**ASSIGNMENT/ASSESSMENT ITEM COVER SHEET**

**Hossain**

**Sayeed Bin**

**Student Name:**

**FIRST NAME Family / last NAME**

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**Student Number:**  Email: c3340471@uon.edu.au

**Course Code** **Course Title**

Database Management 2

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*(Example)*  *(Example)*

Intro to University

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Campus of Study: (eg Callaghan, Ourimbah, Port Macquarie)

Callaghan

Assignment 2: Database Design & Implementation

4 June 2021

Assessment Item Title: Due Date/Time:

Tutorial Group (If applicable): Word Count (If applicable):

Lecturer/Tutor Name:

Kellie Bohlsen

**x**

Extension Granted: Yes No Granted Until:

Please attach a copy of your extension approval

**NB: STUDENTS MAY EXPECT THAT THIS ASSIGNMENT WILL BE RETURNED WITHIN 3 WEEKS OF THE DUE DATE OF SUBMISSION**

**Please tick box if applicable**

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02.07.21

Sayeed Bin Hossain

Sayeed Bin Hossain

C3340471

Assessment Item 1

Requirement Analysis and Conceptual Design

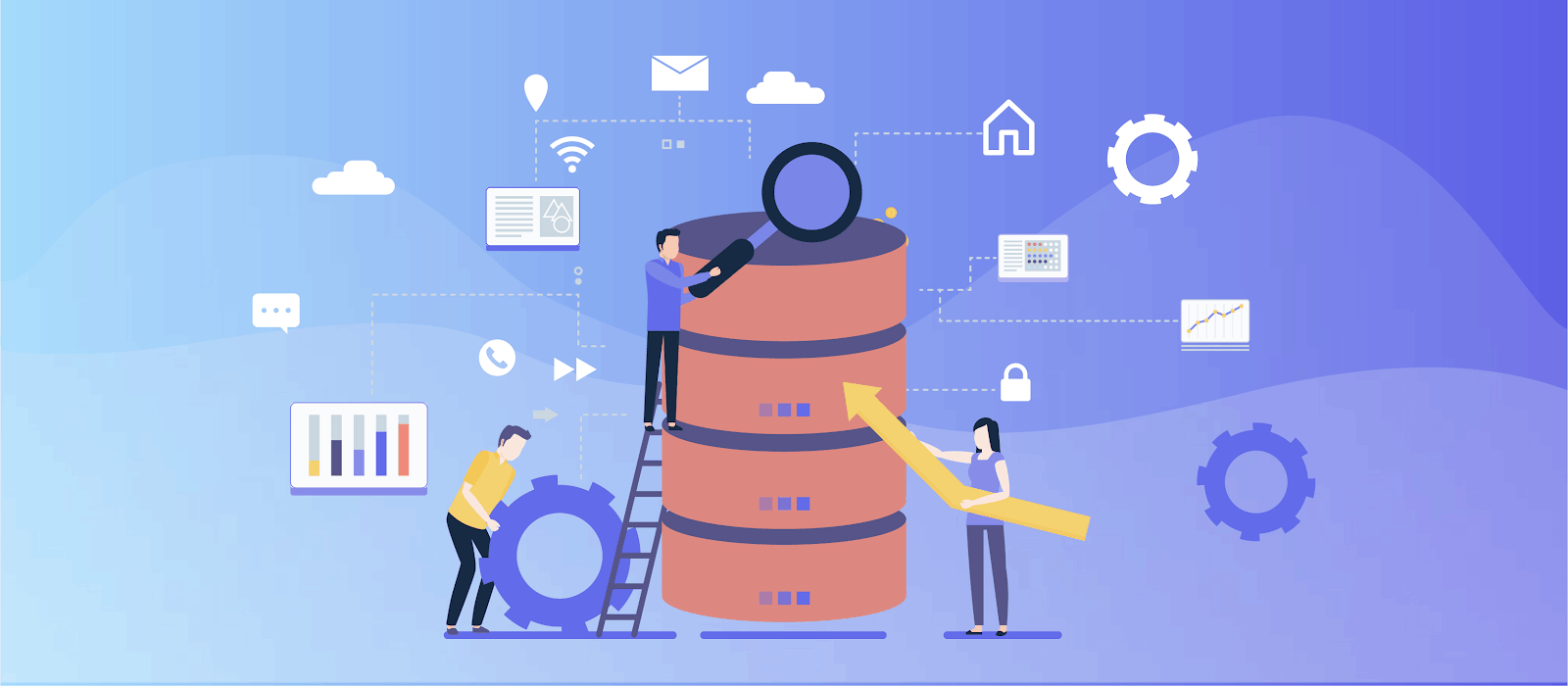


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**Part 1C – Data Dictionary**

