**Team Name: DataTitans**

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**Change Logs:**

1. Claim type table added
2. Relationship details tabulated
3. Address Table added
4. City Table added
5. SSN removed from Member table
6. Gender Table added
7. Disease Table added
8. Structural Changes

**Member Definition**

A member is anyone covered under a health insurance plan under the company policies; and is eligible for benefits during the tenure of the insurance plan.

**Business rules for member**

|  |  |  |
| --- | --- | --- |
| **Area** | **Number** | **Rule** |
| Member\_ID | IS01 | Unique identification ID for each member |
| Insurance\_status | IS02 | This is required to see if the insurance is active or expired. |
| Policy\_ID | ISO3 | The policy the member has subscribed to. It must be captured. |
| SSN | OS02 | SSN not required to be captured |
| Profession | OS03 | Profession must be tracked not required strictly. |

**Definition of Tables:**

**Member:** Contains a unique member id, first name and last name of the member, insurance status stating whether the member is insured by the company, a policy id stating the policy under which the member is insured, SSN of the member, and the profession of the member.

**Personal\_Info:** Contains personal information of the member such as; member id from the Member table, and SSN, date of birth, address, phone number and gender of the member.

**Policy:** This tables has unique policy id indicating a policy, member id from the member table, premium payable, coverage provided, start date of the policy and the end date of the policy for the member.

**Medical\_History:** This table lists the member id from the member table, any pre-existing disease, disability and addiction.

**Claim:** This table records data related to an individual claim. A unique claim id, member id from the member table, doctor id, hospital id, date of visit to a healthcare agency, the date when insurance was claimed and the claim amount.

**Claim Type:** This table consists of type id and type description. A claim type could either be cashless, full bill, etc.

**Address:** This table contains information of a member’s address. This may include the Address type, City, Zip Code.

**City:** City table contains the city and the zip code attributes.

**Gender:** This table contains Gender\_id which is an unique identifier for the Gender\_type, related to the Member table by Member\_id.

**Disease:** Contains Disease\_id, and name of disease.

**TABLES:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Member Table** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Member\_id | varchar(10) | not null | Y | N |
| Member\_fname | varchar(20) | null | N | N |
| Member\_name | varchar(20) | null | N | N |
| Member\_insurance\_status | varchar(1) | not null | N | N |
| Member\_policy\_id | varchar(10) | null | N | Y |
| Member\_profession | varchar(20) | not null | N | N |
| **Personal\_Info Table** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Member\_id | varchar(10) | not null | Y | Y |
| SSN | varchar(10) | null | N | N |
| DOB | Date | not null | N | N |
| Phone | varchar(10) | null | N | N |
| Gender | varchar(1) | null | N | N |
| **Policy Table** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Policy\_id | varchar(10) | not null | Y | N |
| Member\_id | varchar(10) | not null | N | Y |
| Policy\_premium | double | not null | N | N |
| Policy\_coverage | double | not null | N | N |
| Policy\_start\_date | Date | not null | N | N |
| Policy\_expiry\_date | Date | not null | N | N |
| **Medical\_History Table** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Member\_id | varchar(10) | Not Null | Y | N |
| Medical\_History\_past\_disease | varchar(40) | Null | N | N |
| Medical\_History\_disability | varchar(40) | Null | N | N |
| Medical\_History\_addiction | varchar(40) | Null | N | N |
| **Claim Table** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Claim\_id | varchar(10) | Not Null | Y | N |
| Member\_id | varchar(10) | Not Null | N | Y |
| Date\_of\_Visit | Date | Not Null | N | N |
| Claim\_date | Date | Not Null | N | N |
| Claim\_amount | double | Not Null | N | N |
| Doctor\_id | varchar(10) | Not Null | N | Y |
| Hospital\_id | varchar(10) | Not Null | N | Y |
| Disease\_id | varchar(10) | Not Null | N | Y |
| **Claim Type** | | | | |
| **Attribute Name** | **Data Type** | **Nullability** | **PK** | **FK** |
| Claim\_Type\_id | varchar(10) | Not Null | Y | N |
| Claim\_Type\_description | varchar(25) | Not Null | N | N |
| **Address** | | | | |
| **Attribute Name** | **Data Type** | **Nullability** | **PK** | **FK** |
| Member\_id | varchar(10) | Not Null | Y | Y |
| Address\_type | varchar(20) | Not Null | N | N |
| Address\_street\_name | varchar(30) | Not Null | N | N |
| Address\_zip\_code | varchar(10) | Not Null | N | Y |
| **City** | | | | |
| **Attribute Name** | **Data Type** | **Nullability** | **PK** | **FK** |
| City\_zip | varchar(5) | Not Null | Y | Y |
| City | varchar(10) | Not Null | N | N |
| **Gender** | | | | |
| **Attribute Name** | **Data Type** | **Nullability** | **PK** | **FK** |
| Gender\_id | varchar(5) | Not Null | Y | N |
| Gender\_type | varchar(10) | Not Null | N | N |
| Member\_id | varchar(10) | Not Null | N | Y |
| **Disease** | | | | |
| Disease\_id | varchar(10) | Not Null | Y | Y |
| Disease\_name | varchar(20) | Not Null | N | N |

**RELATIONSHIPS**

Member table consists information about each member. Each member in the Member table is related to Person Info table via Member\_Id.

Personal\_Info table contains personal and sensitive information of a member and is linked to the member via the Member\_Id

Policy table includes information related to a member’s policy. It is linked to the Member table via Policy ID and Member\_ID

Medical\_History table is linked with the Member table via Member\_ID and it contains the medical conditions of the members.

Claim table contains information regarding the claims of the members and is linked to the member via Member\_Id of the Member table.

Claim table is linked to the Disease table via the Disease\_id to get information regarding the disease leading to the claim.

|  |  |  |  |
| --- | --- | --- | --- |
| **From** | **To** | **Dependency** | **Foreign Key** |
| Member | Person\_Info | 1-1 | Member\_id |
| Policy | Member | 1-1 | Policy\_id |
| Medical\_History | Member | 1-1 | Member\_id |
| Claim | Member | \*-1 | Member\_id |
| Claim | Disease | 1-1 | Disease\_id |