



Shaheed Zulfikar Ali Bhutto Institute of Science & Technology

COMPUTER SCIENCE DEPARTMENT

Total Marks: 07

Obtained Marks: _____

DATABASE SYSTEM

Project Proposal of Eco Tourism Management Database

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1. Introduction: The "Eco Tourism Management Database" project aims to design, develop, and implement a robust and user-friendly database system for managing ecotourism operations. Ecotourism has gained increasing popularity as a sustainable form of tourism that emphasizes conservation and community involvement. This project is intended to streamline and enhance the management of ecotourism activities, visitor experiences, conservation efforts, and related administrative tasks.

2. Goals: The primary goals of the project are as follows:

- ❖ To create a centralized database system to store and manage data related to visitors, reservations, ecotourism locations, guides, equipment rentals, conservation projects, and feedback.
- ❖ To improve the efficiency of ecotourism operations, including reservations, equipment rentals, and activity scheduling.
- ❖ To facilitate data-driven decision-making for conservation projects and visitor experience enhancements.
- ❖ To provide a user-friendly interface for staff to access and interact with the database.
- ❖ To ensure data security and integrity, as well as implement data validation and access control mechanisms.

3. Purpose: The purpose of the "Eco Tourism Management Database" is to:

- ❖ Streamline and automate various ecotourism management processes.
- ❖ Enhance the visitor experience by offering personalized services and streamlined bookings.
- ❖ Improve the conservation and environmental impact monitoring.
- ❖ Provide a centralized repository for data analysis, reporting, and future planning.

4. Project Scope: The scope of this project includes:

- ❖ Designing and implementing a relational database with tables for visitors, reservations, ecotourism locations, guides, equipment rentals, conservation projects, feedback, and more.
- ❖ Defining relationships between tables to capture the complex interactions within the ecotourism ecosystem.
- ❖ Developing a user-friendly interface for data entry and reporting.
- ❖ Implementing security measures to protect data and control access.
- ❖ Ensuring data validation and constraints are in place.
- ❖ Testing the system for functionality and usability.

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- ❖ Providing training to staff members on how to use the system.

5.OUTPUTS:

Create Table:

Result Grid	Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:	Result Grid
VisitorInfoID	Firstname	LastName	Email	Phone	Address
1	John	Doe	john@example.com	123-456-7890	123 Main Street
2	Jane	Smith	jane@example.com	987-654-3210	456 Elm Street
3	Alex	Johnson	alex@example.com	555-123-4567	789 Oak Avenue
4	Ella	Williams	ella@example.com	222-333-4444	567 Pine Street
5	Adam	Brown	adam@example.com	111-222-3333	890 Cedar Avenue
6	John	Doe	john@example.com	123-456-7890	123 Main Street
7	Jane	Smith	jane@example.com	987-654-3210	456 Elm Street
8	Alex	Johnson	alex@example.com	555-123-4567	789 Oak Avenue
9	Ella	Williams	ella@example.com	222-333-4444	567 Pine Street
10	Adam	Brown	adam@example.com	111-222-3333	890 Cedar Avenue
+	NULL	NULL	NULL	NULL	NULL

VisitorInfo 15 x Apply Revert

Insert Fucntion:

Result Grid	Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:	Result Grid
VisitorInfoID	Firstname	LastName	Email	Phone	Address
1	John	Doe	john@example.com	123-456-7890	123 Main Street
2	Jane	Smith	jane@example.com	987-654-3210	456 Elm Street
3	Alex	Johnson	alex@example.com	555-123-4567	789 Oak Avenue
4	Ella	Williams	ella@example.com	222-333-4444	567 Pine Street
5	Adam	Brown	adam@example.com	111-222-3333	890 Cedar Avenue
6	John	Doe	john@example.com	123-456-7890	123 Main Street
7	Jane	Smith	jane@example.com	987-654-3210	456 Elm Street
8	Alex	Johnson	alex@example.com	555-123-4567	789 Oak Avenue
9	Ella	Williams	ella@example.com	222-333-4444	567 Pine Street
10	Adam	Brown	adam@example.com	111-222-3333	890 Cedar Avenue
+	NULL	NULL	NULL	NULL	NULL

