Table Design & Creation

Data Analyst Program – Project 1

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**About This Project**

This project demonstrates a database for a working Italian restaurant by the name ‘Al Dente’.  
The data is Microsoft SQL Server Management Studio based.   
The database has the information for the restaurant clients, menu, reservation system, food orders, and the employees’ general information and working hours.

**Diagram, schematic

Description automatically generatedERD**

**Table Description**

1. Customers – A list of all the customers that the restaurant have details on them, usually include customers that made a reservation in the past.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Column Type** | **Constraint** |
| Customer\_id | INT | PK |
| First\_Name | VARCHAR(25) |  |
| Last\_Name | VARCHAR(25) |  |
| Email | VARCHAR(60) | CHECK(email LIKE '%@%') |
| Birthday | DATE |  |
| Phone\_number | VARCHAR(12) |  |

2. Employees – List of all the restaurant employees.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Column Type** | **Constraint** |
| Employee\_id | INT | PK |
| First\_Name | VARCHAR(25) |  |
| Last\_Name | VARCHAR(25) |  |
| Age | INT |  |
| Gender | VARCHAR(2) | Check F or M |
| Phone\_number | VARCHAR(12) | Unique |
| Join\_date | DATE | Not null |
| End\_date | DATE | Check end\_date>join\_date |
| Role | VARCHAR(50) | Not null |
| Hourly\_Salary | INT | Not null  CHECK Hourly\_Salary between 5 and 250 |

3. Meals – A list of the meals that the restaurant has on the menu.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Column Type** | **Constraint** |
| Meal\_id | INT | PK |
| Meal\_name | VARCHAR(30) | Unique Not null |
| Meal\_menu\_price | INT | Check price smaller then 50  Not null |
| Meal\_cost | INT | Check cost smaller then 50  Not null |

4. Orders- A list of all the food orders customers made while dining in the restaurant.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Column Type** | **Constraint** |
| Order\_id | INT | PK |
| Customer\_id | INT | FK From Customers(Customer\_id) |
| Date | DATETIME | Default GETDATE() Not null |
| Meal\_id | INT | FK From Meals(Meal\_id) |

5. Payment- A List of the payments the customers made in the restaurant.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Column Type** | **Constraint** |
| Pay\_id | INT | PK |
| Customer\_id | INT | FK From Customers(Customer\_id) |
| Pay\_amount | INT | Not null |
| Date | DATETIME | Default GETDATE() Not null |

6. Tables- A list of the tables available in the restaurant.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Column Type** | **Constraint** |
| Table\_id | INT | PK |
| Number\_of\_sits | INT | Not null  Check smaller or equal to 20 |

7. Reservations- A list od the reservation made by people for the restaurant.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Column Type** | **Constraint** |
| Reservation\_id | INT | PK |
| Customer\_id | INT | FK From Customers(Customer\_id) |
| Date\_time | DATETIME | Default GETDATE() Not null |
| Party\_size | INT | Check smaller or equal to 20  Not null |
| Table\_id | INT | FK From Tables(Table\_id)  Not null |

8. Shifts- A list of the shifts and working hour of the restaurant employees.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Column Type** | **Constraint** |
| Employee\_id | INT | FK From Employees(Employee\_id)  Not null |
| Clock\_in | DATETIME | Not null |
| Clock\_out | DATETIME | Not null |

9. Tips- A list of the tips that the restaurant customers left.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Column Type** | **Constraint** |
| Table\_id | INT | FK From Tables(Table\_id) |
| Employee\_id | INT | FK From Employees(Employee\_id) |
| Customer\_id | INT | FK From Customers(Customer\_id) |
| Tip\_amount | INT |  |