

Table 1 customer

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Colum name | Data type | constrain | Value Null? | Note |
| 1 | userid | int | Automatic growth, primary key | N |  |
| 2 | username | varchar | Unique value | N |  |
| 3 | password | varchar |  | N |  |
| 4 | fname | varchar |  | N | firstname |
| 5 | lname | varchar |  | N | lastname |
| 6 | email | varchar |  | N |  |

Table 2 address

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Colum name | Data type | constrain | Value Null? | Note |
| 1 | addrid | int | Automatic growth, primary key | N |  |
| 2 | apt | varchar |  |  | apartment |
| 3 | box | varchar |  |  | Box# |
| 4 | stno | varchar |  | N | street# |
| 5 | stname | varchar |  | N | streetname |
| 6 | province | varchar |  | N |  |
| 7 | zipcode | varchar |  | N |  |
| 8 | country | varchar |  | N |  |
| 9 | phone | varchar |  | N |  |
| 10 | userid | int | Foreign key, referred from table customer | N |  |

Table 3 category

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Colum name | Data type | constrain | Value Null? | Note |
| 1 | cateid | int | Automatic growth, primary key | N |  |
| 2 | catename | varchar |  | N | Category name |

Table 4 cd

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Colum name | Data type | constrain | Value Null? | Note |
| 1 | cdid | int | Automatic growth, primary key | N |  |
| 2 | title | varchar |  | N |  |
| 3 | artist | varchar |  | N |  |
| 4 | date | date |  |  | Release date |
| 5 | intro | varchar |  |  | introduction |
| 6 | price | float |  | N |  |
| 7 | stock | int |  | N |  |
| 8 | imgurl | varchar |  |  | Cd image url |
| 9 | cateid | int | Foreign key, referred from table category | N |  |

Table 5 order

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Colum name | Data type | constrain | Value Null? | Note |
| 1 | orderid | int | Automatic growth, primary key | N |  |
| 2 | date | datetime |  | N |  |
| 3 | status | char |  | N | 0:half-way (not paid but confirmed)  1:approved  2:deny |
| 4 | total | float |  | N |  |
| 5 | userid | int | Foreign key, referred from table customer | N |  |
| 6 | addrid | int | Foreign key, referred from table address | N |  |
| 7 | shipid | int | Foreign key, referred from table shipping | N |  |
| 8 | taxid | int | Foreign key, referred from table tax | N |  |

Table 6 shipping

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Colum name | Data type | constrain | Value Null? | Note |
| 1 | shipid | int | Automatic growth, primary key | N |  |
| 2 | method | varchar |  | N |  |
| 3 | price | float |  | N |  |

Table 7 tax

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Colum name | Data type | constrain | Value Null? | Note |
| 1 | taxid | int | Automatic growth, primary key | N |  |
| 2 | taxname | varchar |  | N |  |
| 3 | taxrate | float |  | N |  |

Table 8 items

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Colum name | Data type | constrain | Value Null? | Note |
| 1 | itemsid | int | Automatic growth, primary key | N |  |
| 2 | count | int |  | N | Total number each cd purchased |
| 3 | orderid | int | Foreign key, referred from table order | N |  |
| 4 | cdid | int | Foreign key, referred from table cd | N |  |

注意：

在此数据库的设计过程中，没有考虑以下情况，以简化项目实现内容。

1. cd的价格为固定价格，并没有考虑会员特价或者任何特价情况，所以没有将cd信息和对应的价格信息拆分为两个表，但是真实生活中应考虑这种情况；
2. 不存在一个用户拥有多个账号/多重角色，因而没有将顾客的个人信息与系统用户信息拆分为两张表；
3. Order表中status的属性设置，是为了区别以下几种情况：0代表用户已经确认过订单信息，但是在付款过程中中断操作，则可以保留订单信息已方便用户再次选择付款；1代表成功确认信息并付款成功；2代表用户确认信息并填写付款信息，但付款过程遭到拒绝不成功（但这种情况应是网银付款部分,在系统实现中不会实在存在）；
4. Shopping cart中的数据在check out之前不存入数据库中，默认存入session 或者 cookie中，所以这里没有创建购物车的数据表。