# logo**DATABASE SCHEMA**

The schema captures the tables as given in the Data model. The table names as written do not follow the naming convention used in the database although the names are same. This document also describes the relationship between these tables, describes the tables and then lists its columns and constraints.

*This documentation is subject to change as requirement analysis undergoes continuous reviews.*

# **LOOKUP TABLES**

**MethodOfMeasurement:**

This stores information about the process of collecting data.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| MethodMeasureID | INT | - | PK\_MethodOfMeasurements , | — |
| Description | Varchar (32) | Interview, Archive, Questionnaire | Not null | — |

**QuestionStatus:**

This table stores the status of a question.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| StatusID | Char(3) | {Act,Nac} | PK\_QuestionStatus | — |
| Description | Varchar(16) | {Active,Not Active} | Not null | — |

**Title:**

This table stores the titles in the database.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| TitleID | Varchar(16) | Mr,Mrs…….. | PK\_Title | — |
| Description | Varchar(64) | Mr,Mrs…….. | Not null | — |

**ResultType:**

This stores the type of reply a question can have.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| TypeID | Char(3) | {num,tex,dat,sel} | PK\_ResultType | — |
| Description | Varchar(32) | {Number, Text,Date,Selection} | Not null | — |

**IndicatorStatus:**

This table contains the status of an indicator.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| StatusID | Char(3) | {Act,Nac} | PK\_IndicatorStatus | — |
| Description | Varchar(16) | {Active,Not Active} | Not null | — |

**IndicatorClass:**

This stores information of the various sectors for monitoring and evaluation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| IndicatorClassID | Varchar(16) | — | PK\_IndicatorClass | — |
| Description | Varchar(64) | - | Not null | — |

**Selector:**

This stores information of the various languages a question can be written in.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| SelectorID | INT | — | PK\_Selector | — |
| Description | Varchar(64) | - | Not null | — |

**FrequencyOfMeasure:**

This stores information of the duration of measurement for an indicator.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| FrequencyID | Char(3) | — | PK\_FrequencyOfMeasure | — |
| Description | Varchar(32) | Weekly, Monthly, Yearly, | Not null | — |
| EffectiveStartDate | Date | - | Not Null | — |
| EffectiveEndDate | Date | — | — | — |

**ScheduleActiveStatus:**

This stores the Status of a scheduled indicator.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| StatusID | Char(3) | {Act,Nac} | PK\_ScheduleActiveStatus | — |
| Description | Varchar(16) | {Active,Not Active} | Not null |  |

**Gender:**

This stores the gender of human respondents.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| Sex | char(1) | {M,F} | PK\_Gender | — |
| Description | Varchar(6) | {Male,Female} | Not Null | — |

**MaritalStatus:**

This stores the marital status of human respondent.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| MaritalID | Char(1) | {M,S,D,X} | PK\_MaritalStatus | — |
| Description | Varchar(16) | {Married,Single,Divorced,Seperated} | Not Null | — |

**AddressType:**

This stores information on the type of addresses.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| AddressTypeID | Varchar(5) | {Con,Res} | PK\_AddressType | — |
| Description | Varchar(16) | {Contact,Residential} | Not null | — |

**Continent:**

This stores informations of all the continents

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| ContinentCode | Char(5) | — | PK\_Continents | — |
| Name | Varchar(16) | Africa, Asia, Australia,…etc | Not null | — |

**FacilityService:**

This stores the services rendered by a facility.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| ServiceTypeID | Char(16) | — | PK\_FacilityService | — |
| Name | Varchar(64) | Medical Service, Education, Entertainment,…etc | Not Null | — |

**FacilityContact:**

This stores the contacts of facilities.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| ContactID | INT Auto\_Increment | — | PK\_FacilityContacts | — |
| FacilityID | INT | — | PK\_FacilityContacts  FK\_FacilityContact\_Facility | — |
| TitleID | VARCHAR(16) | Mr, Miss, Mrs, Doctor, Principal, Chief,…etc | FK\_FacilityContact\_Title | — |
| ContactEmail | Varchar(32) | — | Not null | — |
| PhoneNumber | Varchar(32) | — | Not null | — |
| SurName | Varchar(32) | — | Not null | — |
| FirstName | Varchar(32) | — | Not null | — |
| MiddleName | Varchar(32) | — | — | — |

