome and takes a lot of time to find the old files, and the data is not always reliable because it is man written e.g., wrong phone number

Requirements

a). Software Requirements:

- Technology Implemented: Full Stack Web Development
- Languages/Technologies Used: HTML, CSS, JavaScript
- IDE Used: Visual Studio Code
- Web Browser: Google Chrome
- GitHub: GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere. GitHub Repository: A GitHub repository can be used to store a development project. It can contain folders and any type of files (HTML, CSS, JavaScript, Documents, Data, Images). A GitHub repository should also include a license file and a README file about the project. A GitHub repository can also be used to store ideas, or any resources that you want to share.
- Visual Studio Code: Visual Studio Code is a free source-code editor made by Microsoft for Windows, Linux and macOS. [7] Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality. Microsoft has released Visual Studio Code's source code on the VS Code repository of GitHub.com, under the permissive MIT License, while the compiled binaries are freeware.

b). Hardware Requirements:

- Processor Required: Intel i5
- Operating System: Windows 10
- RAM: 8GB
- Hardware Devices: Computer System
- Hard Disk: 256GB

Acknowledgement

We thank the almighty for giving us the courage and perseverance in completing the project. This project itself is an acknowledgement for all those people who have given us their heartfelt co-operation in making this project a grand success. We extend our sincere thanks to Mr. Pankaj Kapoor, Assistant Professor at “GLA University, Mathura” for providing his valuable guidance at every stage of this project work. We are profoundly grateful towards the unmatched services rendered by him. And last but not least, we would like to express our deep sense of gratitude and earnest thanks giving to our dear parents for their moral support and heartfelt cooperation in doing the main project.

HOTEL MANAGEMENT SYSTEM

Abstract

As the name suggests, our project is all about a hotel management website which facilitates you to reduce the work load and make work simple and efficient. Hotel management website is one way of giving customers fast service without any error. The limited time and resources have restricted us to incorporate, in this project, only a main activity that are performed in a HOTEL MANAGEMENT SYSTEM, but utmost care will be taken to make the system efficient and user friendly

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Introduction

Front-end development refers to creating and maintaining the part of the website that users directly interact with. Front-end developers need to create a website's entire interface and user experience, as well as its design and overall look. They usually work with HTML, JavaScript and CSS languages to create a basic layout of the website and then add various visual elements to improve its aesthetic quality. Some of the most commonly performed tasks for a front-end developer include:

- Optimizing the user's experience on a website and making sure it's not interrupted by any design or functionality issues
- Creating rough concepts and using HTML, CSS and JavaScript to materialize them
- Developing an easy-to-use and intuitive user interface and gradually improving it based on user feedback
- Adapting a website's design to look and function properly on mobile devices
- Making sure that a website looks and functions according to the same parameters regardless of the internet browser that the end-user chooses to open it with
- Helping with organizing and managing the entire software workflow
- Constantly testing the website's front end for ease of use and potential errors and optimizing it to ensure a smoother user experience
- Considering SEO practices when creating a website's front end to ensure that it's correctly indexed by search engines and users have easier access to it.

HTML

Hypertext Markup Language (HTML) is a computer language that makes up most web pages and online applications. A hypertext is a text that is used to reference other pieces of text, while a markup language is a series of markings that tells web servers the style and structure of a document.

HTML is not considered a programming language as it can't create dynamic functionality. Instead, with HTML, web users can create and structure sections, paragraphs, and links using elements, tags, and attributes.

CSS

Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. Using CSS, you can control the colour of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colours are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects.

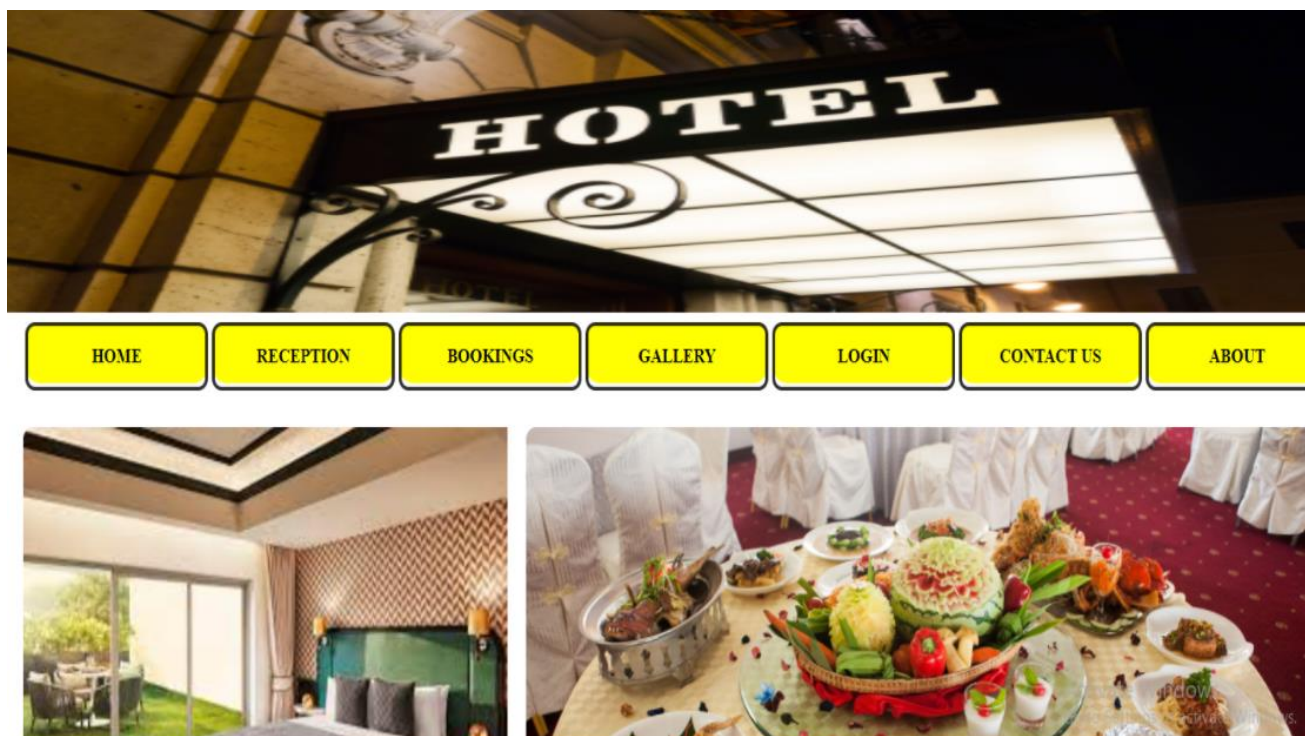
CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

