**Database Design Coursework Template**

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**Scenario Topic Name: Restaurant Management**

**Scenario** (100 words maximum)

Daaboul and Co is a five-star Michelin restaurant situated in London. All employees, including both part-time and full-time workers, have a unique employee ID, facilitating employee information management. Furthermore, their full names, contact numbers, hire dates and roles are also recorded. Customer records list customer full names and phone numbers, while assigning each customer a unique customer ID. Bookings and seating data ensure efficient table management through booking ID, party size, reservation date and table number. Orders are processed efficiently by connecting customers, employees, and table assignments through a unique order ID that is also associated with billings.

**Example queries** (Minimum 5 – list, who, which, how many, most, fewest etc. - check that your models have the attributes needed to answer the queries)

Is a certain employee part-time or full-time?

What time was a specific order placed?

What is the party size for a specific booking?

What is a certain customer’s phone number?

Which employee is dealing with a specific order?

How many seats does a certain table have?

What is the billing amount of a particular order?

**Entity Relationship Model** (insert a jpg image of your model exported from Visual Paradigm in the space below).

Insert your jpg image here

A diagram of a server

Description automatically generated

**Relational Model Tables**

* Copy and paste the table below for as many relational tables as you need
* Replace the placeholder names (table-name1, attribute-name5 etc) with the table and attribute names you derived from your ER model
* List primary key attributes first
* Add new rows to the tables (in the correct place) as needed
* Delete any unnecessary rows (attribute rows and foreign key rows if not used)
* Primary keys are to be specified in the format PRIMARY KEY (attribute-name1, attribute-name2, etc)
* Foreign keys are to be specified in the format ‘FOREIGN KEY (attribute-name) REFERENCES table-name (attribute-name)

|  |  |
| --- | --- |
| **Relational table specification** | **Marker’s corrections (Do not write in this column)** |
| **Table name:** table-name1 | **Employee** |
| **Attributes** |  |
| attribute-name1 | EmployeeID |
| attribute-name2 | Full name |
| attribute-name3 | Contact number |
| attribute-name4 | Date of birth |
| etc | Hire Date, Role |
| **PRIMARY KEY** (attribute-name1, attribute-name2, etc) | **EmployeeID** |
| **FOREIGN KEY** (attribute-name3) REFERENCES table-name2 (attribute-name67) |  |
| **FOREIGN KEY** (attribute-name4) REFERENCES table-name5 (attribute-name129) |  |
| etc |  |

Insert additional tables here……..

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| **Relational table specification** | **Marker’s corrections (Do not write in this column)** |
| **Table name:** table-name1 | **HourlyEmployee** |
| **Attributes** |  |
| attribute-name1 | EmployeeID |
| attribute-name2 | Hourly rate |
| attribute-name3 |  |
| attribute-name4 |  |
| etc |  |
| **PRIMARY KEY** (attribute-name1, attribute-name2, etc) | **EmployeeID** |
| **FOREIGN KEY** (attribute-name3) REFERENCES table-name2 (attribute-name67) | **EmployeeID references Employee** |
| **FOREIGN KEY** (attribute-name4) REFERENCES table-name5 (attribute-name129) |  |
| etc |  |

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| **Relational table specification** | **Marker’s corrections (Do not write in this column)** |
| **Table name:** table-name1 | **SalaryEmployee** |
| **Attributes** |  |
| attribute-name1 | EmployeeID |
| attribute-name2 | Annual salary |
| attribute-name3 |  |
| attribute-name4 |  |
| etc |  |
| **PRIMARY KEY** (attribute-name1, attribute-name2, etc) | **EmployeeID** |
| **FOREIGN KEY** (attribute-name3) REFERENCES table-name2 (attribute-name67) | **EmployeeID references Employee** |
| **FOREIGN KEY** (attribute-name4) REFERENCES table-name5 (attribute-name129) |  |
| etc |  |

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| **Relational table specification** | **Marker’s corrections (Do not write in this column)** |
| **Table name:** table-name1 | **Customer** |
| **Attributes** |  |
| attribute-name1 | CustomerID |
| attribute-name2 | Full name |
| attribute-name3 | Phone number |
| attribute-name4 |  |
| etc |  |
| **PRIMARY KEY** (attribute-name1, attribute-name2, etc) | **CustomerID** |
| **FOREIGN KEY** (attribute-name3) REFERENCES table-name2 (attribute-name67) |  |
| **FOREIGN KEY** (attribute-name4) REFERENCES table-name5 (attribute-name129) |  |
| etc |  |

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| **Relational table specification** | **Marker’s corrections (Do not write in this column)** |
| **Table name:** table-name1 | **Booking** |
| **Attributes** |  |
| attribute-name1 | BookingID |
| attribute-name2 | CustomerID |
| attribute-name3 | Party size |
| attribute-name4 | Booking date |
| etc | Table number |
| **PRIMARY KEY** (attribute-name1, attribute-name2, etc) | **BookingID** |
| **FOREIGN KEY** (attribute-name3) REFERENCES table-name2 (attribute-name67) | **CustomerID references customer** |
| **FOREIGN KEY** (attribute-name4) REFERENCES table-name5 (attribute-name129) |  |
| etc |  |

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| --- | --- |
| **Relational table specification** | **Marker’s corrections (Do not write in this column)** |
| **Table name:** table-name1 | **Seating** |
| **Attributes** |  |
| attribute-name1 | Table number |
| attribute-name2 | Table seats |
| attribute-name3 |  |
| attribute-name4 |  |
| etc |  |
| **PRIMARY KEY** (attribute-name1, attribute-name2, etc) | **Table number** |
| **FOREIGN KEY** (attribute-name3) REFERENCES table-name2 (attribute-name67) |  |
| **FOREIGN KEY** (attribute-name4) REFERENCES table-name5 (attribute-name129) |  |
| etc |  |

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| **Relational table specification** | **Marker’s corrections (Do not write in this column)** |
| **Table name:** table-name1 | **Order** |
| **Attributes** |  |
| attribute-name1 | OrderID |
| attribute-name2 | CustomerID |
| attribute-name3 | EmployeeID |
| attribute-name4 | Table number |
| etc | Order time |
| **PRIMARY KEY** (attribute-name1, attribute-name2, etc) | **OrderID** |
| **FOREIGN KEY** (attribute-name3) REFERENCES table-name2 (attribute-name67) | **CustomerID references customer** |
| **FOREIGN KEY** (attribute-name4) REFERENCES table-name5 (attribute-name129) | **EmployeeID references employee** |
| etc | Table number references seating |

|  |  |
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| **Relational table specification** | **Marker’s corrections (Do not write in this column)** |
| **Table name:** table-name1 | **Billing** |
| **Attributes** |  |
| attribute-name1 | OrderID |
| attribute-name2 | Payment type |
| attribute-name3 | Amount |
| attribute-name4 |  |
| etc |  |
| **PRIMARY KEY** (attribute-name1, attribute-name2, etc) | **OrderID** |
| **FOREIGN KEY** (attribute-name3) REFERENCES table-name2 (attribute-name67) | **OrderID references order** |
| **FOREIGN KEY** (attribute-name4) REFERENCES table-name5 (attribute-name129) |  |
| etc |  |

**Marker’s Comments** (Do not write in this section)

**Important:** Please note that marker’s corrections to your relational tables are there to help you construct a working database for the second coursework. They are not the determinant of your mark. For more information on how your work is assessed see the coursework specification and grade related criteria.

**Coursework Mark** (100 marks available):