**FacilityType:**

This stores the type of facility available.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| FacilityTypeID | Char(3) | — | PK\_FacilityTypes | — |
| Name | VarChar(6) | School, Hospitals, Cinemas,…….etc | Not Null | — |

**FacilityStatus:**

This stores the status of a facility to be monitored.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| StatusID | Char(3) | {Act,Nac} | PK\_FacilityStatus | — |
| Description | Varchar(16) | {Active,Not Active} | Not null | — |

**DataSource:**

This stores information on the type of equipment used to carry out the evaluation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| SourceID | Varchar(16) | — | PK\_DataSources | — |
| Description | Varchar(64) | Laptops, Papers, Tablets…etc | Not Null | — |

**UserRole:**

This stores the roles a user can have.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| RoleID | Varchar(32) | — | PK\_UserRole | — |
| Description | Varchar(128  ) | Admin, TeamLead,…..etc | Not null | — |

**PermissionType:**

This stores information on the permissions that are granted to various roles.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| PermissionID | Varchar(10) | — | PK\_PermissionTypes | — |
| Description | Varchar(100) | Manage users, Manage teams, add photo…….etc | Not Null | — |

**UserStatus:**

This stores the status of users, it shows if users are active or inactive.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| UserStatusID | Char(3) | Nac, Act | PK\_UserStatus | — |
| Description | Varchar(16) | Not Active, Active | Not Null | — |

**UserLogin:**

This stores information about user login

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| Username | VARCHAR(32) | — | PK\_UserLogin | — |
| LoginTime | TIMESTAMP | — | PK\_UserLogin | — |
| LogoutTime | TIMESTAMP | — | — | — |

**Team:**

This stores information of the various teams that carry out evaluation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | — | **CONSTRAINT** | **DEFAULT VALUE** |
| TeamID | Varchar(16) | — | PK\_Team | — |
| Description | Varchar(32) | Team A, Team B, Team C, Team 1, Team 2, Team 3,…etc | Not Null | — |
| DateFormed | Timestamp | — | Not Null |  |

# **BASE TABLES**

**Indicator:**

This stores information of various indicators under a particular indicator class.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| IndicatorID | Auto\_increment | — | PK\_ Indicators | — |
| IndicatorClassID | VARCHAR(16) | — | PK\_ Indicators  FK\_Indicators\_IndicatorClass | — |
| Name | Varchar(128) | Accident Rate, Child Mortality Rate,…etc | Not null | — |
| StatusID | Char(3) | Act, Nac | FK\_Indicators\_ | — |

**Question:**

This stores question for every indicator.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| QuestionID | Auto increment | — | PK\_Questions | — |
| IndicatorID | INT (Unique) | — | FK\_Questions\_Indicators | — |
| SelectorID | INT(UNIQUE) | — | FK\_Questions\_Selector | — |
| QuestionStatusID | Char(3) | Act, Nac | FK\_Questions\_QuestionStatus |  |
| Question | Varchar(255) | How many children died last month? | — | — |
| Hint | Varchar(255) | — | Not null | — |
| Instructions | Varchar(255) | — | — | — |

**HumanRespondent:**

This stores details of a human respondent.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| HumanID | INT Auto\_increment | — | PK\_HumanRespondent | — |
| Surname | Varchar(32) | — | Not Null | — |
| OtherNames | Varchar(32) | — | — | — |
| Sex | Char(1) | F, M | FK\_HumanRespondent\_Gender | — |
| DateOfBirth | DATETIME | — | Not null | — |
| MaritalID | Char(5) | {M,S,D,X} | FK\_HumanRespondent**\_**MaritalStatus | — |

**Country:**

This stores information on all Countries.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| CountryCode | char(3) | — | PK\_Country | — |
| Name | Varchar(64) | Nigeria, Ghana,…etc | Not Null | — |
| ContinentCode | Char(5) | — | FK\_Continents\_Country | — |

