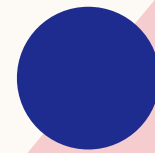# HOTEL MANAGEMENT SYSTEM

TEAM MEMBERS

K. ABHIRAM (RA2011030010218)

S. PRANAV (RA2011030010212)

Y. SREE SANTHOSH (RA2011030010214)

ABSTRACT

The main objective of this project is to make a web based application which will make the management system run smoothly with proper database system. The project allows the hotel employee to have interactive GUI and can even manage room's services and booking in a systematic manner. As the hotel employees are a very busy people and does not have time to plan and manage everything on paper. Now he/she has the power to do it easily with flexible time from this project. The project will allow the hotel management to go on smoothly as it will have features such as Check-in, Check-out, restaurant bills and reservations.

PROBLEM STATEMENT

Managing a hotel is a routine task that never ends. The hospitality industry, which depends only on the delivery of services, will definitely conform to the guests' needs in order to leave a positive impression. The basis of the executive's manual treatment has always been a challenging task. The hotel hospitality management must invest a lot of energy in managing and carrying out the daily work in addition to other things while also catering to the smallest of guest requirements and their basic necessities. However, the implementation of the hotel management system has decreased the potential consequences of error and the requirement that the personnel provide a certain service at an arbitrary time.
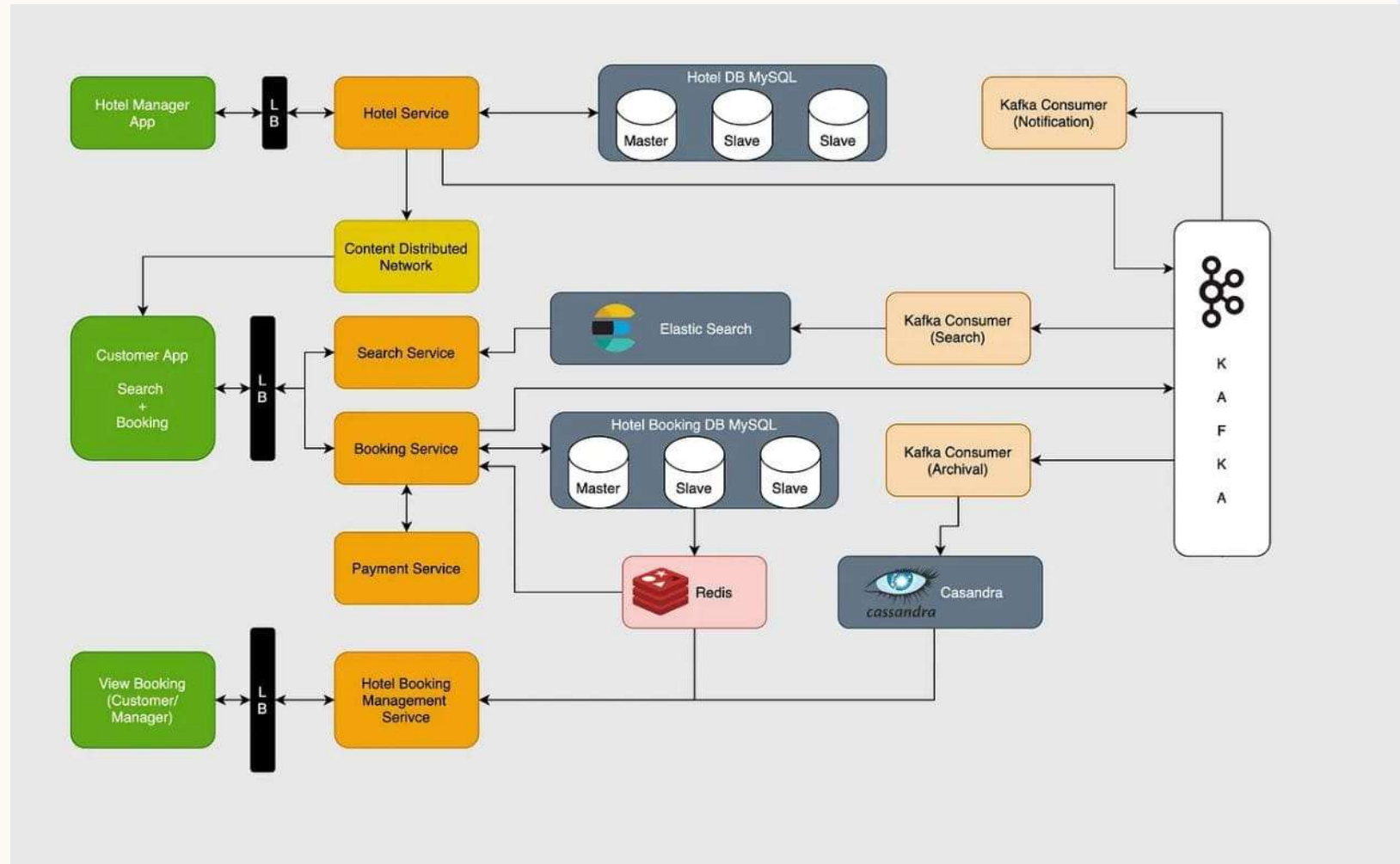
OBJECTIVE

