



**MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION,
MUMBAI**

A MICRO PROJECT PROPOSAL ON

“Zoo Management System”

UNDER THE SUBJECT

**Database Management System
(22319)**

SEMESTER – 3 OF COMPUTER ENGINEERING

ACADEMIC YEAR 2022-2023

UNDER THE GUIDANCE OF

Mr. Dargad A. R.



Government Polytechnic, Miraj

SECOND YEAR DIPLOMA ENGINEERING (I – SCHEME)

BRANCH-COMPUTER

MICRO- PROJECT

“Zoo Management System”

Submitted By

Roll No.	Students Name
21327	Kadam Pavan Balaji
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21329	Kalas Kaushal Kishor

Advisor

Mr. Dargad A. R.



Government Polytechnic, Miraj

MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION

Certificate

This is to certify that Roll no. 21327,21328,21329 are of **Third** Semester of Diploma in **Computer Engineering** of Institute GOVT. POLYTECHNIC MIRAJ (Inst. Code; 0131) has completed the **Micro-Project** satisfactorily in the Subject **Database Management System (22319)** for the academic year **2022-2023** as prescribed in the curriculum by MSBTE Mumbai.

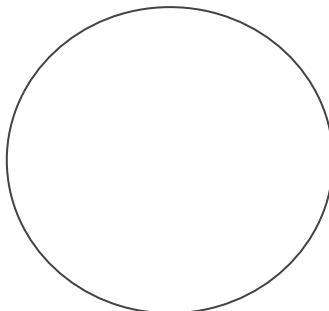
Place: Govt. Polytechnic, Miraj.

Date: 20 / 12 / 2022

Subject Teacher

Head of Department

Principal



ACKNOWLEDGEMENT

We take it is an opportunity to thank all those who have directly and indirectly inspired, directed and assisted us towards successful completion of this project report.

We express our sincere thanks to the Principal, Capt. Dr. N. P. Sonaje & the Head of Department, Prof. Falmari V.R. for having us allowed to submit this report's part of our academics learning.

We express our sincere thanks to Mr. Dargad A. R. Lecturer in Computer Department, Government Polytechnic, Miraj for encouragement throughout the project report and guideline in designing & working out this project. We are also grateful to team of "Zoo Management System" for their highly encouraging and co- operative attitude. We express our sense of gratitude towards our friend and parents for their constant moral support during project report.

Place: Govt. Polytechnic, Miraj

Date: 20 / 12 / 2022

Yours Sincerely: -
Mr. KADAM PAVAN BALAJI.

Mr. KADAM SHIVRAJ ANKUSH.

Mr. KALAS KAUSHAL KISHOR.

Micro-project Proposal

1.0 Title of Micro-project:

Zoo Management System.

2.0 Brief introduction:

- A zoo is a facility in which animals are housed within enclosures, cared for, displayed to the public, and in some cases bred for conservation purposes. The term zoological garden refers to zoology, the study of animals.
- Managing a zoo requires balancing the provision of excellent animal management and care with an optimal visitor experience and quality customer service. In addition to standard business management practices, zoos also need to consider the extra element of collection planning.
- The Zoo Management System is a web-based technology that manages people, animals, and details and provides tickets to those who visit the Zoo with their families. This Web application provide a way to effectively control and track the records of people who access your web application, Zoo.

3.0 Aim of the project:

This Micro-Project aims at

1. Develop skills in students to create, develop and modify, manage and extract information from a database.
2. Database system can be used as a backend for developing database applications.

4.0 Course outcomes:

1. Create and Manage database using SQL command.
2. Create ER-Diagrams.
3. Perform Normalization of the ER-Diagram.

5.0 Proposed methodology:

1. We will decide the topic of the micro-project.
2. We will collect the information about the micro project.
3. We will collect the points related to our micro-project.
4. We will take the guidance of our subject teacher.
5. We will make report of our micro-project.