Entities

|  |  |
| --- | --- |
| Entity Name | Description |
| Order | General term describing all orders made by customers in Tasty’n’Yummy Pizzas |
| PhoneOrder | An order that is received from the customers who places order through phone. |
| WalkInOrder | An order that is received from the customers who physically comes to the shop. |
| OnlineOrder | An order that is received from the customers via website or app. |
| Delivery | An order that needs to be delivered. |
| Pickup | An order that is picked up. |
| Customer | General term describing all the people buying pizza from Tasty’n’Yummy Pizzas. |
| PhoneCustomer | A customer who orders through phone. |
| Member | A customer who orders via online (website or app) and has a registered account. |
| Guest | A customer who orders via online (website or app) but not registered. |
| Employee | General term describing all the staff working for Tasty’n’Yummy Pizzas. An employee is a person who works for Tasty’n’Yummy. |
| Instore | Subclass of Employee. An instore employee Term is a person who works within the shop. |
| Driver | Subclass of Employee. A driver is a person who delivers pizzas for Tasty’n’Yummy pizzas. |
| EmployeePayment | An employee payment is a payment that is made to an employee by Tasty’n’Yummy pizzas. |
| DriverPayment | Subclass of employeePayment. DriverPayment is the payment made to an driver for their shift. |
| InstorePayment | Subclass of employeePayment. InstorePayment is the payment made to an instore staff for their shift. |
| Shift | A shift is the working time that an employee works. |
| InstoreShift | Subclass of Shift. Term describing the shift of an Instore employee. |
| DriverShift | Subclass of Shift. Term describing the shift of an drivers working for the pizza shop. |
| MenuItem | General term describing the menu available at Tasty’n’Yummy Pizzas. |
| Category | A category describes the category of the pizza. |
| Ingredient | An ingredient is a component that is used to make pizzas. |
| Supplier | General term describing the suppliers responsible for supplying the ingredients. |
| IngredientsOrder | An ingredients order is an order for the ingredients that is generated to by the manager of the store and send to the supplier. |
| Discount | A discount is a special offer for the customer to get a deduction on the price. |
| Promotion | A promotion is a special rate given to the customer when some items are purchased in a group. |

Relationships

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Entity Name | Multiplicity | Relationship | Multiplicity | Entity Name | Description |
| Customer | 0…1 | places | 1…\* | Order | a customer can place order |
| Discount | 0…1 | on | 1…\* | Category | a category can have discount |
| Promotion | 0…1 | has | 1….\* | Category | a category can have promotion |
| Order | 0…\* | contains | 1…\* | MenuItem | an order contains items from the menu |
| MenuItem | 1…\* | has | 1…1 | Category | A menu item will have a category |
| MenuItem | 1…\* | contains | 1…\* | Ingredient | an item can have one or many ingredients |
| IngredientOrder | 0…\* | contains | 1…\* | Ingredient | An ingredient order can have one or many ingredients |
| Employee | 1…1 | places | 0…\* | IngredientOrder | an employee (manager) can place ingredient order |
| Supplier | 1…\* | Receives | 0…\* | IngredientOrder | a supplier can receive one or many ingredient order |
| Supplier | 1…\* | Supplies | 0…\* | Ingredients | a supplier supplier supplies ingredients |
| Employee | 1…1 | gets | 0…\* | EmployeePayment | an employee can get employee payment |
| Instore | 1…1 | Works | 0…\* | InstoreShift | an instore employee can work instore shift |
| Driver | 1…1 | Works | 0…\* | DriverShift | a delivery employee can work delivery shift |
| Instore | 1…1 | Takes | 0…\* | PhoneOrder | a instore employee can take phone order |
| Driver | 1…1 | Delivers | 0…\* | Order | a driver can deliver delivery orders |
| InstoreShift | 0…\* | Gets | 1…1 | InstorePayment | An instore payment will be made based on the instore shift |
| DriverShift | 0…\* | Gets | 1…1 | DriverPayment | A driver payment will be made based on the driver shift |

