The following document provides a detailed description of the tables within the Pizza Terminal database. This database is an artificially developed dataset designed to simulate the management of a pizza delivery service, including orders, customers, deliveries, payments, and more.

**Purpose of the Dataset:**

* This dataset was created for educational purposes to provide students with a realistic example of a database schema and its associated tables."
* The dataset serves as a testbed for evaluating database management systems and querying techniques.
* We created this dataset to serve multiple purposes, including exploratory data analysis (EDA), research, and hands-on practice in the field of data science. It can also be used to understand how relational database management systems (RDBMS) work and to perform various analyses on a simulated dataset.

**Data Generation Process**:

* The data was generated using a Python script that simulated customer orders based on predefined scenarios and probabilities. {open Readme file to check entire process}
* To Develop dataset, we research from various publicly available sources and combined it valuable insights to create a representative dataset for a pizza terminal service.
* A team of domain experts manually curated the dataset to ensure it accurately reflects the operations of a real-world pizza business.

This data set has 17 tables with 5 different datatypes in total.

**Table information:**

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| Table name | What is its purpose? |
| Pizza | Record pizza menu items. |
| Toping | List of Toppings |
| PizzaTopping | Manage toppings for different kinds of pizza. |
| Dipping\_sauce | dipping sauce menu items. |
| Drink | Record drink menu items. |
| Wings | Store chicken wing menu items |
| Dessert | Record dessert menu items. |
| Breadstick | Store breadstick menu items |
| Order\_item | Store all the different items for each order. |

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| Table name | What is its purpose? |
| Employee | Employee basic information |
| Ordermain | Customer order details |
| Customer | Store Customers information |
| Address | various address |
| Delivery | Delivery charges as per address Zone |
| Discount | Different types of Discount information |
| Bill | information related charges and Discount |
| Payment | All the Payment records |

**Table Description:**

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|  | | Pizza | | |  |
| Field name | Data type | | Description | | |
| Item\_ID | VARCHAR (10) | | | Unique identifier for each pizza menu item (e.g., PZ001234) | |
| Pizza\_name | VARCHAR (60) | | | Name of the pizza item (e.g., "Hawaiian Pizza") | |
| Size | VARCHAR (10) | | | Size options available for the pizza (e.g., small, medium, large) | |
| Base | VARCHAR (30) | | | The type of base available for the pizza, "Regular", "Gluten-free", "Thin crust", "Stuffed crust", "Garlic parmesan", and "Neon style". | |
| Sauce | VARCHAR (30) | | | Type of sauce used on the pizza (e.g., marinara (Pizza sauce) , alfredo). | |
| Sauce Size | VARCHAR (50) | | | Amount of sauce applied to the pizza (e.g., light, regular, extra). | |
| Cooking\_instruction | VARCHAR (30) | | | Instructions for cooking the pizza, such as "Normal cook" and "Well-done". | |
| Cutting\_instruction | VARCHAR (30) | | | Instructions for cutting the pizza, with options including "Normal cut" and "Square cut". | |
| Cheese | VARCHAR (30) | | | Simply describe amount of cheese in pizza (e.g., Regular, No cheese) | |
| Price | DECIMAL (10, 2) | | | Price of the pizza item (e.g., 29.99) | |

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|  | | | Topping | | |  |
| Field name | Data type | | | Description | | |
| T\_ID | | INT | | | 25 different topping ID (e.g., 1, 23) | |
| T\_Name | | VARCHAR (30) | | | 25 various toppings item (e.g., "Green pepper") | |

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|  | | | PizzaTopping (Junction table) \* | | |  |
| Field name | Data type | | | Description | | |
| Item\_ID | | VARCHAR (10) | | | Unique identifier for each pizza menu item (e.g., PZ001234) | |
| T\_ID | | INT | | | 25 different topping ID (e.g., 1, 23) | |
| Coverage | | VARCHAR (30) | | | Stores the distribution of the topping on the pizza, (e.g., "LeftHalf", "RightHalf", and "Entire".) | |

***\*****Junction tables manage many-to-many relationships in databases, preventing data redundancy and maintaining referential integrity for flexible querying.*