Pre-requisite

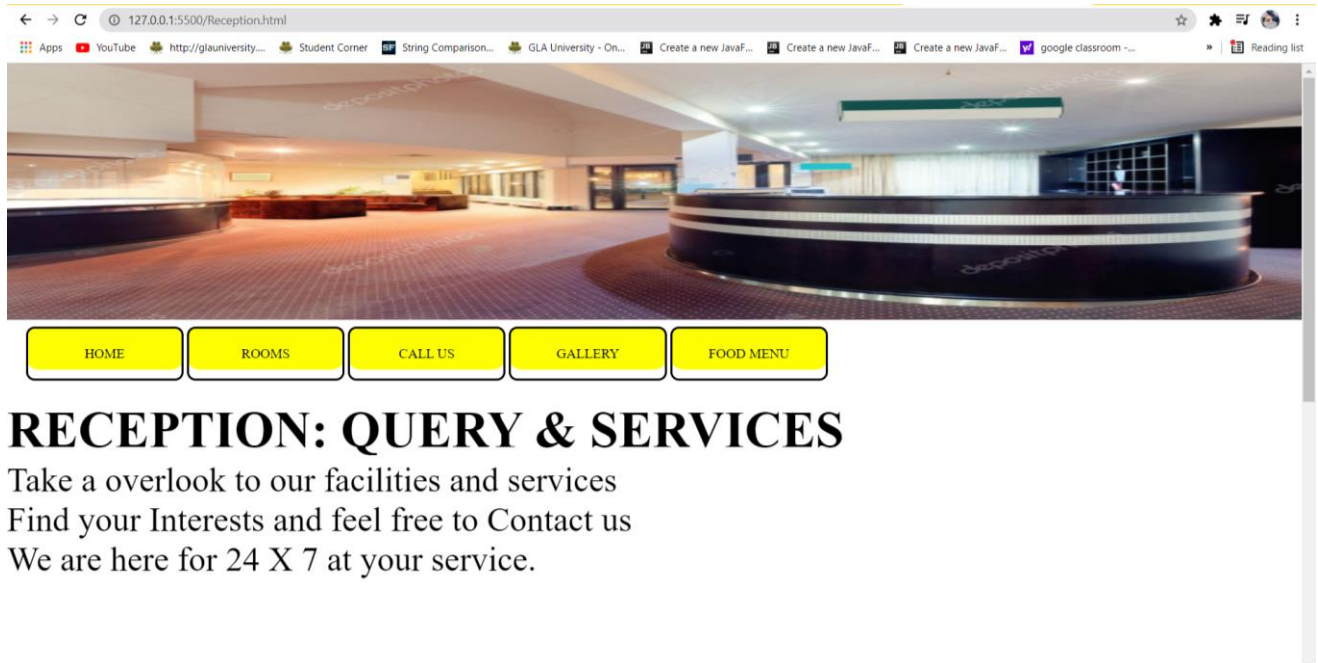
Hands-on knowledge of JavaScript, HTML and CSS is essential before working on the concepts for making of webpages. Make sure that you have the browser or chrome installed and running before opening website.

