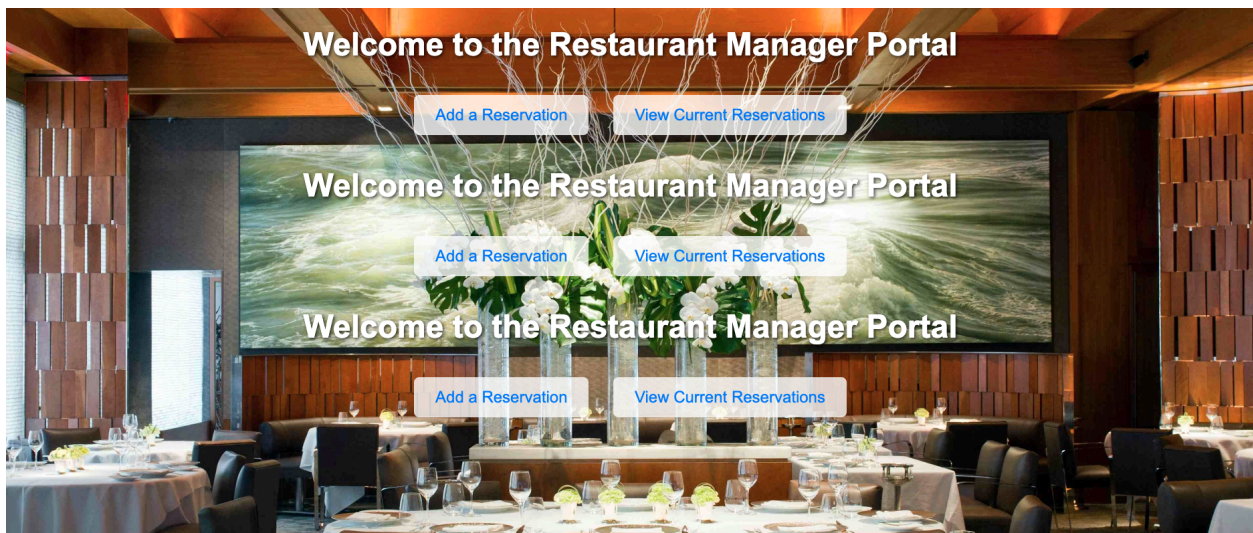Jose Ramirez
CIS 344 - Final Project Report
Professor Peralta

REPORT

1. Overview

The provided code files are used to create a web-platform using PHP and MySQL for Restaurant Managers to manage reservation schedules and dining experiences effectively. The platform uses a SQL script to create and manage the customer and reservation data into a database, and php scripts for managers to manage customers and reservations on the front-end.

The platform allows for new customers to be added directly or during the reservation process. The platform also prevents duplicate customers and reservations from being added twice.

2. SQL Implementation

The SQL script creates the database, tables, and stored procedures to add reservations, special requests, and prevent duplicate entries. The script also establishes the relationships between tables. The SQL script also creates 3 entries per each table to get started.

```sql
/*
CIS 344 — Final Project — Jose Ramirez
MySQL Implementation — Database setup
Table, Relationship, Stored Procedure and Function setup
*/

-- creating database
CREATE DATABASE resturant_reservations;

-- using created database
USE resturant_reservations;

-- creating the 'customers' table
CREATE TABLE customers(
    customerId INT NOT NULL UNIQUE AUTO_INCREMENT,
    customerName VARCHAR(45) NOT NULL,
    contactInfo VARCHAR(200),
    PRIMARY KEY (customerId)
);

-- creating the 'reservations' table
CREATE TABLE reservations(
    reservationId INT NOT NULL UNIQUE AUTO_INCREMENT,
    customerId INT NOT NULL,
    reservationTime DATETIME NOT NULL,
    numberOfGuests INT NOT NULL,
    specialRequests VARCHAR(200),
    PRIMARY KEY (reservationId),
    FOREIGN KEY (customerId) REFERENCES customers(customerId) -- how does foreign key establishment work?
);

-- creating the 'dining preferences' table
CREATE TABLE DiningPreferences(
    preferenceID INT NOT NULL UNIQUE AUTO_INCREMENT,
    customerId INT NOT NULL,
    favoriteTable VARCHAR(45),
    dietaryRestrictions VARCHAR(200),
    PRIMARY KEY (preferenceId),
    FOREIGN KEY (customerId) REFERENCES customers(customerId)
);

-- creating the stored procedure 'findReservations'
DELIMITER // -- statement terminator
CREATE PROCEDURE findReservations(IN custId INT)
BEGIN
    SELECT * FROM reservations WHERE customerId = custId;
END;
//
```

3. PHP Implementation

The PHP scripts on the backend are used to connect the SQL database to the webpage, view and add reservations separately and a home page.

```php
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <meta charset="UTF-8">
5       <meta name="viewport" content="width=device-width, initial-scale=1.0">
6       <title>Restaurant Portal</title>
7       <style>
8           body {
9               margin: 0;
10              padding: 0;
11              font-family: Arial, sans-serif;
12              color: #fff;
13              text-align: center;
14              background: url('https://hips.hearstapps.com/townandcountry/assets/17/01/lebernardin-daniel-krieger.jpg')
15              background-size: cover;
16          }
17
18          h1 {
19              font-size: 3rem;
20              margin-top: 2rem;
21              text-shadow: 2px 2px 5px rgba(0, 0, 0, 0.7);
22          }
23
24          a {
25              display: inline-block;
26              margin: 1rem;
27              padding: 1rem 2rem;
28              font-size: 1.5rem;
29              color: #007bff;
30              background: rgba(255, 255, 255, 0.8);
31              text-decoration: none;
32              border-radius: 8px;
33              transition: background 0.3s, transform 0.2s;
34          }
35
36          a:hover {
37              background: rgba(255, 255, 255, 1);
38              transform: scale(1.05);
39          }
40
41          footer {
42              margin-top: 3rem;
43              padding: 1rem;
44              background: rgba(0, 0, 0, 0.6);
45              color: #ccc;
46              font-size: 0.9rem;
47              position: fixed;
48              width: 100%;
49              bottom: 0;
```