6.0 Action plan:

Sr.No.	Details of Activity	Planned start date	Planned finished date
1.	Selection of topic	06-09-2022	13-09-2022
2.	Making of proposal	20-09-2022	27-09-2022
3.	Literature review	27-09-2022	08-11-2022
4.	Collection of information	08-11-2022	15-11-2022
5.	Making final report	15-11-2022	29-11-2022
6.	Checking of micro-project	06-12-2022	13-12-2022

7.0 Resources Required:

Sr. No.	Name of Resource	Specification
1	Computer System	Processor(i3) RAM- 8GB Monitor: Standard LED Monitor Input Devices: Keyboard
2	Operating System	Windows 11 operating system.
3	Coding Language for Website Development	HTML, CSS, PHP
4	Database	MYSQL

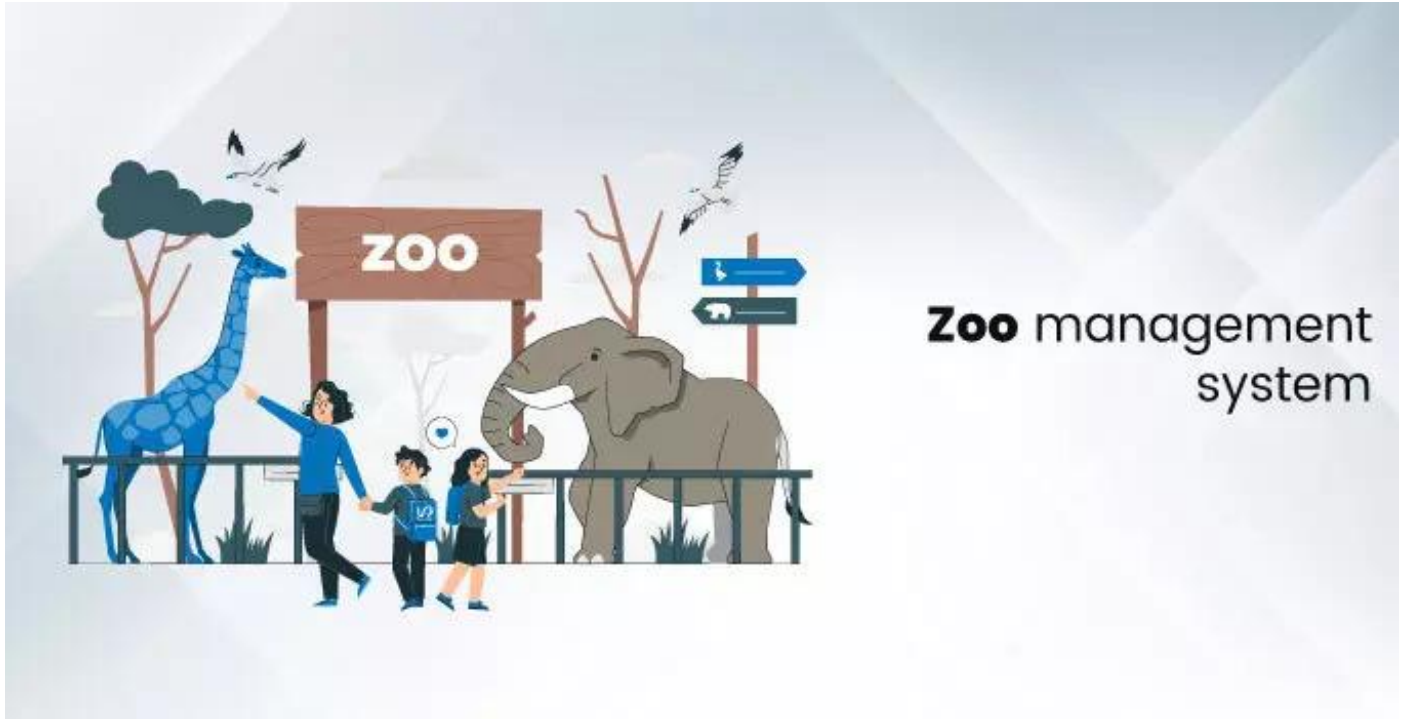
8.0 List of team members:

Roll No.	Students Name
21327	Kadam Pavan Balaji
21328	Kadam Shivraj Ankush
21329	Kalas Kaushal Kishor

Micro-Project Report

Zoo Management System

1.0 Rationale:



- **Introduction:**

India is home to vibrant animal diversity, and although care is manually recorded, the Zoo has initially been set up to entertain people. Gradually, they have played an essential role in nature maintenance. The goal of the Zoo is conservation. It was easy because of the research done to computerize the management, maintenance and ticketing of the wildlife. Therefore, a database system called the zoo management system “ZMS” was developed. This is a web-based technology to manage.

We provide tickets for people, animal details, and those who accompany a visit to the Zoo. Their family. This web application provides a way to control effectively, record, and track zoo visitors. “The zoo management system effectively manages and processes all the zoo software functions; administration can store the ticket data of passengers visiting the Zoo. The System also keeps the ticket price.