SNAPSHOTS FROM THE PROJECT

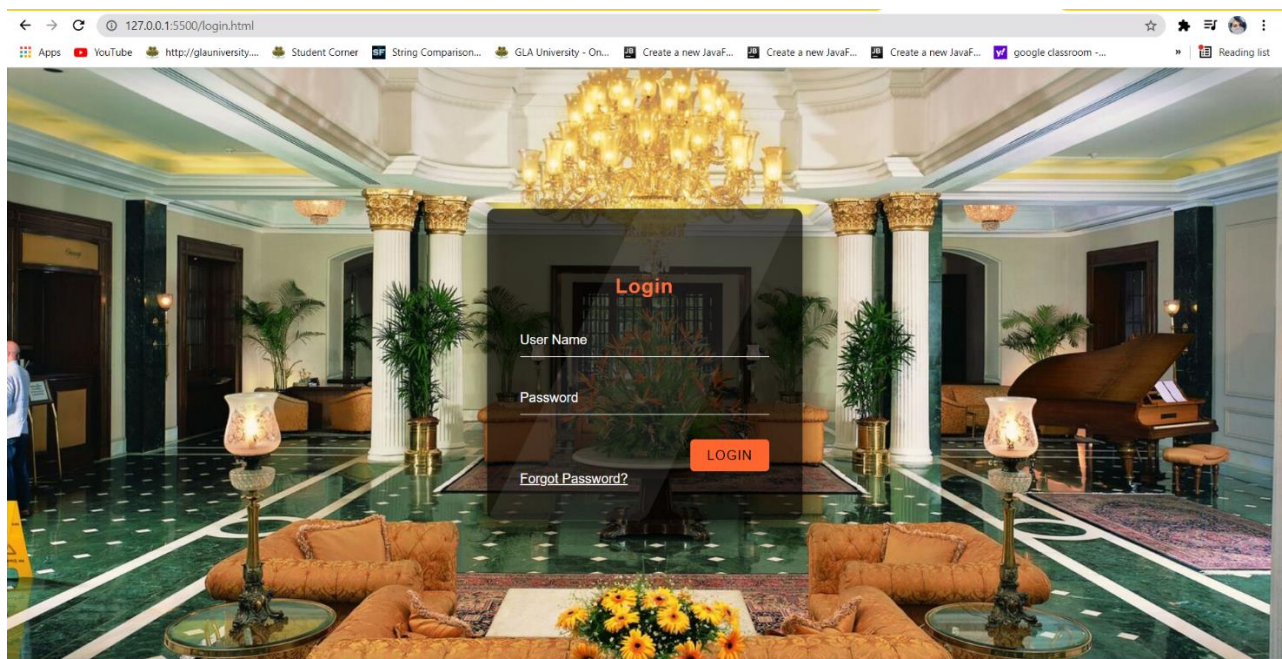
1.Home Page



2. Reception



3. Login Page



4. Contact us



5. Book now page

The screenshot shows a web browser window with the address bar displaying "127.0.0.1:5500/form.html". The browser's tab bar shows several open tabs, including "Apps", "YouTube", "http://glauniversity...", "Student Corner", "String Comparison...", "GLA University - On...", and three "Create a new JavaF..." tabs. The main content area of the browser displays a web page titled "Resort Booking Form" with a background image of a beach and ocean. The page has a "Home" link in the top right corner and a "Book Now" button. The form itself is located on the right side of the page and contains the following fields and buttons:

- first Name:
- Last Name:
- Address:
- Mobile No:
- Guest No:
- Room Type:
- Submit:
- Reset:


The Windows taskbar at the bottom of the screen shows various application icons, including the Start menu, search, task view, and several open applications like File Explorer, Microsoft Edge, and Visual Studio Code. The system tray on the right shows the date and time as "22:39 09-11-2021".

6. Guest Details

127.0.0.1:5500/guest_details.html

HOME

GUEST DETAILS

AVENUE: GUEST ID			
ROOM NUMBER: <input type="text"/>	SERVICE TYPE: <input type="text"/>		
BLOCK: <input type="text"/>			
GUEST ADHAAR: <input type="text"/>	DATE OF BOOKING: <input type="text"/>	DATE OF EXP. OF BOOKING: <input type="text"/>	RENEWABLE: YES: <input checked="" type="radio"/> NO: <input type="radio"/>

