**Human Resources Database Design**

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**Version:**

**1. Introduction**

The purpose of this document is to provide a description of our database created for MSDS .

**2. Architecture Design**

**3. Database Design**

Only one schema is contained within this database – *mydb*.

**Tables schemas**

*Candidate: this table contains information regarding potential candidates for open job positions.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attributes | Description | Type | Examples of Values | Foreign Key? |
| CandidateID | Unique ID of a particular candidate | VARCHAR(10) | 123456789 |  |
| Last\_Name | Last name of the candidate | CHAR(40) | Sterling |  |
| Middle\_Name | Middle name of the candidate, if exists | CHAR(40) | Huger |  |
| First\_Name | First name of the candidate | CHAR(40) | Elizabeth |  |
| Email\_ID | Preferred e-mail address of the candidate | VARCHAR(45) | [lsterling@smu.edu](mailto:lsterling@smu.edu) |  |
| Phone | Preferred phone number of the candidate | CHAR(15) | 555-555-5555 |  |
| Gender | Preferred gender of candidate | CHAR(1) | F |  |
| Ethnicity | Ethnicity of the candidate | CHAR(10) | Caucasian |  |
| Expected\_Salary | Anticipated salary of the candidate | DECIMAL() | $70,000 |  |
| Prior\_Employer | Previous employer of the candidate | VARCHAR(40) | SMU |  |
| Address\_Line | Current address of the candidate | VARCHAR(45) | 123 apple lane |  |
| City | Current city of the candidate | CHAR (20) | Dallas |  |
| State | Current state of the candidate | CHAR (20) | Texas |  |
| Country | Current country of residence of the candidate | CHAR(20) | USA |  |
| LinkedIn\_Profile | Link to candidates linkedin, if exists | VARCHAR(40) | /www.linkedin.com/feed/ |  |
| Source | Where did the candidate find this position? | CHAR(25) | LinkedIn |  |

*Application: this table contains information regarding applications to job positions within the company*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attributes | Description | Type | Example Values | Foreign Key? |
| ApplicationID | Unique ID of the application | VARCHAR(10) | 123456790 |  |
| CandidateID | Unique ID of the candidate filling out the application | VARCHAR(10) | 1234567890 | Yes – Candidate Table |
| RequisitionID | Unique ID of the job itself | VARCHAR(10) | 1234567890 | Yes – Requisition Table |
| Interview\_Status | Has the applicant reached the interview stage? | VARCHAR(45) | Yes/no |  |
| Offer\_accepted | Has the applicant accepted the job, if it has been offered? | VARCHAR(45) | Yes/no |  |
| Salary | What is the applicant’s current salary? | DECIMAL() | $70,000 |  |
| Sign-on\_bonus | How much are they being offered for a sign-on bonus? | DECIMAL() | $10,000 |  |

*Employee: This table contains information regarding current employees.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute | Description | Type | Example | Foreign Key? |
| EmployeeID | Unique ID of the employee | VARCHAR(10) | 1234567890 |  |
| ApplicationID | Unique ID of their application to their current position | VARCHAR(10) | 1234567890 | Yes – Application Table |
| LastName | Last name of the employee | VARCHAR(40) | Sterling |  |
| MiddleName | Middle name of the employee | VARCHAR(40) | Huger |  |
| FirstName | First name of the employee | VARCHAR(40) | Elizabeth |  |
| SSN | Social Security Number of the employee | VARCHAR(12) | 123-45-6789 |  |
| DOB | Birth date of the employee | DATETIME | 10-06-94 |  |
| HireDate | Data the employee was hired | DATETIME | 2-16-18 |  |
| Company | Company where they are employed | VARCHAR(20) | Southern Methodist University |  |
| Location | Location of the company | VARCHAR(20) | Dallas,TX |  |
| JobTitle | Title of the employee | VARCHAR(40) | Data Scientist |  |
| CandidateID | Unique ID from when they were still a candidate for the job | VARCHAR(10) | 1234567890 | Yes – Candidate Table |

*Requisition: This table contains information regarding the job requirements and the job itself.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute | Description | Type | Example | Foreign Key? |
| RequisitionID | Unique ID for the job position | VARCHAR(10) | 1234567890 |  |
| JobTitle | Specific Job Title | VARCHAR(45) | Data Scientist |  |
| JobDescription | General description of the job | VARCHAR(45) | This job entails…. |  |
| Exempt |  | VARCHAR(45) |  |  |
| Location | Location of the job | VARCHAR(45) | Dallas, TX |  |
| Company | Company where the job is held | VARCHAR(45) | Southern Methodisty University |  |
| Salary | Salary fo the job | VARCHAR(45) | $70,000 |  |
| ExperienceLevel | Experience Required | VARCHAR(45) | 3 years experience as a data scientist |  |
| PostingJobBoard | Where is this job posted | VARCHAR(45) | GlassDoor |  |

*PWE:*

**Tables Example Data:**

**SQL Queries:**

**Transactions implementation:**

**4. Graphical User Interface**

**5. Class Diagram and Classes**

**6. Design Process**

**7. References**

**8. Appendix**