Logical Design

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table | Field Name | Description | Key Type | Data Type | Length | Null Support | Index | Default Value | Value Range |
| Products | CoursePreReqID | Unique identification of each row | PK | int |  |  | Yes |  |  |
| CourseID | Unique course id | FK | Int |  |  | Yes |  |  |
| PrereqID | The id of a course as being prerequsites of that field | FK | Int |  |  | YES |  |  |
| MiniGPA | Minimum GPA required for prerequisite to be valid |  | Decimal | (3,2) | Null | No |  | 0.00-4.00 |
| Grocery Stores | SemesterID | Primary key | PK | INT |  | Not null | Yes |  |  |
| SemesterNumber | The number code of the semester |  | varchar | 10 | Not null | Yes |  |  |
| SemesterName | Name of semester |  | Char | 10 | Not null | Yes |  |  |
| SemesterYear | Year of semester |  | Year | 4 | Not null | Yes |  |  |
| StartDate | Date of semester beginning |  | Date |  | Null | No |  |  |
| EndDate | Date of semester ending |  | Date |  | Null | No |  |  |
| Employees | CourseID | Primary key;ID of specific course | PK | INT |  | Not null | Yes |  |  |
| CouShortName | Short version of course name |  | Char | 9 | Null | No |  |  |
| CouLongName | Full version of course name |  | Varchar | 75 | Null | No |  |  |
| CourseDescription | Description of course |  | text |  | Null | No |  |  |
| CreditHours | Number of credits |  | tinyint |  |  | no | 3 | 0-10 |
| Equipment | StudentClassID | Unique ID of the specific class that a student is in | PK | INT |  | Not null | Yes |  |  |
| StudentID | Unique ID of the student; FK | FK | INT |  | Not null | Yes |  |  |
| ScheduleID | Unique ID of the schedule; FK | FK | INT |  | Not null | Yes |  |  |
| RegisterDate | The date of class registration |  | date |  | Null | Yes |  |  |
| Score | The score that students get for each class |  | decimal | (4,1) | Nul | no |  | 0-100 |
| Customer | ScheduleID | ID of the schedule | PK | INT |  | Not null |  |  |  |
| ScheduleCode | Code used for the schedule |  | Char | 10 | Not null |  |  |  |
| Section | Section of class |  | tinyint |  | Null |  |  |  |
| ClassDay | Day of class |  | Varchar | 14 | Null |  |  |  |
| ClassTime | Time of class |  | Time |  | Null |  |  |  |
| ClassLocation | Location of class |  | Varchar | 50 | Null |  |  |  |
| SemesterID | ID of semester | FK | INT |  | Not null | Yes |  |  |
| CourseID | ID of course | FK | INT |  | Not null | Yes |  |  |
| LecturerID | ID of Lecturer | FK | INT |  | Not null | Yes |  |  |
| Transactions | LecturerID | ID of Lecturer | PK | INT |  | Not null | Yes |  |  |
| LecLastName | Surname of lecturer |  | Varchar | 25 | Not null | Yes |  |  |
| LecFirstName | First name of lecturer |  | Varchar | 25 | Not null | Yes |  |  |
| LecMiddleName | Middle name of lecturer |  | Varchar | 25 | Null | No |  |  |
| LecGender | Gender of lecturer |  | Varchar | 10 | Null | No |  |  |
| LecEmail | College contact email for lecturer |  | Varchar | 50 | Not null | Yes |  |  |
| LecWTel | College work telephone for lecturer |  | Char | 10 | Null | Yes |  |  |
| UserID | Lecturer’s userid for the system | FK | INT |  | Not null | Yes |  |  |
| LecSSN | Social security number |  | char | 9 | Null |  |  |  |
| Allocation | StudentID | ID of a student | PK | INT |  | Not null | Yes |  |  |
| StuLastName | Surname of student |  | Varchar | 25 | Not null | Yes |  |  |
| StuFirstName | First name of student |  | Varchar | 25 | Not null | Yes |  |  |
| StuMiddleName | Middle name of student |  | Varchar | 25 | Null | No |  |  |
| StuEmail | College email of student |  | Varchar | 50 | Not null | Yes |  |  |
| StuMobile | Mobile phone number of student |  | Char | 10 | Null | Yes |  |  |
| UserID | UsrID, FK | FK | INT |  | Not null | Yes |  |  |
| StuStreet | Street address of students |  | varchar | 100 |  | yes |  |  |
| StuCity | The city name of student address |  | varchar | 25 |  | yes |  |  |
| StuState | The state name student address |  | char | 2 |  | yes |  |  |
| Stuzipcode | Zipcode of student address |  | char | 6 |  | yes |  |  |
| AccessLevels | AccessLevelID | ID of Access Level | PK | INT |  | Not null | Yes |  |  |
| AccessLevelCode | Code for Specific Access level |  | varchar | 6 | Not null | Yes |  |  |
| AccessShortName | The short name for the access level |  | varchar | 15 | Not null | Yes |  |  |
| AccessLongName | The long name for the access level |  | varchar | 40 |  |  |  |  |
| AccessLevelDescription | Description of access level |  | Varchar | 255 | Not null | No |  |  |
| Users | UserID | ID to use on computer network | PK | INT |  | Not null | Yes |  |  |
| UserName | Name of user on computer network |  | Varchar | 25 | Not null | Yes |  |  |
| Password | User's password for computer network |  | Char | 64 | Not null | No |  |  |
| LoginStatus | User is active in system or not |  | Char | 3 | Null | No |  |  |
| AccessLevelID | ID of access level | FK | INT |  | Not null | Yes |  |  |
| CreateUserID | User ID which has been created by a user | FK | INT |  | Not null | Yes |  |  |
| LogEntries | LogEntryID | ID of when a user activity in the system | PK | INT |  | Not null | Yes |  |  |
| UserID | ID to use on computer network | FK | INT |  | Not null | Yes |  |  |
| LoggedOnTime | Time that a user logs on |  | Date time |  | Not null | Yes |  |  |
| LoggedOutTime | Time that a user logs out |  | Date time |  | Not null | Yes |  |  |
| LogonIP | IP address that a user logs in from |  | Varchar | 55 | Not null | Yes |  |  |