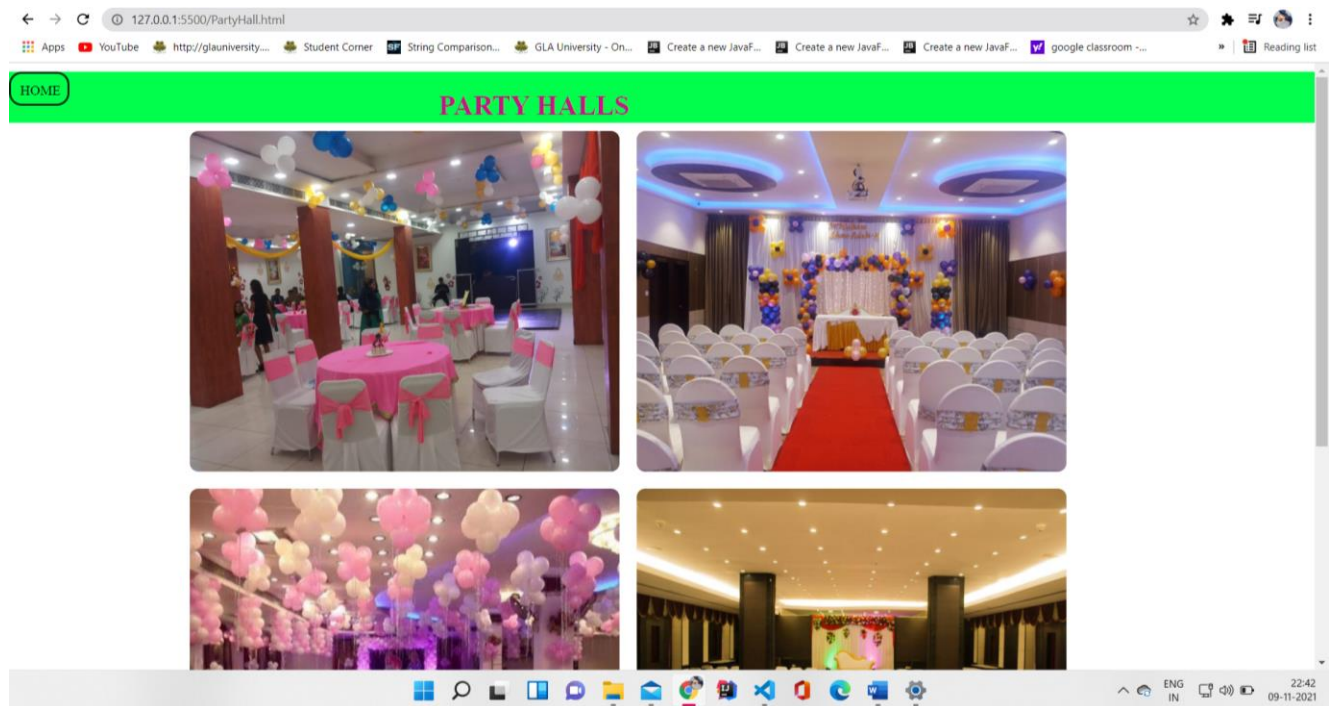
DESIGNED BY:

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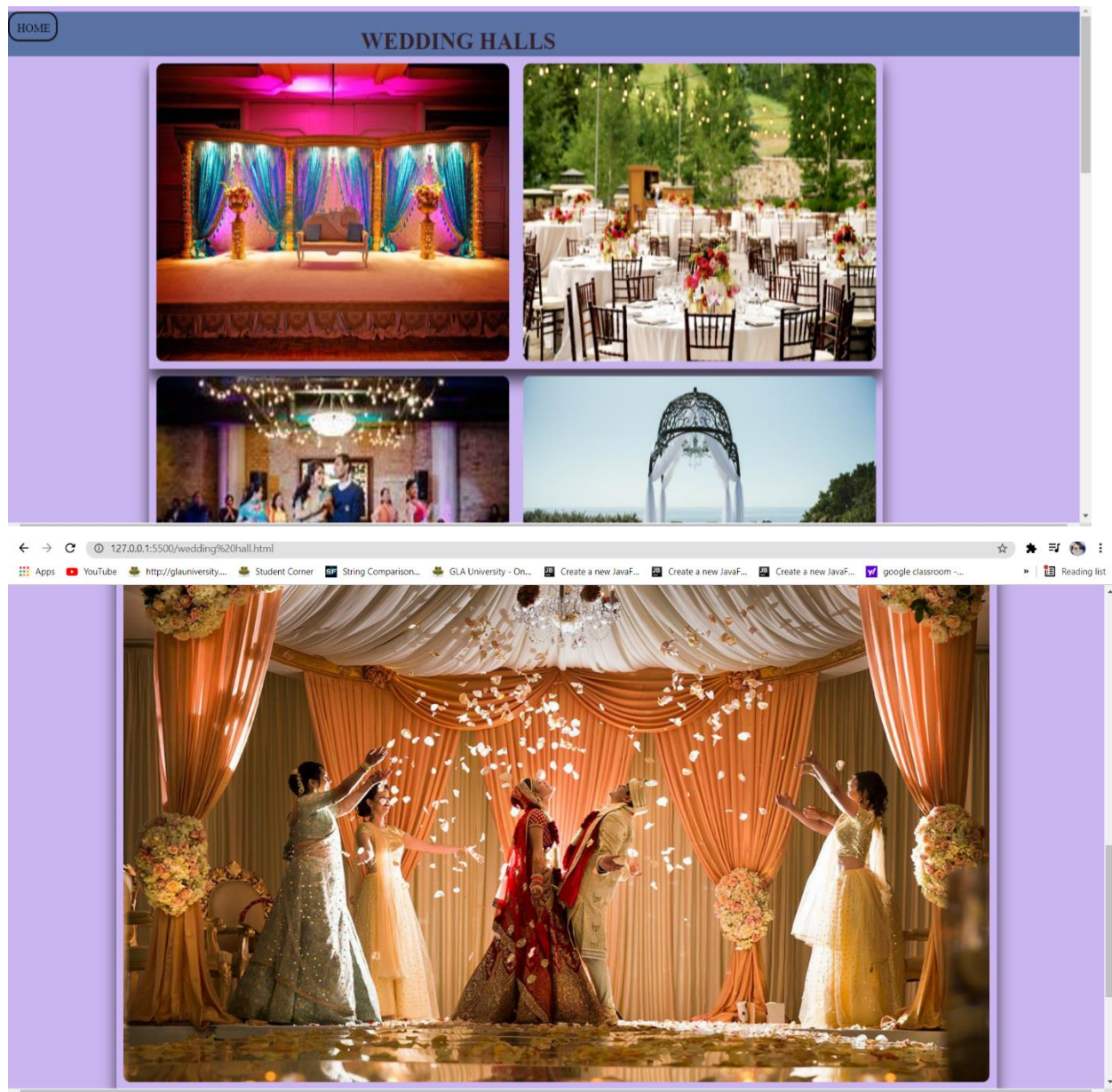
HOTEL MANAGEMENT SYSTEM