VisitorInfo 15 x Apply Revert

Order BY ASC:

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Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Activity_ID	Activity_Name	Description	Duration	Cost	Difficulty_Level
5	Nature Walk	Learn about local flora and fauna	1 hour	10.00	NULL
2	Bird Watching	Spot local bird species	1.5 hours	15.00	NULL
1	Hiking	Explore scenic trails	2 hours	20.00	NULL
4	Photography Tour	Capture wildlife and landscapes	2.5 hours	25.00	NULL
3	Kayaking	Paddle along the river	3 hours	30.00	NULL
NULL	NULL	NULL	NULL	NULL	NULL

Activities 16 x Apply Revert

ORDER BY DESC:

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

VisitorInfoID	Firstname	LastName	Email	Phone	Address
4	Ella	Williams	ella@example.com	222-333-4444	567 Pine Street
9	Ella	Williams	ella@example.com	222-333-4444	567 Pine Street
2	Jane	Smith	jane@example.com	987-654-3210	456 Elm Street
7	Jane	Smith	jane@example.com	987-654-3210	456 Elm Street
3	Alex	Johnson	alex@example.com	555-123-4567	789 Oak Avenue
8	Alex	Johnson	alex@example.com	555-123-4567	789 Oak Avenue
1	John	Doe	john@example.com	123-456-7890	123 Main Street
6	John	Doe	john@example.com	123-456-7890	123 Main Street
5	Adam	Brown	adam@example.com	111-222-3333	890 Cedar Avenue
10	Adam	Brown	adam@example.com	111-222-3333	890 Cedar Avenue
NULL	NULL	NULL	NULL	NULL	NULL

VisitorInfo 18 x Apply Revert

Where Operator:

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

ReservationID	VisitorInfoID	Date	Number_of_Guests	Payment_Information	Special_Requests
1	1	2023-07-10	3	Credit Card	Vegetarian meals
2	2	2023-08-15	2	PayPal	Room with a view
3	3	2023-09-20	4	Cash	No special requests
4	4	2023-10-05	1	Credit Card	Wheelchair accessible room
5	5	2023-11-12	5	Cash	Early check-in, late check-out
NULL	NULL	NULL	NULL	NULL	NULL

Reservations 19 x Apply Revert

SUM OPERATOR:

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154 • `SELECT SUM(Total_Amount) AS TotalRevenue FROM Invoices;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

TotalRevenue
575.00

Result 20 x Read Only

AND OPERATOR:

160 • `SELECT * FROM Reservations WHERE VisitorInfoID = 1 AND Payment_Information = 'Credit C`

161

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

ReservationID	VisitorInfoID	Date	Number_of_Guests	Payment_Information	Special_Requests
1	1	2023-07-10	3	Credit Card	Vegetarian meals
NULL	NULL	NULL	NULL	NULL	NULL

Reservations 22 x Apply Revert

OR OPERATOR:

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

VisitorInfoID	Firstname	LastName	Email	Phone	Address
1	John	Doe	john@example.com	123-456-7890	123 Main Street
2	Jane	Smith	jane@example.com	987-654-3210	456 Elm Street
6	John	Doe	john@example.com	123-456-7890	123 Main Street
7	Jane	Smith	jane@example.com	987-654-3210	456 Elm Street
NULL	NULL	NULL	NULL	NULL	NULL

VisitorInfo 23 x Apply Revert



6. Conclusion: The "Eco Tourism Management Database" project represents a significant step toward improving the efficiency and sustainability of our ecotourism operations. By implementing this database, we aim to enhance visitor experiences, promote conservation efforts, and streamline administrative tasks. We believe that this project will have a positive impact on our organization and the broader ecotourism community.