**LevelName:**

This stores information of the levels in various countries.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| CountryCode | Char(3) | — | PK\_LevelNames\_Country  FK\_LevelNames\_Country | — |
| Level1name | Varchar(64) | State(Delta state,…etc) | — | — |
| Level2name | Varchar(64) | LGA(Ughelli south,…etc) | — | — |
| Level3name | Varchar(64) | Ward(olomu,…etc) | — | — |

**Zone:**

This stores information of the zones in a country.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| ZoneCode | Varchar(5) | — | PK\_Zone | — |
| CountryCode | Char(3) | — | FK\_Zone\_Country | — |
| Description | Varcahar(64) | North, South, East, West | Not null | — |

**AULevel1:**

This stores information on the first level of a country.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| CountryCode | Char(3) | — | PK\_ AULevel1  FK\_AULevel1\_Country | — |
| AULevel1ID | Varchar(5) | — | PK\_AULevel1 | — |
| Name | Varchar(64) | Abia, Cross Rivers, Delta,….etc | Not null | — |

**AULevel2:**

This stores information on the Second level of a country.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| CountryCode | Char(3) | — | PK\_ AULevel2  FK\_AULevel2\_ AULevel1 | — |
| AULevel1ID | Varchar(5) | — | PK\_AULevel2\_ AULevel1 | — |
| AULevel2ID | Varchar(5) | — | PK\_AULevel2 | — |
| Name | Varchar(64) | Ughelli-South lga, Abia lga,.…etc | Not null | — |

**AULevel3:**

This stores information on the third level of a country.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| CountryCode | Char(3) | — | PK\_ AULevel3  FK\_AULevel3\_ AULevel2 | — |
| AULevel1ID | Varchar(5) | — | PK\_ AULevel3,  FK\_AULevel3\_ AULevel2 | — |
| AULevel2ID | Varchar(5) | — | PK\_AULevel,  FK\_AULevel3\_ AULevel2 | — |
| AULevel3ID | Varchar(5) | — | PK\_AULevel3 | — |
| Name | Varchar(100) | Ward 1, ward2, ohia,….etc | Not null | — |

**Facility:**

This stores information of a facility.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| FacilityID | INT Auto\_Increment |  | PK\_Facility | — |
| FacilityTypeID | Char(3) | — | FK\_Facility\_FacilityTypes | — |
| Name | Varchar(64) | — | Not Null | — |
| StatusID | Char(3) | {Act,Nac} | FK\_Facility\_FacilityStatus | — |
| ServiceTypeID | Char(3) | — | FK\_Facility\_FacilityServices | — |

**User:**

This stores information of a user.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| Username | Varchar(32) | — | PK\_Users | — |
| Password | Varchar(255) | — | Not null | — |
| Surname | Varchar(32) | — | Not null | — |
| FirstName | Varchar(32) | — |  | — |
| RoleID | Char(32) | — | FK\_User\_UserRoles | — |
| UserStatusID | Char(3) | Act, Nac | FK\_Users\_UserStatus | — |

**TeamMember:**

This stores information on the members of a team.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| TeamID | Varchar(16) | — | PK\_TeamMembers  FK\_TeamMembers\_Team | — |
| Username | Varchar(32) | — | PK\_TeamMembers  FK\_ TeamMembers\_Users | — |
| SourceID | Char(16) | — | FK\_DataSources | — |

**Permission:**

This stores information on the roles and their permissions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| PermissionID | Varchar(32) | — | PK\_Permissions\_PermissionTypes  FK\_Permissions\_PermissionTypes | — |
| RoleID | Varchar(32) | — | PK\_Permissions\_UserRoles  FK\_Permissions\_UserRoles | — |

**TeamAreaOfCoverage:**

This stores information of areas to be covered by teams during evaluation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| AreaID | Auto\_Increment | — | PK\_AreaOfCoverage | — |
| TeamID | Varchar(16) | — | FK\_TeamAreaOfCoverage\_Teams | — |
| AULevel3ID | Varchar(5) | — | FK\_ TeamAreaOfCoverage\_AULevel3 | — |
| CountryCode | Char(3) | — | FK\_ TeamAreaOfCoverage\_AULevel3 | — |
| AULevel1ID | Varchar(5) | — | FK\_ TeamAreaOfCoverage\_AULevel3 | — |
| AULevel2ID | Varchar(5) | — | FK\_ TeamAreaOfCoverage\_AULevel3 | — |
| StartDate | DATETIME | — | Not null | — |
| EndDate | DATETIME | — | Not null | — |

