

Exercise 3) Publication Usage

1. Publication Table:

Table Name: Publication
pub_id (Primary Key, INT)
pub_title (VARCHAR(100), Not Null)
last_rev (DATE, Not Null)

• Attributes:

- **pub_id (SERIAL, Primary Key):** An integer value serving as the primary key of the table, uniquely identifying each publication. It is auto-generated using the SERIAL data type.
- **pub_title (VARCHAR(100), Not Null):** A string representing the title of the publication.
- **last_rev (DATE, Not Null):** A date representing the date of the last revision of the publication.

2. MonthlyUsage Table:

Table Name: MonthlyUsage
monthly_usage_id (Primary Key, INT)
month (DATE, Not Null)
pub_id (INT, Not Null, Foreign Key)

• Attributes:

- **monthly_usage_id:** An integer value serving as the primary key of the table, uniquely identifying each monthly usage entry. It is auto-generated using the **SERIAL** data type.
- **month:** A date representing the month for which the usage is recorded.
- **pub_id:** An integer value representing the publication associated with the monthly usage. It is a foreign key referencing the **pub_id** column in the **Publication** table.

- **Association:** One-to-Many relationship between **Publication** and **MonthlyUsage**. Each publication can have multiple monthly usage entries.

3. DailyUsage Table:

Table Name: DailyUsage
daily_usage_id (Primary Key, INT)
date (DATE, Not Null)
usage (INT, Not Null)
monthly_usage_id (INT, Not Null, Foreign Key)

• Attributes:

- **daily_usage_id:** An integer value serving as the primary key of the table, uniquely identifying each daily usage entry. It is auto-generated using the **SERIAL** data type.
- **date:** A date representing the specific date for which the usage is recorded.
- **usage:** An integer value representing the usage on the given date.
- **monthly_usage_id:** An integer value representing the monthly usage associated with the daily usage. It is a foreign key referencing the **monthly_usage_id** column in the **MonthlyUsage** table.

- **Association:** One-to-Many relationship between **MonthlyUsage** and **DailyUsage**. Each monthly usage entry can have multiple daily usage entries.