Attributes

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Entity Name | Attributes | Description | Data type & Length | Nulls | Multi-valued | De-rived | De-fault |
| Customer | CustomerID  FName  Lname  Address  Phone | ID of customer  First name of customer  Last name of customer  Address of customer  phoneNo of customer | Int (20)  Char (20)  Char (20)  Varchar (250)  Int (20) | N  N  N  N  N | N  N  N  Y  N | N  N  N  N  N |  |
| Member | Username  Email | Username of member  Email of email | Varchar (250)  Varchar (250) | N  N | N  N | N  N |  |
| Order | OrderNo  Date&Time  subtotal  totalDue  discountAmount  tax  approvalNo  PaymentMethod  OrderStatus  TypeOfOrder  Description  preorderDate&Time  deliveryMethod | Order number  Order date and time  Total amount to be paid  Total amount due  Deduction for discount  Total tax  If paid via card  Method of payment (Card/cash)  (Processing, On the way, ready-to-be-completed, etc)  Phone/online/walk-in  Description of the order  Later Date and time for pre-orders  Pickup/Delivery | Int (20)  Date&Time  Int (20)  Int (20)  Int (20)  Int (20)  Varchar (20)  Char (20)  Char (20)  Char (20)  Varchar (250)  Date&Time  Char (20) | N  N  N  N  N  N  Y  N  N  N  Y  Y  N | N  Y  N  N  N  N  N  N  N  N  N  N  N | N  N  Y  Y  Y  Y  N  N  N  N  N  N  N |  |
| WalkinOrder | customerName | Name of the customer | Char (50) | N | N | N |  |
| Delivery | DTime&date  deliveryAddress | Time&Date of delivery  Address of delivery | Date&Time  Varchar (250) | Y  N | N  N | N  N |  |
| MenuItems | ItemNO  Name  Size  Price  Description. | Item Number  Name of the item  Size of the item  Selling price of item  Description of the item | Int (20)  Char (20)  Char (20)  Int (20)  Varchar (250) | N  N  N  N  Y | N  N  N  Y  N | N  N  N  N  N |  |
| Ingredients | code  name  type  description  CurrentStockLevel  SuggestedStockLevel  ReOrderLevel  LastStocktake | Unique code of item  Name of the item  Type of the item  Description of the item  Available amount in the stock  Suggested amount to be purchased  Amount at which the item will be reordered  Date of the last stock take | Int (20)  Char (20)  Char (20)  Varchar (250)  Int (20)  Int (20)  Int (20)  Date | N  N  N  Y  N  N  N  N | N  N  N  N  N  N  N  N | N  N  N  N  N  N  N  N |  |
| EmployeePayment | paymentID, gross payment  taxWithheld  totalAmountPai  PaymentDate  startDate  endDate | ID of Payment  Gross payment  Tax withheld  Total amount paid  Payment date  Start date  End date | Int (20)  Int (20)  Int (20)  Int (20)  Date  Date  Date | N  N  N  N  N  N  N | N  N  N  N  N  N  N | N  N  N  N  N  N  N |  |
| Employees | employeeNO  firstname  lastname  postal address  contact number  TFN  bankCode  bankName  accountNo  payment rate  status  description. | Employee Number  First name of employee  Last name of employee  Address of employee  Employee’s contact number  Tax file No. of employee  Bank code of employee  Name of the bank  Employee’s accountNo  Payment rate  Parttime/fulltime  Description of the employee | Int (20)  Char (20)  Char (20)  Varchar (250)  Int (20)  Int (20)  Varchar (250)  Varchar (250)  Varchar (250)  Varchar (250)  Int (20)  Char (20)  Varchar (250) | N  N  N  N  N  N  N  N  N  N  N  N  Y | N  N  N  Y  N  N  Y  N  N  N  N  N  N | N  N  N  N  N  N  N  N  N  N  N  N  N |  |
| Driver | licenseNo | License number of the driver | Int (20) | N | N | N |  |
| IngredientsOrder | OrderNo  TotalAmount  Status  Description | Order Number  Total amount to be paid  Status of the order  Description of the order | Int (20)  Int (20)  Char (20)  Varchar (20) | N  N  N  Y | N  N  N  N | N  N  N  N |  |
| Supplier | SupplierNo  Name  Address  Phone  Email  ContactPerson | Supplier Number  Name of the Supplier  Address of the supplier  Phone no. of the supplier  Email address  Contact person’s detail | Int (20)  Char (20)  Varchar (250)  Int (20)  Varchar (250)  Varchar (250) | N  N  N  N  N  N | N  N  Y  N  N  Y | N  N  N  N  N  N |  |
| Shift | shiftID  start date  start time  end date  end time | Unique ID of shifts  Start date of the shirt  Start time of the shift  End date of the shift  End time of the shift | Varchar (250)  Date  Time  Date  Time | N  N  N  N  N | N  N  N  N  N | N  N  N  N  N |  |
| DriverShift | NumberOfDelivery  DriverPaymentRate | Number of deliveries made in a shift  Rate of payment for each delivery | Int (20)  Int (20) | N  N | N  N | N  N |  |
| Discount | DiscountCode  Description  startDate  endDate  requirements  discountPercentage | Unique code of discount  Detail description  Start date of discount  Discount End date  Discount requirements  Percetage of discount | Varchar (250)  Varchar (250)  Date  Date  Varchar (250)  Int (20) | N  Y  N  N  N  N | N  N  N  N  N N | N  N  N  N  N  N |  |
| Promotion | promotionCode  Description  startDate  endDate  itemQuantity  deliveryMethod | Unique code of promotion  Detail description  Start date of promotion  Promotion End date  Quantity of Item  Pickup/delivery | Varchar (250)  Varchar (250)  Date  Date  Int (20)  Char (50) | N  Y  N  N  N  N | N  N  N  N  N N | N  N  N  N  N  N |  |
| Category | ID  name | Category ID  Category name | Varchar (250)  Varchar (250) | N  N | N  N | N  N |  |