**Respondent:**

This stores information on the type of contact encountered during evaluation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| RespondentID | INT Auto\_Increment | — | PK\_Respondent | — |
| DateVisited | TIMESTAMP | — | PK\_Respondent | — |
| Description | Varchar(255) | — | Not Null | — |
| FacilityID | INT | — | FK\_Respondent\_Facility | — |
| HumanID | Int | — | FK\_Respondent\_HumanRespondent | — |

**TeamRespondent:**

This keeps record of the respondents (human or facility) assigned to teams.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| TeamResID | INT | — | PK\_TeamRespondent, | — |
| RespondentID | INT | — | FK\_ TeamRespondent\_Respondent | — |
| DateVisited | TIMESTAMP |  | FK\_ TeamRespondent\_Respondent |  |
| TeamID | Varchar(16) | — | FK\_ TeamRespondent\_Team | — |
| StartDate | DATETIME | — | — | — |
| EndDate | DATETIME | — | — | — |

**Address:**

This stores the possible addresses of Respondents.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| AddressID | Auto\_Increment |  | PK\_Addresses | — |
| AddressTypeID | Varchar(5) | — | FK\_Addresses\_ AddressTypes | — |
| CountryCode | Char(3) | — | FK\_Addresses\_ AULevel3 | — |
| AULevel1ID | Varchar(5) | — | FK\_Addresses\_ AULevel3 | — |
| AULevel2ID | Varchar(5) | — | FK\_Addresses\_ AULevel3 | — |
| AULevel3ID | Varchar(5) | — | FK\_Addresses\_ AULevel3 | — |
| RespondentID | Varchar(6) | — | FK\_Addresses\_Respondent | — |
| Addressline1 | Varchar(255) | — | Not null | — |
| Addressline1 | Varchar(255) | — | — | — |

**ScheduledActiveIndicator:**

This stores scheduled questions for different indicators that would be used for an evaluation period.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| ScheduleID | Auto\_increment | — | PK\_ScheduledActiveIndicators | — |
| QuestionID | Auto\_increment | — | PK\_ScheduledActiveIndicator,  FK\_ScheduledActiveIndicators\_Questions | — |
| StatusID | Char(3) | {Act,Nac} | FK\_ScheduledActiveIndicators \_ScheduleActiveStatus | — |
| StartDate | DateTime | — | Not Null | — |
| EndDate | DateTime | — | Not Null | — |
| MethodMeasureID | Varchar(8) | — | FK\_ ScheduledActiveIndicators\_MethodOfMeasurements | — |
| FrequencyID | Char(3) | — | FK\_ ScheduledActiveIndicators\_FrequencyOfMeasures | — |
| TeamID | Varchar(5) | — | FK\_ ScheduledActiveIndicators\_Team | — |

**Measure:**

This keeps the responses gotten from either a facility or human respondent to questions used in an evaluation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN** | **DATATYPE** | **DOMAIN** | **CONSTRAINT** | **DEFAULT VALUE** |
| MeasureID | Auto\_increment | — | PK\_Measure, | — |
| QuestionID | INT | — | PK\_Measure,  FK\_Measure \_ScheduledActiveIndicator | — |
| IndicatorID | INT | — | PK\_Measure,  FK\_Measure \_ScheduledActiveIndicator | — |
| Collected On | Timestamp | — | Not Null | — |
| TeamResID | INT | — | FK\_Measure \_TeamRespondent | — |
| Username | Varchar(32) |  | FK\_Measure\_TeamMember | — |
| Answer | Varchar(255) |  | Not null | — |
| TeamID | Varchar(16) | — | FK\_Measure \_TeamMember | — |

**PRIMARY KEY CONSTRAINTS**

|  |  |  |
| --- | --- | --- |
| **CONSTRAINT** | **RELATION** | **COLUMN** |
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**FOREIGN KEY CONSTRAINTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CONSTRAINT** | **FOREIGN KEY COLUMN** | **FOREIGN COLUMN** | **ON DELETE** | **ON UPDATE** |
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