❑ Identify the relevant risks for the project regarding different factors like social, economic and environmental.

❑ Develop a database for storing the guest details and property, employee and other details.

❑ Develop a friendly web application which can be used for retrieving, insertion, modification and deletion of records stored on database.

❑ The Website should be able to books the rooms, produce reports using various queries from the database software.

❑ Analyze different applications similar to the proposed project to compare the technology and ideas and benefit from them.

SCOPE OF THE PROJECT

The point of this project is to fabricate a web application for lodgings around the world however concentrating more on Nepal as this is the new innovation here. The system will deal with all the fundamental services done by the hotel however the online framework like room booking, consumer loyalty subtleties, getting ready report and some more. The system won't be huge however if necessary in future more exertion and work should be possible to cause it to develop regarding usefulness and usability.
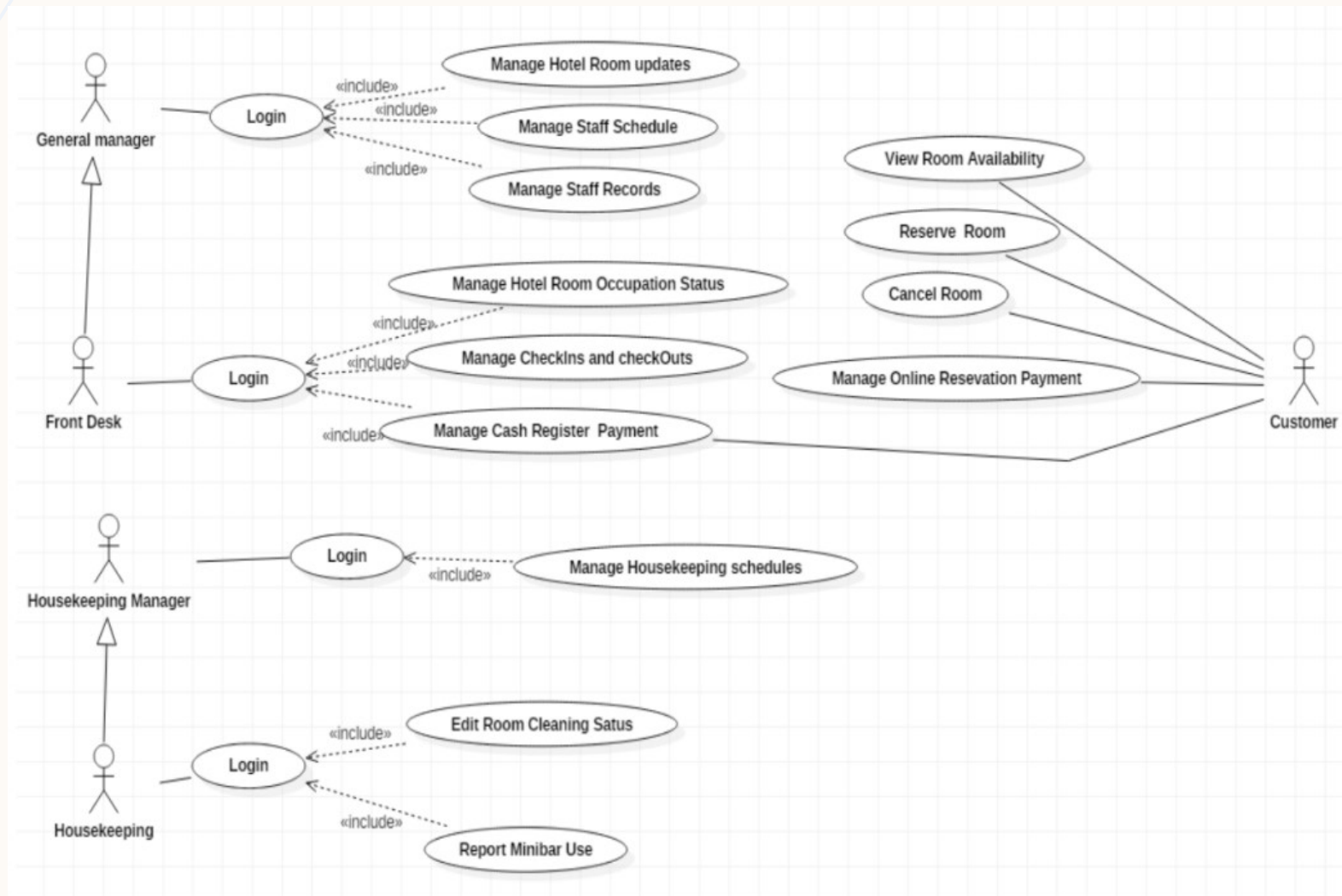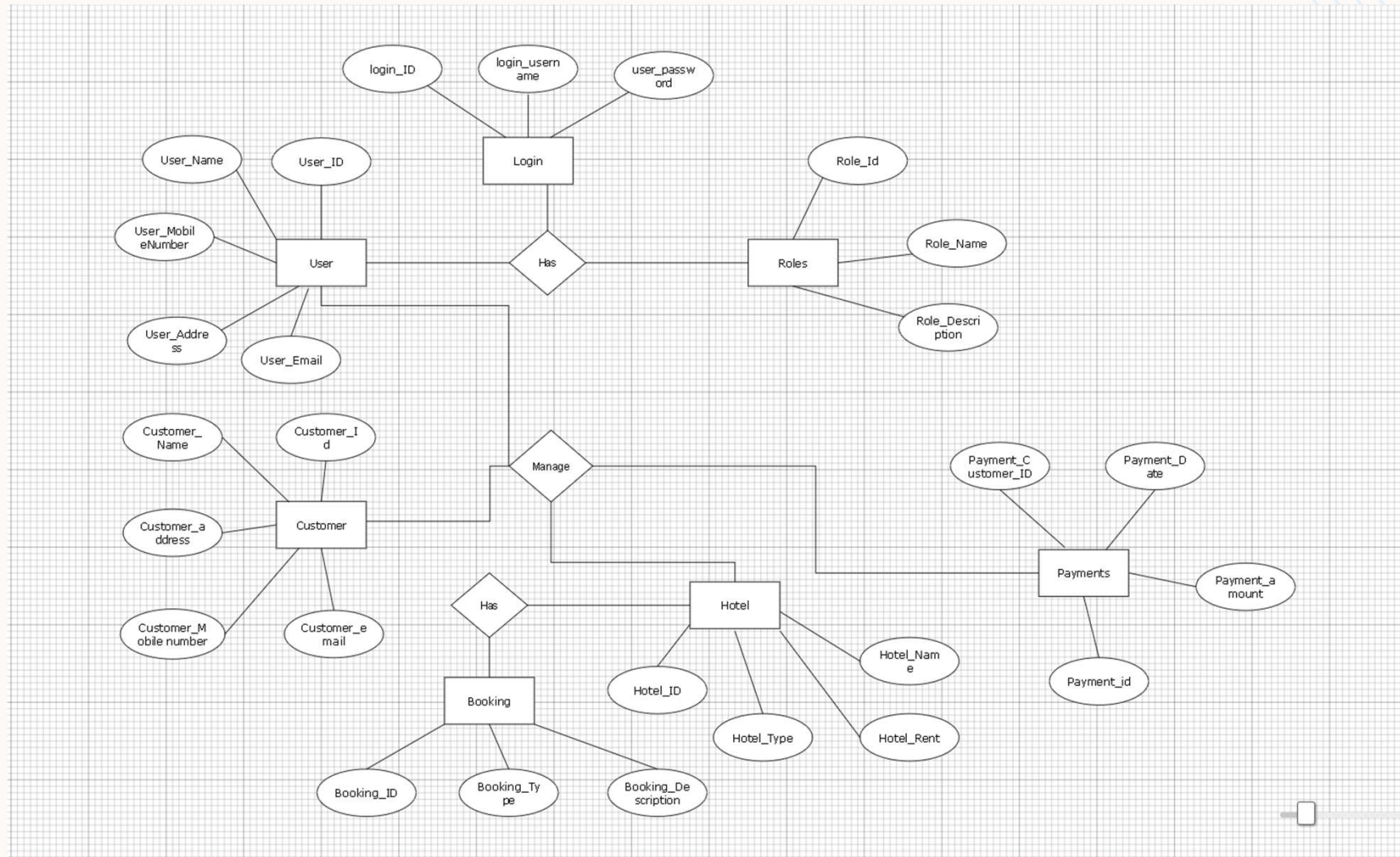
ARCHITECTURE DIAGRAM

