**Class: CIS-336-** Introduction to Database with Lab

**Student:** Kyle Grigsby

**Assignment:** Week 1 Lab

**Step 1 & Step 2: Drawing and Extending my first ER diagram**



**Step 3: Should a NULL be allowed?**

**Question:** From examination of the sample data and your current understanding of business in which orders could be placed either in person, over the phone, or over the Internet, determine of it would be permissible for null values to be allowed for the foreign key *EmpNo* in the *Order* table. This column would reference back to the *EmpNo* column in the employee table. Why or why not?

**Answer:** After examination of the fact that orders can be placed either in person, over the phone, or over the Internet, it is my determination that it *would* be permissible to use a null value for the foreign key *EmpNo* in the *Order* table because of the fact that successful order transactions can be taken over the Internet without need of an employee and therefore, no need for an employee number. This represents an optional relationship.

**Step 4: Initial Project Exercise**

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| --- | --- |
| **Entity** | **Attribute(s)** |
| Customer | Customer ID (PK) |
|  | First Name |
|  | Last Name |
|  | E-Mail Address |
|  | Channels Purchased |
|  | Favorite Channel Survey Results (FCSR) |
|  | Date of (FCSR) |

|  |  |
| --- | --- |
| **Entity** | **Attribute(s)** |
| MiniQuest Weekly Showing Guide | Date (PK) |
|  | Day of the Week |
|  | Customer ID (FK) |
|  | Channel ID (FK) |
|  | Show ID (FK) |

|  |  |
| --- | --- |
| **Entity** | **Attribute(s)** |
| Billing Information | Customer ID (PK, FK) |
|  | Billing Date |
|  | Amount Owed |
|  | Current Balance |

|  |  |
| --- | --- |
| **Entity** | **Attribute(s)** |
| Channels | Channel ID (PK) |
|  | Channel Name |
|  | Channel Category |

|  |  |
| --- | --- |
| **Entity** | **Attribute(s)** |
| Programming | Show ID (PK) |
|  | Show Title |
|  | Show Time |

|  |  |
| --- | --- |
|  | Show Rating |