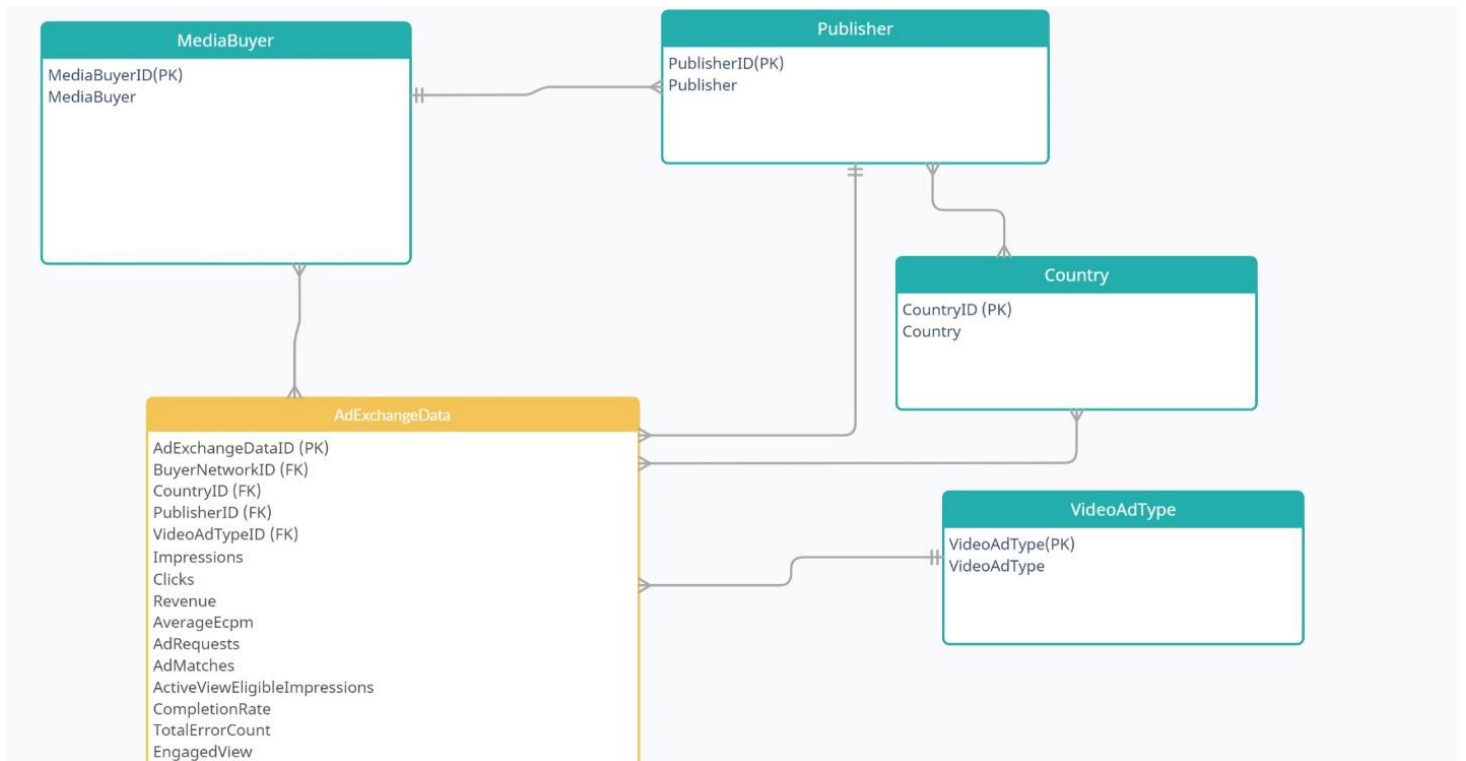


First Quarter Ad Performance Database

- ERP Design



- Database & Associated Tables

```
mysql> use First_Quarter_Ad_Performance;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+-----+
| Tables_in_First_Quarter_Ad_Performance |
+-----+
| AdExchange                             |
| Country                                 |
| MediaBuyer                              |
| Publisher                               |
| VideoAdType                             |
+-----+
5 rows in set (0.00 sec)
```

```
mysql> describe Publisher;
+-----+-----+-----+-----+-----+-----+
Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
Publisher_ID | bigint        | NO   | PRI | NULL    |      |
Publisher    | varchar(255)  | YES  |     | NULL    |      |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

26 rows - Game Publishers

```
mysql> describe MediaBuyer;
+-----+-----+-----+-----+-----+-----+
Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
Media_buyer_ID | varchar(255)  | NO   | PRI | NULL    |      |
Mediabuyer    | varchar(255)  | YES  |     | NULL    |      |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

350 rows - Media Buyers

```
mysql> describe Country;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Country_ID     | int           | NO   | PRI | NULL    |       |
| Country        | varchar(255)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

226 rows - Countries

```
mysql> describe VideoAdType;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Video_ad_type_ID | int           | NO   | PRI | NULL    |       |
| Video_ad_type    | varchar(255)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

8 rows -Ad Types

```
mysql> describe AdExchange;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Ad_Exchange_ID | int           | NO   | PRI | NULL    | auto_increment |
| Media_buyer_ID | varchar(255)  | YES  | MUL | NULL    |                 |
| Country_ID     | int           | YES  | MUL | NULL    |                 |
| Video_ad_type_ID | int           | YES  | MUL | NULL    |                 |
| Publisher_ID   | bigint        | YES  | MUL | NULL    |                 |
| Ad_Exchange_impressions | int           | YES  |     | NULL    |                 |
| Ad_Exchange_clicks | int           | YES  |     | NULL    |                 |
| Ad_Exchange_revenue | decimal(10,2) | YES  |     | NULL    |                 |
| Ad_Exchange_average_eCPM | decimal(10,2) | YES  |     | NULL    |                 |
| Ad_Exchange_ad_requests | int           | YES  |     | NULL    |                 |
| Ad_Exchange_Ad_Match | int           | YES  |     | NULL    |                 |
| Ad_Exchange_Active_View_eligible_impressions | int           | YES  |     | NULL    |                 |
| Completion_rate | decimal(5,2)  | YES  |     | NULL    |                 |
| Total_error_count | int           | YES  |     | NULL    |                 |
| Engaged_view   | int           | YES  |     | NULL    |                 |
+-----+-----+-----+-----+-----+-----+
15 rows in set (0.00 sec)
```

~15,000 rows of Ad Performance Data

- Queries

Query 1: What are the top 10 media buyers for north America (USA & Canada).

It is a JOIN query that includes Aggregation, Sorting & Filtering.

Query 2: Which of the top 3 publishers brought in the most revenue last quarter?

It is an aggregation and sorting query.

Query 3: Here I have tried to create a stored procedure that retrieves the best video ad type based on ad revenue for the first 5 media buyers.

Query 4: Which media buyer has the most error rate and in which 10 countries?

This query aggregates, sorts and filters datasets 3 tables.

Query 5: Understand the correlation between CPM and Engaged View? –

Here I will use a stored function (Pearson correlation coefficient)