Database Design Best Practises Previously Learned Checklist – YES these STILL Apply! :

|  |  |
| --- | --- |
|  | Tables: |
| ☐ | Each table must have a primary key. Each primary key should be the name of the table followed by "\_ID" or “ID”. |
| ☐ | Tables are related using foreign keys. The **foreign key** always goes on the ‘**many side’** of the relationship. |
| ☐ | Many to Many tables require the use of a junction table. Note the specific fields included in junction tables include a primary key, plus the 2 foreign keys from the tables being joined together in the many to many, plus any fields specific to both of the related entities/tables. |
| ☐ | Foreign key fields are used to enforce referential Integrity (enforce the business rules!!) |
|  | Attributes: |
| ☐ | Attribute names (and Tables) "should not" include spaces or special characters with the exception of an underscore. |
| ☐ | Attributes must be ordered (within a table) from most to least important. |
|  |  |
|  |  |
|  | Normalization: |
| ☐ | Normalization is the process of breaking apart tables to reduce modification anomalies / reduce redundancy. |
| ☐ | 1st Normal Form: If there are repeating groups of information (like ingredient\_1, ingredient\_2, Ingredient\_3, or Address,City,Province all in 1 field … etc.) you MUST normalize. |
| ☐ | 3rd Normal Form: If there are columns that are not fully dependant (a.k.a. ‘Transitive Dependency’) on the primary key you SHOULD CONSIDER/Usually normalize. |
| ☐ | Numeric values, date attributes and name/address typically do not apply third normal form design considerations. (ie. De-Normalization for performance) |
| ☐ | In a physical table, if you see data values/information repeating within a column, it is most likely a violation of third normal form. |