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|  | | | Wings | | |  |
| Field name | Data type | | | Description | | |
| Item\_ID | | VARCHAR (10) | | | Unique identifier for each wings menu item. (e.g., 'WT101' for traditional wings, 'WB101' for boneless wings) | |
| IType | | VARCHAR (10) | | | Type of wings, either "Boneless" or "Traditional". | |
| Sauce\_Type | | VARCHAR (30) | | | Type of sauce used for the wings (e.g., "Unsauced", "BBQ", "Buffalo", "Garlic Parmason", "Honey Chipotle"). | |
| ICount | | INT | | | Number of wings included in the order. | |
| Price | | DECIMAL (10, 2) | | | Price of the wings item. (e.g., 9.99) | |

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|  | | | Breadsticks | | |  |
| Field name | Data type | | | Description | | |
| Item\_ID | | VARCHAR (10) | | | 15 Unique identifier for each breadstick menu item. (e.g., 'BS101') | |
| IName | | VARCHAR (30) | | | Name of the Breadstick item (e.g., "Jalapeno bites Pizza") | |
| Price | | DECIMAL (10, 2) | | | Price of the Breadstick item. (e.g., 7.99) | |

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|  | | | Drink | | |  |
| Field name | Data type | | | Description | | |
| Item\_ID | | VARCHAR (10) | | | 21 Unique identifier for each Drink item. (e.g., 'DR301') | |
| Drink\_name | | VARCHAR (30) | | | Name of the Drink item (e.g., "Diet Pepsi") | |
| DSize | | VARCHAR (50) | | | Size options available for the drink (e.g., 20OZ, 2L) | |
| Price | | DECIMAL (10, 2) | | | Price of the Drink item. (e.g., 5.49) | |

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|  | | | Dipping\_Sauce | | |  |
| Field name | Data type | | | Description | | |
| Item\_ID | | VARCHAR (10) | | | 13 Unique identifier for each dipping sauce menu item. (e.g., 'DP101') | |
| IName | | VARCHAR (30) | | | Name of the dipping sauce item (e.g., "Spicy Garlic ") | |
| Price | | DECIMAL (10, 2) | | | Price of the item. (e.g., 1.39) | |

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|  | | | Dessert | | |  |
| Field name | Data type | | | Description | | |
| Item\_ID | | VARCHAR (10) | | | 4 Unique identifier for each dessert menu item. (e.g., 'DS101') | |
| IName | | VARCHAR (30) | | | Name of the dessert item (e.g., "cinnamon pull apart ") | |
| Price | | DECIMAL (10, 2) | | | Price of the item. (e.g., 9.99) | |

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|  | | | Employee | | |  |
| Field name | Data type | | | Description | | |
| Employee\_ID | | INT | | | Unique identifier for each employee of the store. (e.g., '10001') | |
| EName | | VARCHAR (255) | | | Name of the employee (e.g., "Jessica Wilson ") | |
| EPosition | | VARCHAR (50) | | | Job role. (e.g., Instore Member) | |
| Hire\_date | | DATE | | | Date of hiring for particular employee | |

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|  | | | Customer | | |  |
| Field name | Data type | | | Description | | |
| Customer\_ID | | VARCHAR (10) | | | Unique identifier for each Customer (e.g., 'C10001') | |
| CFName | | VARCHAR (20) | | | Given name of customer (e.g., "Mike") | |
| CFName | | VARCHAR (20) | | | Second name. (e.g., Eaton) | |
| Contact | | VARCHAR (12) | | | Customers phone number | |

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|  | | | Address | | |  |
| Field name | Data type | | | Description | | |
| Address\_ID | | VARCHAR (10) | | | Unique identifier for each new address from the city (e.g., “SC0124986”) | |
| Street\_Number | | INT | | | Street number (e.g., "1189") | |
| Street\_Name | | VARCHAR (50) | | | Main street name. (e.g., Aaron Cliffs) | |
| City | | VARCHAR (20) | | | City name (in our dataset only: Saltcity) | |
| Zip\_Code | | VARCHAR (10) | | | Zip code. (e.g., KAZ76) | |
| Address\_Zone | | VARCHAR (5) | | | Address Zone which divided whole city in numerous parts to assign delivery fees as per address zone | |

