7. **Database Design/Structure**

**Table design:**

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| **Table Expo** | | | |
| **File Name** | **Data Type** | **Constraint** | **Description** |
| ExID | int | Primary key, Identity(1,1), Not null | Expo ID |
| ExName | nvarchar(100) | Not Null | Expo Name |
| ExNumBooth | int | Not Null | Expo Number Booth |
| ExMoney | float | Not Null | Expo Money |
| ExDescription | ntext | Null | Expo Description |
| ExDateStart | smalldatetime | Not Null | Expo Date Start |
| ExDateEnd | smalldatetime | Not Null | Expo Date End |

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| **Table Booths** | | | |
| **File Name** | **Data Type** | **Constraint** | **Description** |
| BID | int | Primary key, Identity(1,1), Not null | Booth ID |
| BTID | int | FK, Not Null | Booth Type ID |
| SID | int | FK, Not Null | Sponsor ID |
| CID | int | FK, Not Null | Contact ID |
| BName | ntext | Not Null | Booth Name |
| BDate | smalldatetime | Not Null | Booth Date |
| BMoney | float | Not Null | Booth Money |
| BBooker | bit | Not Null | Booth Booker |

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| **Table Booth Type** | | | |
| **File Name** | **Data Type** | **Constraint** | **Description** |
| BTID | int | Primary key, Identity(1,1), Not null | Booth Type ID |
| BTName | nvarchar(100) | Not Null | Booth Type ID |
| ExID | int | FK, Null | Expo ID |
| BTHeight | float | Null | Booth Type Height |
| BTWidth | float | Null | Booth Type Width |
| BoothLength | int | Null | Booth Type Length |
| BoothRemain | int | Null | Booth Type Remain |

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| **Table Exhibitor** | | | |
| **File Name** | **Data Type** | **Constraint** | **Description** |
| EID | Int | Primary key, Identity(1,1), Not null | Exhibitor ID |
| EName | Nvarchar(100) | Not Null | Exhibitor Name |
| EFax | Varchar(30) | Null | Exhibitor Fax |
| EPhone | Varchar(30) | Null | Exhibitor Phone |
| EAddress | Ntext | Not Null | Exhibitor Address |
| EWebsite | Vachar(100) | Null | Exhibitor Website |

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| **Table Products** | | | |
| **File Name** | **Data Type** | **Constraint** | **Description** |
| PID | Int | Primary key, Identity(1,1), Not null | Product ID |
| EID | Int | FK, Not Null | Exhibitor ID |
| CID | Char(10) | FK, Not Null | Contact ID |
| PName | Nvarchar(100) | Not Null | Product Name |
| PPrice | Float | Null | Product Price |
| PNumber | Int | Null | Product Number |
| PDescription | Ntext | Null | Product Description |
| PDate | smalldatetime | Not Null | Product Date Create |

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| **Table Sponsors** | | | |
| **File Name** | **Data Type** | **Constraint** | **Description** |
| SpID | Int | Primary key, Identity(1,1), Not null | Sponsor ID |
| ExID | Int | FK, Null | Expo ID |
| SpName | Nvarchar(100) | Not Null | Sponsor Name |
| SpMoney | Float | Null | Sponsor Money |
| SpDescription | Ntext | Null | Sponsor Description |

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| **Table Staff** | | | |
| **File Name** | **Data Type** | **Constraint** | **Description** |
| SID | Int | Primary key, Identity(1,1), Not null | Staff ID |
| CID | Char(10) | FK, Not Null | Contact ID |
| SName | Nvarchar(100) | Not Null | Staff Name |
| SEmail | Nvarchar(100) | Not Null | Staff Email |
| SPhone | Varchar(50) | Null | Staff Phone |
| SAddress | Ntext | Not Null | Staff Address |

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| **Table User** | | | |
| **File Name** | **Data Type** | **Constraint** | **Description** |
| UName | Nvarchar(100) | Primary key, Identity(1,1), Not null | User ID |
| UPass | Varchar(100) | Not Null | User Pass |
| UTypeUser | TinyInt | Null | Type User |
| UEmail | Varchar(100) | Null | User Email |
| EID | Int | FK, Null | Exhibitor ID |

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| **Table Priority** | | | |
| **File Name** | **Data Type** | **Constraint** | **Description** |
| Priority | Int | Primary key, Identity(1,1), Not null | Priority ID |
| PrType | Nvarchar(50) | Not Null | Priority Type |

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| **Table Contact** | | | |
| **File Name** | **Data Type** | **Constraint** | **Description** |
| CID | Char(10) | Primary key, Not null | Contact ID |
| ExID | Int | FK, Not Null | Expo ID |
| EID | Int | FK, Not Null | Exhibitor ID |
| PrID | Int | FK, Not Null | Priority ID |
| CUserCredential | Nvarchar(100) | Not Null | Contact User Credential |
| CNumOfBooth | Int | Not Null | Contact Number Of Booth |
| CPaid | Float | Not Null | Contact Paid |
| CDateRegister | Smalldatetime | Not Null | Date Register |
| CDateSent | Smalldatetime | Not Null | Date Sent |
| CDateReturn | Smalldatetime | Not Null | Date Return |
| CDateLastChange | Smalldatetime | Not Null | Date Last Change |
| CStatus | Bit | Not Null | Contact Status |