The administrator enters the ticket details. Print the number of adults and children, and the ticket and give it to that person. “The main advantage of this System is to protect the environment. Reduce the environment and the time required. This project uses PHP and MYSQL databases, and it has a module that is admin. All possible features such as validation, validation, security, etc., are considered.

- **Abstract:**

We are going to do a zoo management system project here. It's application software that can get information about animals. I love animals here, and humans look for strange animals and get complete information with an ID. The Zoo Management System is a web-based technology that manages people, animals, and details and provides tickets to those who visit the Zoo with their families. This Web application provide a way to effectively control and track the records of people who access your web application, Zoo.

“The Zoo Management System adequately manages and processes all the works of the Zoo. The software system can store zoo visitor ticket data, reducing response time to queries from different users. This is A project based on the PHP language with an MYSQL database that manages people. We will provide tickets to those who go to the Zoo with their families. All possible features are considered, including validation, validation, security, and ease of use.

2.0 Aim of the project:

This Micro-Project aims at

1. Develop skills in students to create, develop and modify, manage and extract information from a database.
2. Database system can be used as a backend for developing database applications.

3.0 Course outcomes achieved:

1. We have created the ER diagram for our project.
2. We have normalized the database on given data.
3. We created and managed Database using SQL command.

4.0 Literature Review:

Database System Concepts by Henry F. Korth S. Sudarshan.

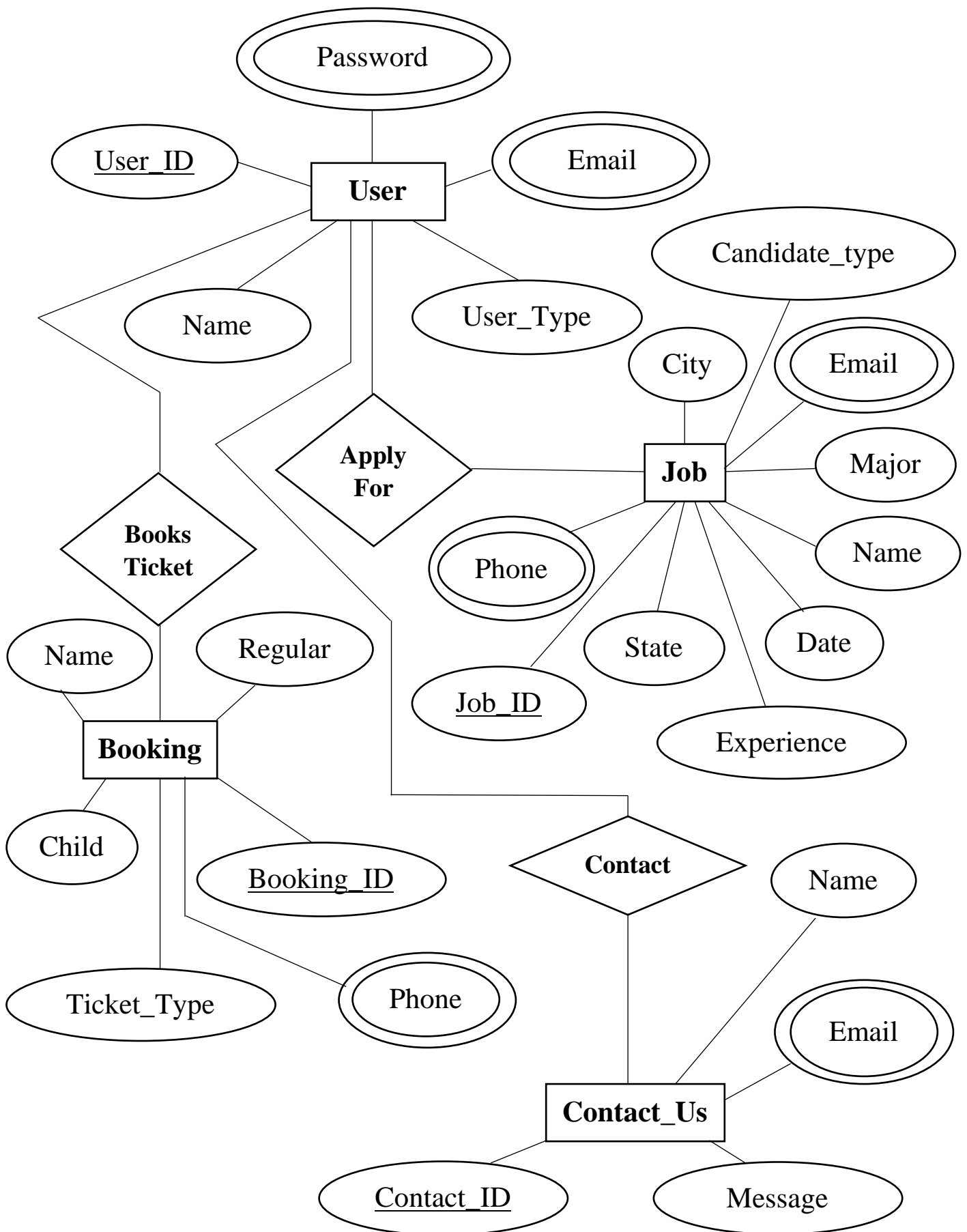
5.0 Actual Methodology Followed:

