Dim\_Applicant

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| ApplicantKey | int | PK |
| GeographyKey | int | FK |
| FirstName | varchar(50) |  |
| MiddleName | varchar(50) |  |
| LastName | varchar(50) |  |
| BirthDate | date |  |
| MaritalStatus | nchar(1) |  |
| Gender | varchar(50) |  |
| EmailAddress | varchar(50) |  |
| Education | varchar(50) |  |
| Address | varchar(50) |  |
| Phone | varchar(50) |  |
| IsAdmitted | nchar(1) |  |
| IsEnrolled | nchar(1) |  |
| GRE | int |  |
| GMAT | int |  |
| TOEFL | int |  |
| SAT | int |  |

Dim\_Course

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| CourseKey | int | PK |
| CourseId | varchar(50) |  |
| CourseName | varchar(50) |  |
| CourseCredits | int |  |
| CourseMaxSize | int |  |
| CourseFee | money |  |
| DepartmentKey | int |  |

Dim\_Date

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| TimeKey | int | PK |
| DayNumberOfWeek | int |  |
| DayNameOfWeek | varchar(50) |  |
| DayNumberOfMonth | int |  |
| DayNumberOfYear | int |  |
| WeekNumberOfYear | int |  |
| MonthName | varchar(50) |  |
| MonthNumberOfYear | int |  |
| CalendarYear | int |  |
| CalendarSemester | int |  |
| SemesterName | varchar(50) |  |

Dim\_Degree

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| DegreeKey | int | PK |
| DegreeName | varchar(50) |  |
| MinDegreeDuration | int |  |
| MaxDegreeDuration | int |  |

Dim\_Department

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| DepartmentKey | int | PK |
| DepartmentName | varchar(50) |  |
| DepartmentHead | varchar(50) |  |
| DepartmentCode | varchar(50) |  |

Dim\_Domain

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| DomainKey | int | PK |
| DomainCategory | varchar(50) |  |
| DomainSubCategory | varchar(50) |  |
| Role | varchar(50) |  |

Dim\_Facility

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| FacilityKey | int | PK |
| FacilityName | varchar(50) |  |
| FacilityLocation | varchar(50) |  |
| FacilityType | varchar(50) |  |
| FacilityCapacity | int |  |

Dim\_Faculty

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| FacultyKey | int | PK |
| CourseKey | int |  |
| FacultyFirstName | varchar(50) |  |
| FacultyLastName | varchar(50) |  |
| Position | varchar(50) |  |
| Experience | int |  |
| FacultyEmail | varchar(50) |  |
| FacultyPhone | varchar(50) |  |

Dim\_Geography

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| GeographyKey | int | PK |
| City | varchar(50) |  |
| StateProvinceCode | varchar(50) |  |
| StateProvinceName | varchar(50) |  |
| CountryRegionCode | varchar(50) |  |
| CountryRegionName | varchar(50) |  |
| PostalCode | varchar(50) |  |

Fact\_Admission

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| TimeKey | int | FK |
| ApplicantKey | int | FK |
| ProgramKey | int | FK |
| DegreeKey | int | FK |
| AmountOfScholarship | money |  |
| AmountOfFederalLoan | money |  |
| AmountOfInstateWaiver | money |  |

Fact\_FacilityUsage

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| TimeKey | int | FK |
| FacilityKey | int | FK |
| NumberOfStudents | int |  |
| NumberOfGuests | int |  |
| Revenue | money |  |

Fact\_Placement

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| TimeKey | int | FK |
| GeographyKey | int | FK |
| ProgramKey | int | FK |
| DegreeKey | int | FK |
| DomainKey | int | FK |
| TotalSalary | money |  |
| NoOfPlacements | int |  |
| RelocationBonus | money |  |

Fact\_Registration

|  |  |  |
| --- | --- | --- |
| **Attribute** | **DataType** | **Key** |
| TmeKey | int | FK |
| DepartmentKey | int | FK |
| FacultyKey | int | FK |
| TotalTuition | money |  |
| NumberOfStudents | int |  |

Estimating the size of the Data Warehouse

The data warehouse dimensions have been classified into 3 types:

* **Small**: This kind of dimensional table usually has around 10000 historical records. This dimension is usually a slowly changing dimension with type 1 changes, which corresponds to errors. As a result there is not much change in the dimension table row
* **Intermediate**: This kind of dimensional table usually has around 100000 historical records. This dimension is usually a slowly changing dimension with type 2 changes, which corresponds to preservation of history. As a result there are few changes in the dimension table rows.
* **Large**: This kind of dimensional table usually has around 1000000 historical records. This dimension is usually a slowly changing dimension with type 2 changes, which corresponds to frequent revisions. As a result there are frequent changes in the dimension table rows as new records are added every time there is a revision change.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name** | **Type** | **Record Size** | **No:of records** | **Total Table Size** |
| Dim\_Applicant | Large | 438 | 10000000 | 4.38 |
| Dim\_Course | Medium | 124 | 100000 | 0.0124 |
| Dim\_Date | Large | 182 | 10000000 | 1.82 |
| Dim\_Degree | Small | 62 | 10000 | 0.00062 |
| Dim\_Department | Small | 154 | 10000 | 0.00154 |
| Dim\_Domain | Small | 154 | 10000 | 0.00154 |
| Dim\_Facility | Small | 158 | 10000 | 0.00158 |
| Dim\_Faculty | Medium | 262 | 100000 | 0.0262 |
| Dim\_Geography | Large | 304 | 10000000 | 3.04 |
| Dim\_Program | Small | 108 | 10000 | 0.00108 |
|  |  |  | Total Size | 9.28496 |

Dim\_Applicant: large,

Dim\_Course: Medium

Dim\_Date: large

Dim\_Degree: Small

Dim\_Department: small

Dim\_Domain:small

Dim\_Facility: small

Dim\_Faculty:medium

Dim\_Program: small

Dim\_Geography: Large