**Description of Entities**

| **Entity Name** | **Description** | **Aliases** | **Occurrence** |
| --- | --- | --- | --- |
| Student | Contains information about the student. | Student | One student can have many…. am i gonna list every single relationship? |
| Academic Stage | Contains information about students academic stage. | Academic\_Stage | One academic stage must have at least one program and at least one student. |
| School | Contains information about students' school name, school ranking, and school location. | School | One school must offer at least one program, and at least one school must be attended by at least one student. |
| Program | Contains information about program ID, program name and program length | Program | Each program must have a standardized test and offer one program. A school must offer at least one program |
| Standardized Tests | Contains information about test ID, test name, description, minimum score required, and maximum score required | Standardized\_Tests | Multiple programs can have the same standardized tests, many students can take the same standardized test |
| Transactions | Contains information about the amount of the transaction as well as the date. | Transactions | One student can make many transactions (or none). |
| Products | Contains information about the products linked with the transaction, the product description, category, and price. | Products | One product can be linked with at least 1 transaction. |
| Direct Message | Contains information about message content between students. | Direct\_Message | One student can send many direct messages (or none). |
| Comment | Contains information about comment content between students as well as the comment date. | Comment | One student can have many comments (or none) and one post can have many comments (or none) |
| Post | Contains information post content and post date. | Post | One post can have many comments (or none) and one student can have many posts (or none). |
| Upvote | Contains information about the date of the upvote. | Upvote | One post can have many upvotes, and one student can perform many upvotes. |

Description of Attributes

| **Entity Name** | **Attributes** | **Description** | **Data Type** | **Nulls** | **Multi-valued** | **Derived** | **Default** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student** | *StudentID* | Unique ID of a student | Varchar | No | No | No | None |
|  | *Student\_FirstName* | Student’s first name | Varchar | No | No | No | None |
|  | *Student\_Lastname* | Student’s last name | Varchar | No | No | No | None |
|  | *Gender* | Gender of student | Varchar | Yes | No | No | None |
|  | *Phone* | Student’s phone number | Varchar | Yeso | No | No | None |
|  | *BirthDate* | Student’s date of birth | Timestamp | No | No | No | None |
|  | *Email* | Student’s email address | Varchar | No | No | No | None |
|  | *Interests* | Student’s interests | Varchar |  | Yes | No | None |
|  | *Languages* | Student’s languages. | Varchar |  | Yes | No | None |
|  | *Awards* | Student’s awards. | Varchar |  | Yes | No | None |
| **School** | *SchoolID* | Student’s school unique ID. | Varchar | No | No | No | None |
|  | *SchoolName* | Student’s school name. | Varchar | No | No | No | None |
|  | *SchoolRanking* | The school’s ranking. | Int | No | No | No | None |
|  | *Location* | The school’s location | Varchar | No | No | No | None |
| **Program** | *ProgramID* | Student’s unique program ID | Varchar | No | No | No | None |
|  | *ProgramName* | Program name | Varchar | No | No | No | None |
|  | *ProgramLength* | The length of the program | Float | No | No | No | None |
|  | *ProgramCategory* | Program category like law, engineering | varcahar | No | No | No | None |
| **Academic Stage** | *StageID* | Student’s unique academic stage ID | Varchar | No | No | No | None |
|  | *Description* | Description of academic stage | Text | No | No | No | None |
|  | *AcademicStageINT* | Integer representation of academic stage | Int | No | No | No | None |
| **StudentAcademicExperience** | *StartYear* |  | Year |  |  |  |  |
| **StudentStandardizedTest** | *TestDate* |  | Timestamp |  |  |  |  |
|  | *Result* |  | Int |  |  |  |  |
| **Standardized Tests** | *TestID* | A standardized test’s unique ID | Varchar | No | No | No | None |
|  | *TestName* | The test’s name | Varchar | No | No | No | None |
|  | *Description* | The test’s description | Text | No | No | No | None |
|  | *Min\_Score* | The minimum score for the test | Int | No | No | No | None |
|  | *Max\_Score* | The maximum score for the test | Int | No | No | No | None |
| **Transactions** | *TransactionID* | A student’s unique transaction Id | Varchar | No | No | No | None |
|  | *Amount* | Amount spent on a certain transaction | Float | No | No | No | None |
|  | *Timestamp* | A transaction’s date | Timestamp | No | No | No | None |
| **Products** | *ProductID* | The unique product ID linked with the transaction ID | Varchar | No | No | No | None |
|  | *ProductDescription* | The description of the product | Varchar | No | No | No | None |
|  | *ProductCategory* | The category of the product | Varchar | No | No | No | None |
|  | *StandardPrice* | The product’s standard price | Float | No | No | No | None |
| **Direct Message** | *MessageID* | The message ID of a direct message sent by a student | Varchar | No | No | No | None |
|  | *MessageContent* | The content of the message | Text | No | No | No | None |
| **Comment** | *CommentID* | The comment ID of a comment made by a student | Varchar | No | No | No | None |
|  | *Comment\_content* | The comment content | Text | No | No | No | None |
|  | *Comment\_Tinestamp* | The comment date | Timestamp | No | No | No | None |
| **Post** | *PostID* | The post ID of a post made by a student | Varchar | No | No | No | None |
|  | *Post\_content* | The post’s content | Text | No | No | No | None |
|  | *Post\_Timestamp* | The post’s date | Timestamp | No | No | No | None |
|  | *Hashtags* | The post’s hashtags | Varchar |  | Yes | No | None |
| **Upvote** | *UpvoteID* | The ID of an upvote performed by a student | Varchar | No | No | No | None |
|  | *Upvote\_Timestamp* | The date of the upvote | Timestamp | No | No | No | None |