1. Creation of ER-Diagram.
2. Performing Normalization.
3. Creation of front-end Website for Zoo Management using CSS, HTML and PHP.
4. Creating database in MySQL Database.
5. Linking the Webpages and MySQL Database using PHP.
6. Store information in Database using Zoo Website.
7. Run the various SQL commands on MySQL Database such as JOIN, VIEW, Arithmetic, Comparison, Like, Logical, Between operator, Aggregate Functions.

6.0

ER-Diagram:

ER-Diagram for Zoo Management System



The ER model is a popular high-level conceptual data model. This model and its variations are widely used in the conceptual design of database applications, and many database design tools use that concept.

The database corresponding to the ER diagram can be represented by a collection of tables in the relational System. The mapping of the ER diagram to the entity is as follows:

- Attributes
- Relationship

Entity Name	Type of Key	Attributes
User	Primary Key	User_ID
	Candidate Key	Email, Name, Password, User_Type
Job	Primary Key	Job_ID
	Candidate Key	Email, Name, Phone Date, State, City, Experience, Major
Booking	Primary Key	Booking_ID
	Candidate key	Name, Phone, Ticket_Type, Regular, Child
Contact_Us	Primary Key	Contact_ID
	Candidate key	Name, Email, Message

7.0 Normalization:

1. First Normal Form (1NF):

A relation is in 1NF if it contains an atomic value.

Entity Name	Type of Key	Attributes
User	Primary Key	User_ID
	Candidate Key	Email, Password, User_Type Name
Job	Primary Key	Job_ID
	Candidate Key	Email, Name, Phone Date
	Attributes	State, City, Experience, Major
Booking	Primary Key	Booking_ID
	Candidate key	Name, Phone, Ticket_Type
	Attributes	Regular, Child
Contact_Us	Primary Key	Contact_ID
	Candidate key	Name, Email, Message

2. Second Normal Form (2NF):

A relation will be in 2NF if it is in 1NF and all non-key attributes are fully functional dependent on the primary key.

Table 1: (User)

User_ID	Phone	Email	Password
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Table 2: (Job)

Job_ID	Phone	Email	Password
Name	State	City	Experience
Major	Date		

Table 3: (Booking)

Booking_ID	Phone	Name	Ticket_Type
Regular	Child		

Table 4: (Contact_us)

Contact_ID	Name	Email	Message
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3. Third Normal Form (3NF):

A relation will be in 3NF if it is in 2NF and no transition dependency exists.

Table 1: (User)

User_ID	Email	Password
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Table 2: (Job)

Job_ID	Email	Password
Phone		

Table 3: (Booking)

