***Dynamic Ordering System for Restaurant***

**Feature**

1. Menu
2. Waiter
3. Table
4. Customer
5. Billing

**Requirement**

|  |  |  |  |
| --- | --- | --- | --- |
| **Menu**  Name  Description  Category  Unit  Price  TimeRquired  Images | **Waiter**  Name  Contact  Tables | **Table**  Name  Description  Capacity | **Customer**  Name  Contact  Email  CreateDate |
| **Billing**  Number  DateTime  Waiter  Table  Customer  Menus  Price  Qty  SubTotal  Total  Discount  Remarks |  |  |  |

**Normalize / Design Database**

**First Normal Form : Define PK & FK**

|  |  |  |  |
| --- | --- | --- | --- |
| **Menu**  **Id**  Name  Description  Category  Unit  Price  TimeRquired  Images | **Waiter**  **Id**  Name  Contact  TableId | **Table**  **Id**  Name  Description  Capacity | **Customer**  **Id**  Name  Contact  Email  CreateDate |
| **Billing**  **Id**  Number  DateTime  WaiterId  TableId  CustomerId  MenuId  Price  Qty  SubTotal  Total  Discount  GrandTotal  Remarks |  |  |  |

**Second Normal Form : make new table with Common data field, Define PK & FK**

|  |  |  |  |
| --- | --- | --- | --- |
| **Menu**  **Id**  Name  Description  CategoryId  UnitId  Price  TimeRquired  Images | **Waiter**  **Id**  Name  Contact  TableId | **Table**  **Id**  Name  Description  Capacity | **Customer**  **Id**  Name  Contact  Email  CreateDate |
| **Billing**  **Id**  Number  DateTime  WaiterId  TableId  CustomerId  MenuId  Price  Qty  SubTotal  Total  Discount  GrandTotal  Remarks | **Category**  Id  Name  Description  CategoryId | **Unit**  Id  Name  Description |  |

**Third Normal Form : remove and make new table with repeated, irregular data field, Define PK & FK**

|  |  |  |  |
| --- | --- | --- | --- |
| **Menu**  **Id**  Name  Description  CategoryId  UnitId  Price  TimeRquired  Images | **Waiter**  **Id**  Name  Contact  TableId | **Table**  **Id**  Name  Description  Capacity | **Customer**  **Id**  Name  Contact  Email  CreateDate |
| **BillingSummary**  **Id**  Number  DateTime  WaiterId  TableId  CustomerId  Total  Discount  GrandTotal  Remarks | **Category**  Id  Name  Description  CategoryId | **Unit**  Id  Name  Description | **BillingDetails**  BillId  MenuId  Price  Qty  SubTotal |
| **//MenuImage**  //MenuId  //Images |  |  |  |

**Fourth Normal Form : Remove redundant and dependent data field**

|  |  |  |  |
| --- | --- | --- | --- |
| **Menu**  **Id**  Name  Description  CategoryId  UnitId  Price  TimeRquired | **Waiter**  **Id**  Name  Contact  rTableId  **MenuImages**  menuId  Image  Title  Description | **rTable**  **Id**  Name  Description  Capacity | **Customer**  **Id**  Name  Contact  Email  CreateDate |
| **BillingSummary**  **Id**  Number  DateTime  TableId  CustomerId  Discount  Remarks | **Category**  Id  Name  Description  CategoryId | **Unit**  Id  Name  Description  PrimaryQty | **BillingDetails**  BillId  MenuId  Price  Qty |
|  |  |  |  |