Data Model:- SOCIAL MESSAGING PLATFORM

# USER\_DIM

|  |  |
| --- | --- |
| USER\_ID | PRIMARY KEY |
| FIRST\_NAME | VARCHAR(100) |
| LAST\_NAME | VARCHAR(100) |
| GENDER | ENUM(‘M’,’F’) |
| COUNTRY\_ID | FOREIGN KEY REFERENCE COUNTRY\_DIM |
| Mobile Number | NUMBER(10,0) |
| DOB | DATE |
| JOINED\_DATE | DATETIME |

# COUNTRY\_DIM

|  |  |
| --- | --- |
| COUNTRY\_ID | PRIMARY KEY |
| COUNTRY\_CODE | VARCHAR(3) |
| COUNTRY\_NAME | VARCHAR(100) |

# GROUP\_DIM

|  |  |
| --- | --- |
| GROUP\_ID | PRIMARY KEY |
| GROUP\_NAME | VARCHAR(25) |
| DESCRIPTION | VARCHAR(200) |
| STATUS | ENUM(‘ADMIN’,’ALL’) |

# GROUP\_MEMBER\_DIM

|  |  |
| --- | --- |
| GROUP\_ID | FOREIGN KEY REFERENCE GROUP\_DIM |
| USER\_ID | NUMBER(7,6) |
| JOINED\_DATE | DATETIME |
| LEFT\_DATE | DATETIME |

# CONVERSATION\_DIM

|  |  |
| --- | --- |
| CONVERSATION\_ID | PRIMARY KEY |
| CONVERSATION\_TYPE | ENUM(‘SINGLE’,’GROUP’) |

# SINGLE\_CONVERSATION\_DIM

|  |  |
| --- | --- |
| CONVERSATION\_ID | PRIMARY KEY |
| USER1\_ID | FOREIGN KEY REFERECES CONVERSATION\_DIM |
| USER2\_ID | FOREIGN KEY REFERECES CONVERSATION\_DIM |

# GROUP\_CONVERSATION\_DIM

|  |  |
| --- | --- |
| CONVERSATION\_ID | PRIMARY KEY |
| GROUP\_ID | FOREIGN KEY REFERENCES GROUP\_DIM |

# PHOTO\_DIM

|  |  |
| --- | --- |
| PHOTO\_ID | PRIMARY KEY |
| MESSAGE\_ID | FOREIGN KEY REFERENCES MESSAGE\_DIM |
| PHOTO\_URL | TEXT |
| PHOTO\_SIZE | NUMBER(10) |

# VIDEO\_DIM

|  |  |
| --- | --- |
| VIDEO\_ID | PRIMARY KEY |
| MESSAGE\_ID | FOREIGN KEY REFERENCES MESSAGE\_DIM |
| VIDEO\_URL | TEXT |
| VIDEO\_SIZE | NUMBER(10) |

# FILE\_DIM

|  |  |
| --- | --- |
| FILE\_ID | PRIMARY KEY |
| MESSAGE\_ID | FOREIGN KEY REFERENCES MESSAGE\_DIM |
| FILE\_URL | TEXT |
| FILE\_SIZE | NUMBER(10) |

# BLOB\_DIM

|  |  |
| --- | --- |
| BLOB\_ID | PRIMARY KEY |
| MESSAGE\_ID | FOREIGN KEY REFERENCES MESSAGE\_DIM |
| BLOB\_URL | TEXT |
| BLOB\_SIZE | NUMBER(10) |

# LOCATION\_DIM

|  |  |
| --- | --- |
| LOC\_ID | PRIMARY KEY |
| MAP\_GRID\_ID | FOREIGN KEY REFERENCES MAP\_GRID\_DIM |

# MAP\_GRID\_DIM

|  |  |
| --- | --- |
| MAP\_GRID\_ID | PRIMARY KEY |
| LATITIUDE | NUMBER(7,7) |
| LONGITUDE | NUMBER(7,7) |

# MESSAGE\_DIM

|  |  |
| --- | --- |
| MESSAGE\_ID | PRIMARY KEY |
| CONVERSATION\_ID | FOREIGN KEY REFERENCES CONVERSATION\_DIM |
| SENDER\_ID | FOREIGN KEY REFERENCES USER\_DIM |
| RECEIVER\_ID | FOREIGN KEY REFERENCES USER\_DIM |
| MESSAGE\_TEXT | TEXT |
| MESSAGE\_TYPE | ENUM(‘TEXT’,’MULTIMEDIA\_FILES’) |
| TIMESTAMP | DATETIME WITH TIMESTAMP |
| READ \_STATUS | BOOLEAN |
| LOCATION\_DIM | FOREIGN KEY REFERENCES LOCATION\_DIM |

DESCRIPTION

1. USER\_DIM: Stores information about users, such as their name, gender, country, mobile number, date of birth, and when they joined the platform.
2. COUNTRY\_DIM: Stores information about countries, including their name and country code.
3. GROUP\_DIM: Stores information about groups, including their name, description, and status.
4. GROUP\_MEMBER\_DIM: Connects users to the groups they belong to and tracks when they joined and left the group.
5. CONVERSATION\_DIM: Stores information about conversations, including whether it is a single or group conversation.
6. SINGLE\_CONVERSATION\_DIM: Connects two users in a single conversation.
7. GROUP\_CONVERSATION\_DIM: Connects a group to a conversation.
8. PHOTO\_DIM: Stores information about photos, including their URL and size, and connects them to a message.
9. VIDEO\_DIM: Stores information about videos, including their URL and size, and connects them to a message.
10. FILE\_DIM: Stores information about files, including their URL and size, and connects them to a message.
11. BLOB\_DIM: Stores information about blobs, including their URL and size, and connects them to a message.
12. LOCATION\_DIM: Stores information about a location, including its latitude and longitude, and connects it to a message.
13. MESSAGE\_DIM: Stores information about messages, including the conversation it belongs to, sender and receiver, message text, message type, timestamp, and read status.