NBD-Project Data-Model

Description:

* One client can have many projects but a project can only have one client (1:M).
* Similarly, a project can have multiple bids(1:M).
* Staff can be assigned to multiple projects and meanwhile the projects can also have number of staff based on their roles (such as designer, production, associate etc.). Thus, Staff and Project tables represent many-to-many relationship(M:M).
* Staff and Role tables are used to store the staff data for tracking the bid.
* INV\_TYPE table helps to select from inventory types from Plants/Pottery/Materials.

Code First Entities:

|  |  |  |
| --- | --- | --- |
| Property | Type/Validation | Format/Notes |
| CLIENT |  |  |
| ID | Int | Identity PK |
| cltFName | Required string, max length 30 |  |
| cltMName | Required string, max length 30 |  |
| cltLName | Required string, max length 30 |  |
| cltAddress | Required string, max length 100 |  |
| cltPhNum | Required string, exactly 10 digits |  |
| cltContact | Required string, max length 70 |  |
| ProjectID | Required int | Foreign Key |
|  |  |  |
| PROJECT |  |  |
| ID | Int | Identity PK |
| projName | Required string, max length 50 |  |
| projBeginDate | Required DateTime |  |
| projCompDate | Required DateTime |  |
| projSite | Required string, max length 100 |  |
| BidID | Required Int | Foreign Key |
| StaffID | Required Int | Foreign Key |
|  |  |  |
| BID |  |  |
| ID |  | Identity PK |
| bidDate | Required DateTime |  |
| bidAmount | Required Decimal |  |
| InvID | Required Int | Foreign Key |
|  |  |  |
| INVENTORY |  |  |
| ID | Int | Identity PK |
| invDesc | Required string, max length 60 |  |
| invQty | Required int |  |
| invSize | Required string, max length 30 |  |
| invList$/ invUnitPrice | Required decimal |  |
| invTypeID | Required Int | Foreign Key |
|  |  |  |
| INV\_TYPE |  |  |
| ID | Int | Identity PK |
| invType | Required string, max length 9 |  |
|  |  |  |
| STAFF |  |  |
| ID | Int | Identity PK |
| staffFName | Required string, max length 30 |  |
| staffMName | Required string, max length 30 |  |
| staffLName | Required string, max length 30 |  |
| staffPhNum | Required string, exactly 10 digits |  |
| staffEmail | Required string, max length 255 |  |
| staffAddress | Required string, max length 100 |  |
| RoleID | Required Int | Foreign Key |
|  |  |  |
| ROLE |  |  |
| ID | Int | Identity PK |
| roleDesc | Required string, max length 50 |  |
|  |  |  |
|  |  |  |

CLIENT

ID\*

cltFName

cltMName

cltLName

cltAddress

cltPhNum

cltContact

projectID

BID

ID\*

bidDate

bidAmount

InvID

ROLE

ID\*

roleDesc

INV\_TYPE

ID\*

invType

INVENTORY

ID\*

invItemDesc

invQty

invSize

invList$/invUnitPrice

invTypeID

STAFF

ID\*

staffFName

staffMName

staffLName

staffAddress

staffPhNum

staffEmail

RoleID

PROJECT

ID\*

projName

projBeginDate

projCompDate

projSite

BidID

StaffID