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|  | | Order main | | |  |
| Field name | Data type | | Description | | |
| Order\_ID | VARCHAR (10) | | | Unique identifier for each order that has been placed (e.g., OA013979) | |
| Employee\_ID | INT | | | Employee ID of the employee who is in charge of taking that order. (e.g., " 10011") | |
| ODate | DATE | | | Order date | |
| OTime | TIME | | | Time when order placed into the Pizza terminal sytem. | |
| Order\_Source | VARCHAR (30) | | | four different sources from the order placed. Like in-person, Web, Call, Third-party (UBER, SkipTheDishes) | |
| Order\_type | VARCHAR (30) | | | various order types such as dine in, pick up (takeout), Uber, SkipTheDishes, DoorDash, and Delivery | |
| Subtotal\_Price | DECIMAL(10, 2) | | | Calculated total price for each item in the order before tax, tips, discount, or any charges | |
| Address\_ID | VARCHAR (10) | | | Address\_ID for all delivery orders; if the order is not for delivery, then Address\_ID is SC0000001 (which is the store address ID). | |
| Customer\_ID | VARCHAR (10) | | | Customer\_Id who placed the order | |

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|  | | | Order\_Item (Junction table) \* | | |  |
| Field name | Data type | | | Description | | |
| Order\_ID | | VARCHAR (10) | | | Unique identifier for each order that has been placed (e.g., OA013979) | |
| Item\_ID | | VARCHAR (10) | | | Item\_Id of Item that has been ordered from 6 different tables (Pizza, wings, drink, etc..) | |
| Quantity | | INT | | | Number of particular items ordered | |

***\**** *Junction tables manage many-to-many relationships in databases, preventing data redundancy and maintaining referential integrity for flexible querying.*

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|  | | | Delivery | | |  |
| Field name | Data type | | | Description | | |
| Del\_ID | | INT | | | 28 Unique identifier for each delivery zone (address zone). (e.g., '112') | |
| Address\_Zone | | VARCHAR (5) | | | Address zone based on order address | |
| Charges | | DECIMAL (10, 2) | | | Charges of Delivery based on address zone the Breadstick item. (e.g., 5.49) | |

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|  | | | Discount | | |  |
| Field name | Data type | | | Description | | |
| Dis\_ID | | INT | | | 8 Unique identifier for each Discount category. (e.g., 'BS101') | |
| D\_Name | | VARCHAR (30) | | | Name of the Discount o Offers item (e.g., " Flash Pizza Sale ") | |
| Percent | | DECIMAL (5, 2) | | | How much Discount have been applied in all the order the discount ranges from 0 to 50%. (e.g., 0.25) | |

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|  | | | Bill \*\* | | |  |
| Field name | Data type | | | Description | | |
| Bill\_ID | | VARCHAR (10) | | | 8 Unique identifiers same as Order\_ID. | |
| Del\_ID | | INT | | | Del\_ID is used to record Applied Delivery charges in particular order | |
| Dis\_ID | | INT | | | Dis\_ID is used to record Applied Discount in particular order | |

***\*\**** *Table Bill acts as a linking table, connecting Order and Payment tables, managing their one-to-one and one-to-many relationships*

***(In this database, this table(Bill) is not essential and can be removed or adjusted. However, I have kept it here to demonstrate the concept of a linking table.)***

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|  | | | Payment | | |  |
| Field name | Data type | | | Description | | |
| Payment\_ID | | BIGINT | | | It is 12-digit Unique identifier for each Payment has been accepted (e.g., 306561371370) | |
| Bill\_ID | | VARCHAR (10) | | | Billing ID for the bill or order this payment is processed for. | |
| Payment\_Mode | | VARCHAR (30) | | | 4 different types of payment option such as Cash, online transfer, credit, Debit. | |
| Tip | | DECIMAL (10, 2) | | | Tip Amount received for any billing. | |
| Total\_Amount | | DECIMAL (10, 2) | | | The Final Paid Amount After applying charges, Discount Tax and tip. | |

This dataset was created by Nikhlbhai Nakum for Educational use only.