USECASE DIAGRAM

FRONT END (UI)DESIGN AND SOFTWARE USED

HTML

In essence, HTML is used for creating the primary content of a webpage, giving it structure. You start by writing words, then apply tags or elements to these words. The web browser then reads this and can then understand the heading of a page, any paragraphs, and where the page starts and finishes, thus filling your web page with content. HTML is supported by every single browser and is established on pretty much every webpage in existence. You don't need any licenses, you don't need to pay for it, and it can be pretty easy to learn and code. If we can compare a webpage to the human body, then HTML is the bones of the body.
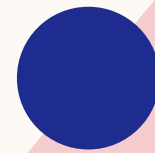
CSS

If HTML is the bones of the body, then CSS is the skin that covers it. It's used for background colour, styling, layout, borders, shadowing – all the essential design bits and bobs that make a webpage look slick and smart. CSS enables you to distinguish between presentation and content by modifying the design and display of HTML elements. Presentation and ease of use are a couple of the main things that CSS has bought to web design by translating the way content looks on a webpage and what else goes on it to complement that content. While frequently used in conjunction with HTML, it is actually independent of it, and can be used with any XML-based markup language.

BACK END (DATABASE) DESIGN, SOFTWARE USED

1. Database:

At the point when I chose to utilize PHP as my essential IDE, I considered whereupon database can be utilized with PHP to give it all the more simple and productive touch. From my Research and point by point investigation of the themes I currently realize that Database MYSQL is an imaginative, incredible and instinctive numerous database the executive's apparatus Browse objects, Design tables, Edit columns, Export information and Run questions with a reliable interface. PHP and MYSQL are especially utilized for overseeing database and web applications.

2. MY SQL:

MySQL is described as a free, quick, solid open source social database. It lacks some refinement and offices, however it has a functioning advancement group and, as it goes from discharge to discharge, more abilities are included. At specific occasions there will be an exchange off among speed and capacities, and the MySQL group expect to keep their database motor quick and solid MySQL Advantage is a suite of four open-source programming bundles demonstrated, mainstream, and well-upheld ones–that work together to run intelligent, unique Internet locales. Free-programming ventures that require a full-highlighted database the board framework frequently use MySQL and the arrangement for FYP is to make it as costless as could reasonably be expected. MySQL is additionally utilized in some prominent, huge scale World Wide Web items including, Google and Facebook, Wikipedia its prominence for use with web applications is intently attached to the notoriety of PHP, which is regularly joined with MySQL