22:41 09-11-2021

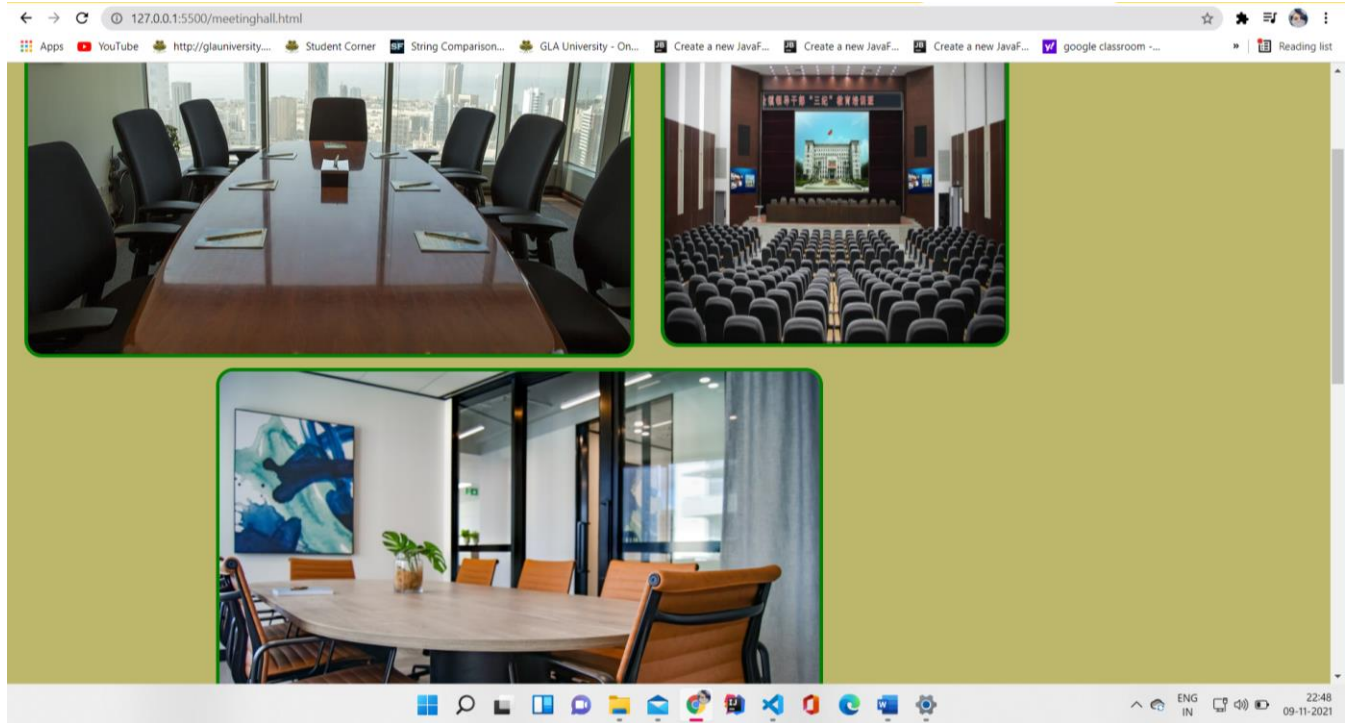
7. Party hall



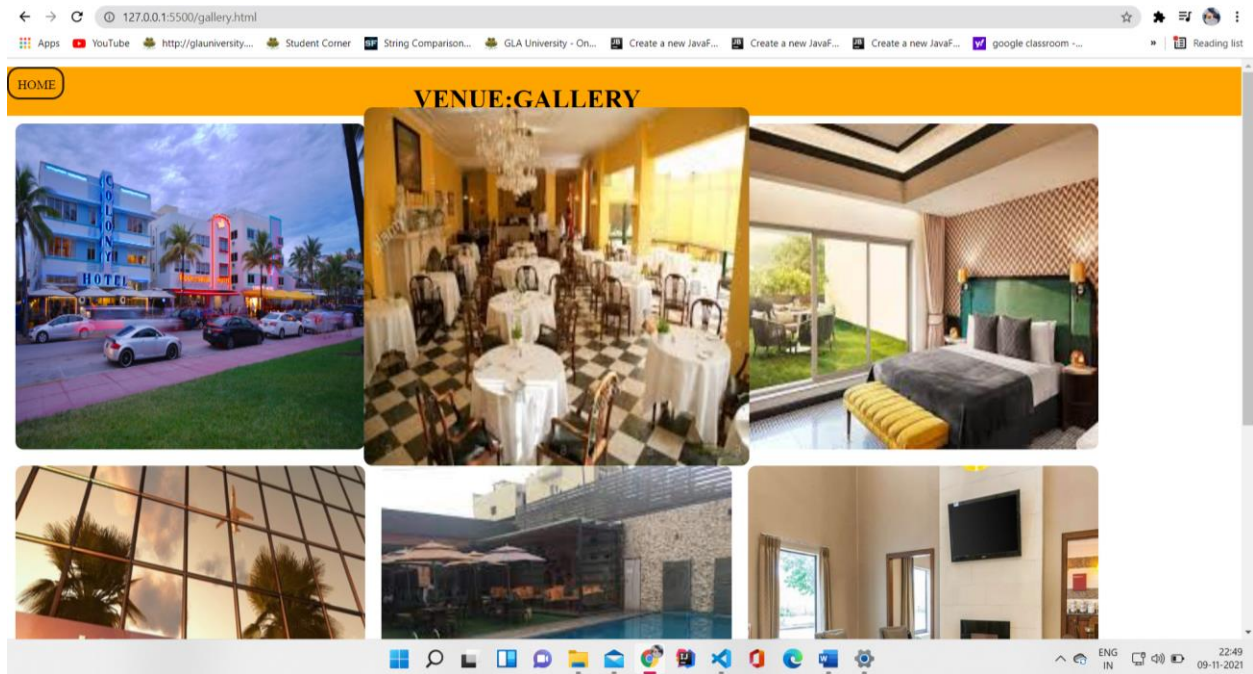
8. Wedding halls



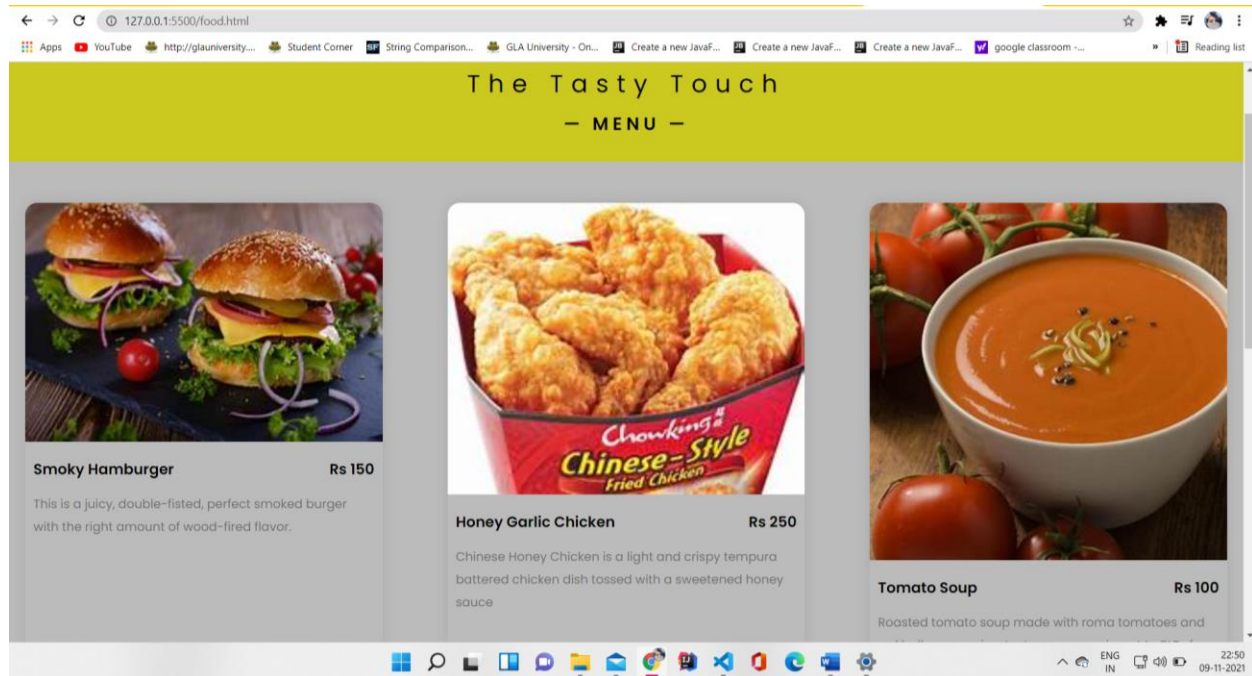
9.Meeting halls



10.Gallery



11. Food menu




12. Room management cell

127.0.0.1:5500/rooms.html

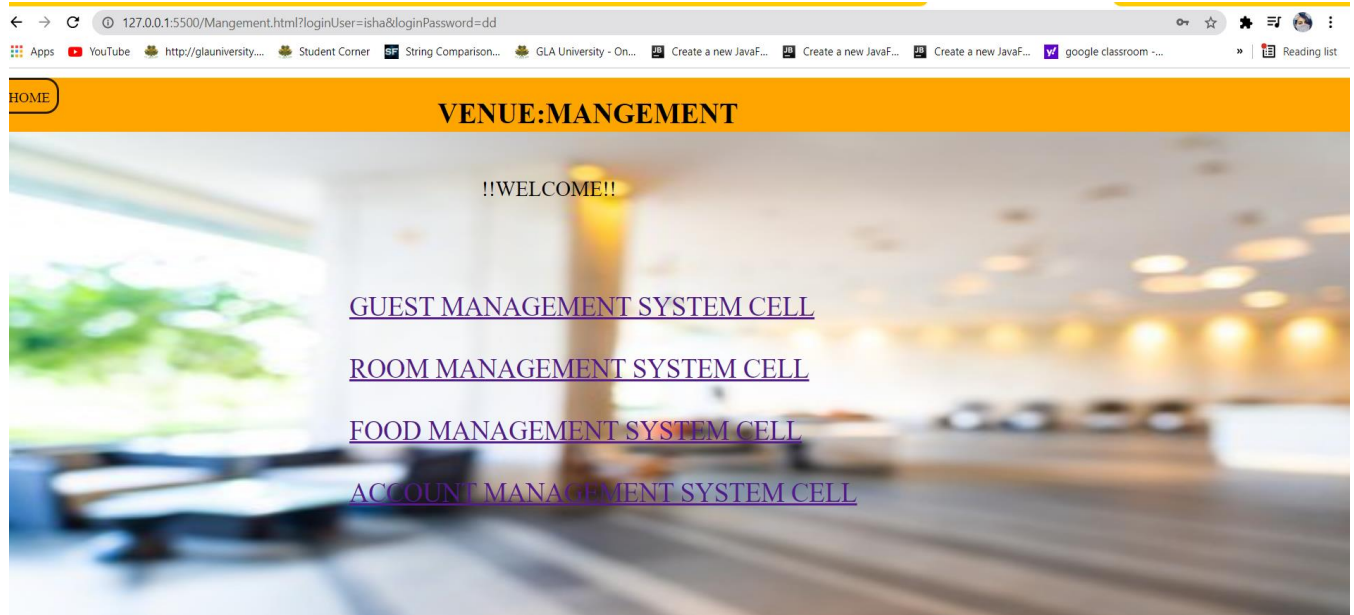
Apps YouTube http://glauuniversity... Student Corner String Comparison... GLA University - On... Create a new JavaF... Create a new JavaF... Create a new JavaF... google classroom -... Reading list