Booking_ID	Phone
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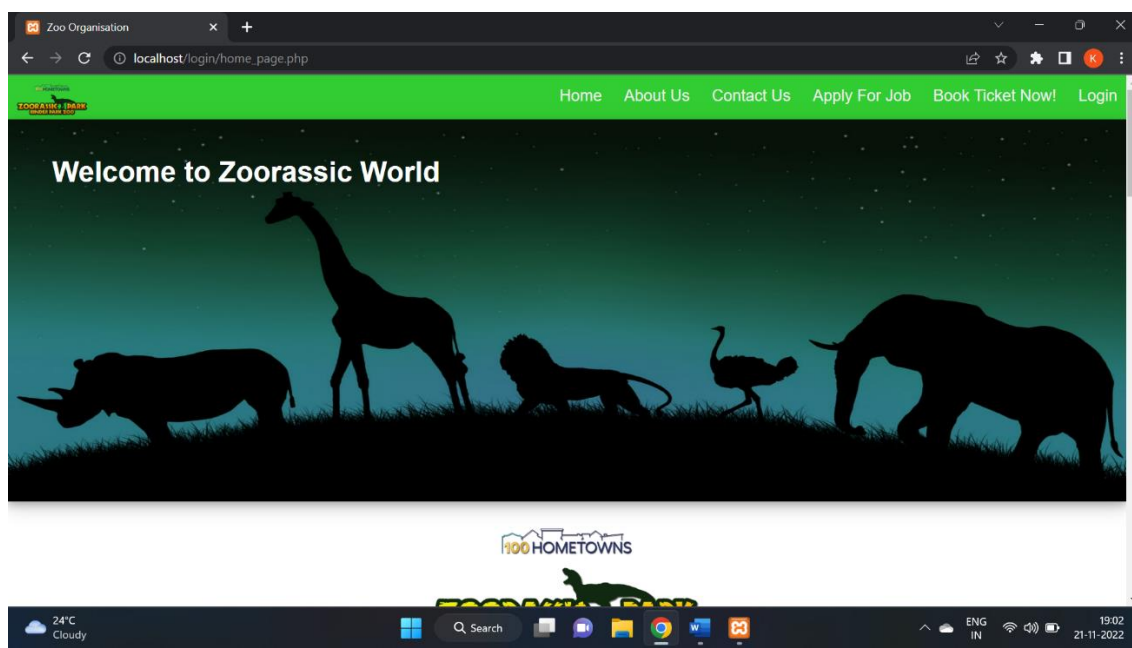
Table 4: (Contact_Us)

Contact_ID	Email
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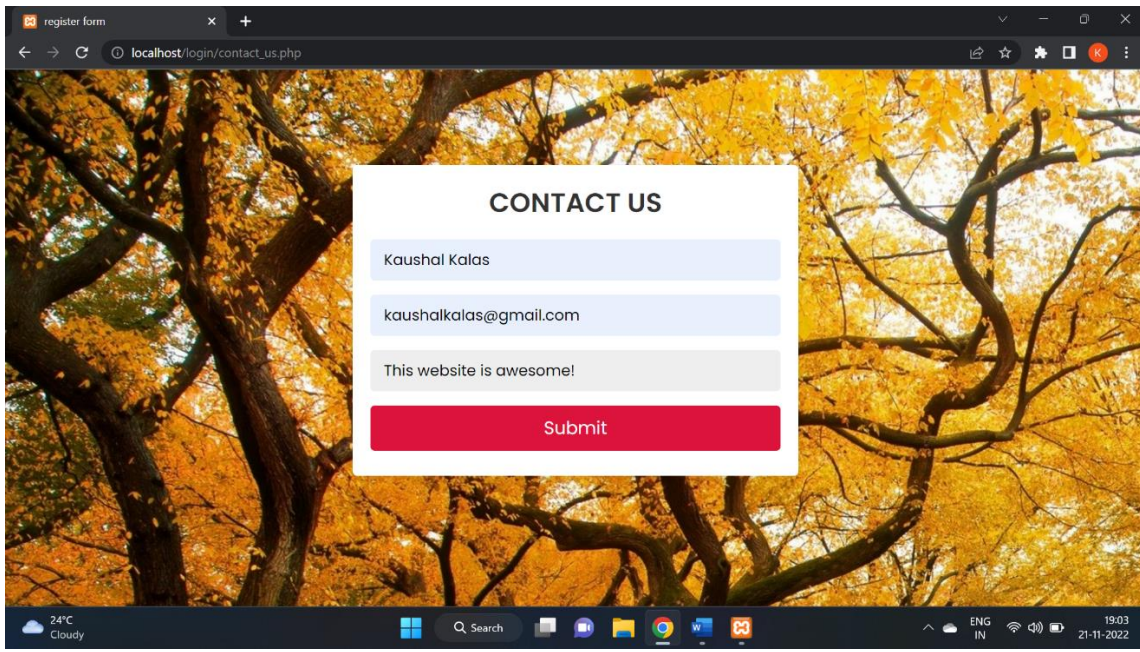
8.0 Resources Used:

Sr.No.	Name of Resource	Specification
1	Computer System	Processor(i3i5) RAM- 8GB Monitor: Standard LED Monitor Input Devices: Keyboard
2	Operating System	Windows 11
3	Coding Language for Website Development	HTML, CSS, PHP
4	Database	MYSQL