3. PHP:

PHP is an open source server-side scripting language that is fundamentally the same as in sentence structure to C language. From this it tends to be inferred three of the essential favourable circumstances of PHP. Right off the bat, it is a cross stage innovation and subsequently PHP applications can be entirely versatile – depending, obviously, upon any extra segments they are worked to join, for example, seller explicit databases and so on. This conveyability causes an extra advantage by righteousness of the way that most Web facilitating suppliers support PHP, making it genuinely simple to change has if essential. Furthermore, in light of the fact that PHP looks to some extent like C programming languages, it is effectively gotten by designers acquainted with this sentence structure – one that is shared by Java, JavaScript and Perl, among others. Thirdly, being open source, PHP is always advancing and, all the more significantly, bug fixes are in effect normally actualized deeply libraries, which are uninhibitedly accessible.

TYPE OF CONNECTIVITY USED FOR DATABASE ACCESS

MySQLi is an API used as a connector function to link the backend of the PHP app to the MySQL database. It works just like the previous version, but it is safer and faster, and provides a better set of functions and extensions. MySQLi was introduced with PHP 5.0.0 and the drivers were installed in 5.3.0. The API was designed to support MySQL from version 4.1.13 to newer ones. The PHP code consists of a core, with optional extensions to the core functionality. PHP's MySQL-related extensions, such as the MySQLi extension, and the MySQL extension, are implemented using the PHP extension framework. An extension typically exposes an API to the PHP developer, to allow its facilities to be used programmatically. However, some extensions which use the PHP extension framework do not expose an API to the PHP developer. The PDO MySQL driver extension, for example, does not expose an API to the PHP developer, but provides an interface to the PDO layer above it. MySQLi is an improved version of the older PHP MySQL driver, offering various benefits.

LIST OF MODULES AND FUNCTIONALITIES IN EACH OF THE MODULES

Owner Profile:

In the Owner profile, he has full access to the system. The owner can view all the details in a graphical way and he has the authority to change the Cost of Room, Room Availability, Service Details, and much more. He can also check the details of the receptionist and staff member currently working at that Hotel. He will get the notification of all the changes made by the Manager in the system. He will also have special permission to revert those changes if needed. He can also check the transactions made through the day and thought the month and an algorithm will check the progress the Hotel is making.

Manager Profile:

Manager profile can have partial access to the System. The manager can view the availability and can change the cost of the room and other service details. He will also have a special interface where he can manage the staff of the hotel. He can add new people and he can also remove anyone from the system. And at the same time Owner will receive the notification of these changes.

Customer Profile:

In the Customer profile, people can check the availability of rooms and they can also book a room according to their budget and need. Customer profile contains their name, Contact details, address, and other necessary details, etc. They need to sign-up for booking the hotel, which will make them as well as the manager of the hotel easily interact with each other.

Staff Profile:

In the staff profile, there will be complete details of each staff of the hotel like their personal details and their post at the hotel. They can easily give their attendance to the receptionist and that attendance details will be visible in Realtime to Manager.

Booking:

The customer can easily search their Room from the various option available. This all will be so user-friendly so that Customer will not find any trouble in the booking room. Once the room is searched and the customer finds his choice room then this module helps the customer to book the room by following the rules of the Hotel like Check-in and check-out time of the Hotel, Limit of people per room, etc. If everything is done properly, he will be asked to pay partial or complete money. And then he will be forwarded to Payment Gateway. Where he can easily pay Online.

Payment Details:

After filling in the booking details clients need to pay the money using different options available like cash/net banking/ATM card. The payment portal would use a payment gateway to clear payment. Once payment will clear receipt of payment will be generated automatically and this receipt will be sent to the manager and the Receptionist will get the notification to make the room ready before they arrive

REFERENCES

❑ Tourism Has generated 20% of total world employment since 2013. Available: Importance of Tourism Industry Grows | .TR (tourism-review.com).

❑ "Hotel Management and Operations" by Denney G. Rutherford.

❑ Hotel Management website and the Hotel Management Magazine website (www.hotelmanagement.net)

THANK YOU