HOME **ROOM MANAGEMENT CELL**

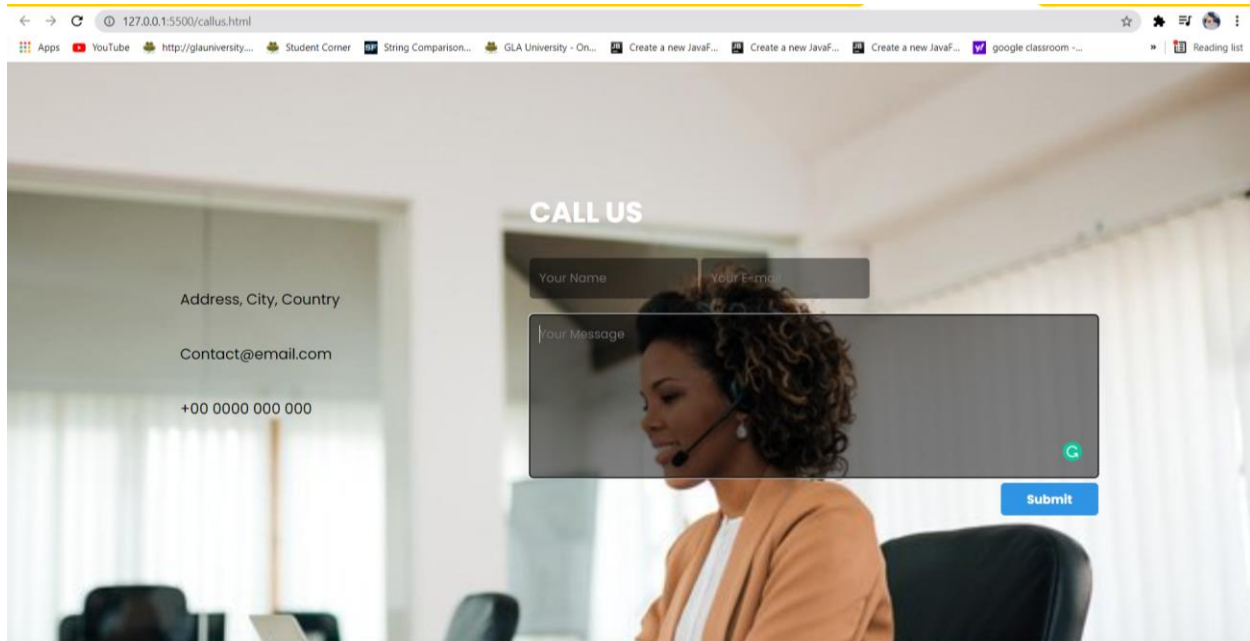
SR.NO	ROOM TYPES	PICTORIAL VIEW	BOOKING STATUS	TOATAL NO OF ROOMS	ROOM ID	AVAILABLE
1	SINGLE BED		10:00 - 12:00 : <input type="checkbox"/> 11:00 - 15:00 : <input type="checkbox"/> 16:00 - 23:00 : <input type="checkbox"/> FULL - DAY : <input type="checkbox"/>	25	SB10	YES: <input type="radio"/> NO: <input type="radio"/>
2	SINGLE BED PREMIUM		10:00 - 12:00 : <input type="checkbox"/> 11:00 - 15:00 : <input type="checkbox"/> 16:00 - 23:00 : <input type="checkbox"/> FULL - DAY : <input type="checkbox"/>	50	SBP10	YES: <input type="radio"/> NO: <input type="radio"/>
3	DOUBLE BED		10:00 - 12:00 : <input type="checkbox"/> 11:00 - 15:00 : <input type="checkbox"/> 16:00 - 23:00 : <input type="checkbox"/> FULL - DAY : <input type="checkbox"/>	75	DB10	YES: <input type="radio"/> NO: <input type="radio"/>
4	DOUBLE BED ATTACHED		10:00 - 12:00 : <input type="checkbox"/> 11:00 - 15:00 : <input type="checkbox"/> 16:00 - 23:00 : <input type="checkbox"/>	100	DBA10	YES: <input type="radio"/> NO: <input type="radio"/>

