Experiment: Tourism Management Application Using PHP

Aim

To develop an online tourism management application using **PHP and MySQL** that displays season-based trip details, travel modes, concession details for passengers, and supports booking and cancelling tickets.

Software & Hardware Requirements

- PHP 7+ / XAMPP or WAMP Server
- MySQL Database
- HTML5, CSS3
- Browser (Chrome/Firefox)
- Code Editor (VS Code / Sublime)
- Minimum 4GB RAM system

Theory

A Tourism Management System is a web-based application that helps users view available trips based on travel seasons and book or cancel tickets. PHP handles server-side processing, while MySQL is used to manage the database.

Key Functionalities

- Season-based trip display
- Travel mode selection (Bus, Train, Flight, etc.)
- Concession details (Senior citizen, Student, Defense, Children)
- Ticket booking
- Ticket cancellation

Database Design

1. trips Table

Field	Type	Description
trip_id	INT (PK)	Unique Trip ID
place	VARCHAR(50)	Destination
season	VARCHAR(20)	Season (Winter/Summer/Monsoon)

Field	Type	Description
mode	VARCHAR(20)	Mode of Travel
price	DECIMAL(10,2)	Base Fare

2. bookings Table

Field	Type	Description
booking_id	INT (PK)	Booking ID
name	VARCHAR(50)	Passenger Name
age	INT	Passenger Age
concession	VARCHAR(50)	Concession Type
trip_id	INT (FK)	Trip ID
status	VARCHAR(10)	booked/cancelled

Create Table Queries

```sql
CREATE TABLE trips (
    trip_id INT PRIMARY KEY,
    place VARCHAR(50),
    season VARCHAR(20),
    mode VARCHAR(20),
    price DECIMAL(10,2)
);

CREATE TABLE bookings (
    booking_id INT PRIMARY KEY AUTO_INCREMENT,
    name VARCHAR(50),
    age INT,
    concession VARCHAR(50),
    trip_id INT,
    status VARCHAR(10),
    FOREIGN KEY (trip_id) REFERENCES trips(trip_id)
);
```

Algorithm

1. Create database and required tables.
2. Build a PHP page to display season-based trips.
3. Create a booking form with passenger details.
4. Apply concession logic during fare calculation.
5. Insert booking details into database.
6. Create a cancellation page to update booking status.
7. Display confirmation messages to the user.

Program

1. Trip Display Page (trips.php)

```php
<?php
$conn = mysqli_connect("localhost", "root", "", "tourism");
$season = $_GET['season'];

$sql = "SELECT * FROM trips WHERE season='$season'";
$result = mysqli_query($conn, $sql);

echo "<h2>Available Trips for $season Season</h2>";

echo "<table border='1'><tr><th>Trip
ID</th><th>Place</th><th>Mode</th><th>Price</th></tr>";
while ($row = mysqli_fetch_assoc($result)) {
    echo "<tr>
            <td>{$row['trip_id']}</td>
            <td>{$row['place']}</td>
            <td>{$row['mode']}</td>
            <td>{$row['price']}</td>
        </tr>";
}
echo "</table>";
?>
```

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2. Booking Form (book.html)

```html
<!DOCTYPE html>
<html>
<head><title>Book Ticket</title></head>
<body>
<h2>Ticket Booking</h2>
<form method="POST" action="book.php">
    Name: <input type="text" name="name"><br><br>
    Age: <input type="number" name="age"><br><br>
    Concession:
    <select name="concession">
        <option>None</option>
        <option>Senior Citizen</option>
        <option>Student</option>
        <option>Children</option>
    </select><br><br>
    Trip ID: <input type="text" name="trip_id"><br><br>
    <input type="submit" value="Book Ticket">
</form>
</body>
</html>
```

3. Booking Script (book.php)

```php
<?php
$conn = mysqli_connect("localhost", "root", "", "tourism");

$name = $_POST['name'];
$age = $_POST['age'];
$concession = $_POST['concession'];
$trip_id = $_POST['trip_id'];

$fareRes = mysqli_query($conn, "SELECT price FROM trips WHERE
trip_id='$trip_id'");
$fare = mysqli_fetch_assoc($fareRes)['price'];

if ($concession == "Senior Citizen") $fare *= 0.7;
else if ($concession == "Student") $fare *= 0.85;
else if ($concession == "Children") $fare *= 0.5;

$sql = "INSERT INTO bookings(name, age, concession, trip_id, status)
        VALUES ('$name', '$age', '$concession', '$trip_id', 'booked')";

if (mysqli_query($conn, $sql)) {
    echo "Ticket Booked Successfully! Final Fare: Rs. $fare";
} else {
    echo "Error: " . mysqli_error($conn);
}
?>
```

4. Cancel Booking (cancel.php)

```php
<?php
$conn = mysqli_connect("localhost", "root", "", "tourism");
$booking_id = $_GET['booking_id'];

$sql = "UPDATE bookings SET status='cancelled' WHERE
booking_id='$booking_id'";

if (mysqli_query($conn, $sql)) {
    echo "Ticket Cancelled Successfully";
} else {
    echo "Error: " . mysqli_error($conn);
}
?>
```

Output

- Displays season-based trip details.
- Shows travel mode and fare.
- Applies concession rules.
- Allows booking and cancellation.
- Stores all data in MySQL database.

Result

The tourism management application using PHP and MySQL was successfully developed. The system manages trips, applies concessions, and supports ticket booking and cancellation based on user requirements.