**School of Computing**

**ST1501 Data Engineering CA1**

**AY2020/2021 Semester 1**

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**Appendix A**

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| **Database Relational Diagram (ERD)**  PreferredSpecialization  PreferredWorkLocation    CurrentEducation  HighestQualification |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **List all the relations, PK, FK and all non-key attributes for the database relation diagram** | | | | | |
| **No** | **Relation Name** | **Primary Key(s)** | **Non-key Attribute(s)** | **Foreign Key(s)** | **Referenced Relation** |
| 1 | Member | Email | FirstName |  |  |
| LastName |
| Password |
| Nationality |
| ResidentCountry |
| PRCountry |
| WorkingSince |
| ExpectedSalary |
| 2 | PreferredSpecialization | MemberEmail |  | MemberEmail | Member |
| Specialization |
| 3 | PreferredWorkLocation | MemberEmail |  | MemberEmail | Member |
| Region |
| 4 | Skill | MemberEmail | SkillProficiency | MemberEmail | Member |
| Skill |
| 5 | Language | MemberEmail | LangProficiency | MemberEmail | Member |
| Language | PrimaryLanguage |
| 6 | CurrentEducation | MemberEmail | InstituteName | MemberEmail | Member |
| YearOfAdmission |
| CurrentLevelOfStudy |
| CourseOfStudy |
| Qualification |
| 7 | HighestQualification | MemberEmail | InstituteName | MemberEmail | Member |
| InstituteLocation |
| Qualification |
| FieldOfStudy |
| GraduationDate |
| 8 | Company | CompanyRegNo | CompanyName |  |  |
| Address |
| WorkStartTime |
| WorkEndTime |
| CompanySizeMin |
| CompanySizeMax |
| Industry |
| 9 | WorkExperience | WorkExperienceID | PositionTitle | CompanyRegNo | Company |
| PositionLevel | MemberEmail | Member |
| Role |
| Specialization |
| JoinedIn |
| JoinedUntil |
| MobileNumber |
| CompanyName  (if not registered) |
| 10 | Review | MemberEmail | RecommendToFriend | MemberEmail | Member |
| CompanyRegNo | OverallRating | CompanyRegNo  (Only for registered companies) | Company |
| SalaryRating |
| DateOfReview |
| 11 | JobVacancy | JobID | JobTitle | CompanyRegNo | Company |
| JobLevel |
| WorkLocation |
| Specialization |
| MinSalary |
| MaxSalary |
| JobResponsibilities |
| AdvertisementDate |
| ApplicationClosingDate |
| 12 | JobApplication | MemberEmail |  | MemberEmail | Member |
| JobID | JobID | JobVacancy |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 13 | Award | AwardNo | AwardName |  |  |
| 14 | CompanyAward | AwardNo | Value | AwardNo | Award |
| CompanyRegNo  (Only for registered companies) | CompanyRegNo | Company |
| 15 | AwardConferment | ID | DateAwarded | AwardNo, CompanyRegNo | CompanyAward |
| MemberEmail | Member |

**Appendix B**

**List the SQL queries and their corresponding results**

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| Query 1 |
| Query 1 results |

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| Query 2 |
| Query 2 results |

|  |
| --- |
| Query 3 |
| Query 3 results |
| Query 4 |
| Query 4 results |

**Appendix C**

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| **Expanded Database Relational Diagram (only relevant parts need be shown)** |