Windows Taskbar: 22:52 09-11-2021

13.Management



14.Call us



SOFTWARE TESTING

Once source code has been generated, software must be tested to uncover as many errors as possible before delivery. It is very important to work the system successfully and achieve high quality of software. Testing includes designing a series of test cases that have a high likelihood of finding errors by applying software-testing techniques. System testing makes logical assumptions that if all the parts of the system are correct, the goal will be successfully achieved. The system should be checked logically. Validations and cross checks should be there. Avoid duplications of record that cause redundancy of data. In other Words, Testing is the process of evaluating a system or its component(s) with the intent to find whether it satisfies the specified requirements or not. It is executing a system

in order to identify any gaps, errors, or missing requirements in contrary to the actual requirements.

The preliminary goal of implementation is to write source code and internal documentation so that conformance of the code to its specifications can be easily verified, and so that debugging, testing and modifications are eased. This goal can be achieved by making the source code as clear and straightforward as possible. Simplicity, clarity and elegance are the hallmark of good programs, obscurity, cleverness, and complexity are indications of inadequate design and misdirected thinking. Source code clarity is enhanced by structured coding techniques, by good coding style, by, appropriate supporting documents, by good internal comments, and by feature provided in modern programming languages. The implementation team should be provided with a well-defined set of software requirement, an architectural design specification, and a detailed design description. Each team member must understand the objectives of implementation.

4.1 TERMINOLOGY

Error The term error is used in two ways. It refers to the difference between the actual output of software and the correct output, in this interpretation, error is essential a measure of the difference between actual and ideal. Error is also to used to refer to human action that result in software containing a defect or fault.

Fault is a condition that causes to fail in performing its required function. A fault is a basic reason for software malfunction and is synonymous with the commonly used term Bug.

Failure is the inability of a system or component to perform a required function according to its specifications. A software failure occurs if the behavior of the software is different from the specified behavior. Failure may be caused due to functional or performance reasons.

4.2 TYPES OF TESTING

a. Unit Testing The term unit testing comprises the sets of tests performed by an individual programmer prior to integration of the unit into a larger system. A program unit is usually small enough that the programmer who developed it can test it in great detail, and certainly in greater detail than will be possible when the unit is integrated into an evolving software product. In the unit testing the programs are tested separately, independent of each other. Since the check is done at the program level, it is also called program teasing.

b. Module Testing A module and encapsulates related component. So can be tested without other system module.

c. Subsystem Testing Subsystem testing may be independently design and implemented common problems are sub-system interface mistake in this checking we concenton it. There are four categories of tests that a programmer will typically perform on a program unit.

- i Functional test
- ii Performance test
- iii Stress test
- iv Structure test

Functional Test Functional test cases involve exercising the code with Nominal input values for which expected results are known; as well as boundary values (minimum values, maximum values and values on and just outside the functional boundaries) and special values.

Performance Test Performance testing determines the amount of execution time spent in various parts of the unit, program throughput, response time, and device utilization by the program unit. A certain amount of avoid expending too much effort on fine-tuning of a program unit that contributes little to the overall performance of the entire system. Performance testing is most productive at the subsystem and system levels.

Stress Test Stress test are those designed to intentionally break the unit. A great deal can be learned about the strengths and limitations of a program by examining the manner in which a program unit breaks.

Structure Test Structure tests are concerned with exercising the internal logic of a program and traversing particular execution paths. Some authors refer collectively to functional performance and stress testing as “black box” testing. While structure testing is referred to as “white box” or “glass box” testing. The major activities in structural testing are deciding which path to exercise, deriving test data to exercise those paths, determining the test coverage criterion to be used, executing the test, and measuring the test coverage achieved when the test cases are exercised.

Conclusion

- We have completed our project within time limit with the coordination of our team members under the supervision of our mentor Mr. Pankaj Kapoor.
- Our project repository is available at
<https://github.com/mahakAgrawal12/Full-stack-project-Hotel-Mangement-System->
- Our project live website link is
<https://mahakagrawal12.github.io/Full-stack-project-Hotel-Mangement-System-/>

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