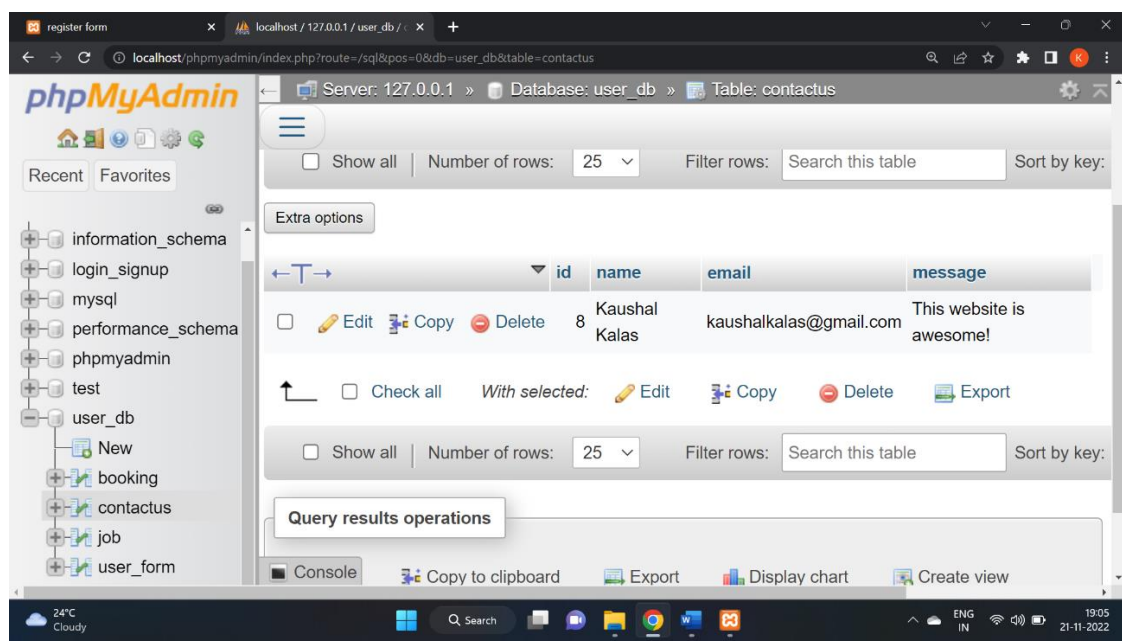
9.0 Project Output:



Home page



Contact Us Page



The data of contact us page is been stored in the database in phpMyAdmin

10.0 Skills Developed/Learning out of this Micro-project:

In this project we have learned how to use of various types of keywords. In this project we learned how to create tables and insert records and display it. We understood the role of DBMS in our life.

11.0 Applications of this Micro-Project:

The implementation of the System depends on the time spent by the visitors or the zoo administration on doing certain things like ticket booking etc. This System allows zoo staff to track and view customers registered and booked items.

This project helped researchers partially achieve an honours degree in computer science and information technology. This project helped researchers acquire system development and research skills, and this project also contributed to future research in the same direction. This project has significantly reduced the delay in Zoo's booking process, where customers waste time booking on-premises.

It provides search options based on various factors, like location search, online passes, events announcements, appointments etc.

- The Zoo management system also manages to book details online for visiting.
- Details, reservation details, and any other events.
- Track all information related to zoo keepers, appointments, visitors, etc.
- Manage security details.
- Display special events information, visitors' information and description
- Administration to improve the efficiency of the zoo management system.
- Handles conflict information and transaction monitoring.
- Manage animals' habitat information
- Improved record editing, additions and updates to ensure proper resource management of the zoo office management system.
- Manage test information
- Integration of records for all appointments.

12.0 Area of future Development:

After implementing the Zoo Management System project and investigating and analysing all existing or required features of the System, the next task is to carry out a feasibility study. All projects can be run with unlimited resources and infinite time, and the feasibility study involves considering all possible ways to provide a solution to a given problem. The proposed solution should meet all user requirements and be flexible enough to adapt to future changes based on future needs quickly.

13.0 Conclusion:

This zoo management system project focuses primarily on tracking visitors, animals, etc. More specifically, this System helps track visitor, sponsor, and animal records by category. The System also displays all available personnel requirements, and it is also possible to reserve tickets for visitors. This project includes a client-side with an admin panel, staff panel, sponsorship panel, and visitor panel.

In this web application overview, visitors need to register to use the service. Visitors registered here can view upcoming events, book, and provide feedback. For sponsored accounts, they can sponsor animals and post letters of recommendation. Previously, each sponsor had to provide detailed information such as annual revenue. In other words, all of this visitor and sponsorship activity is on the customer side.