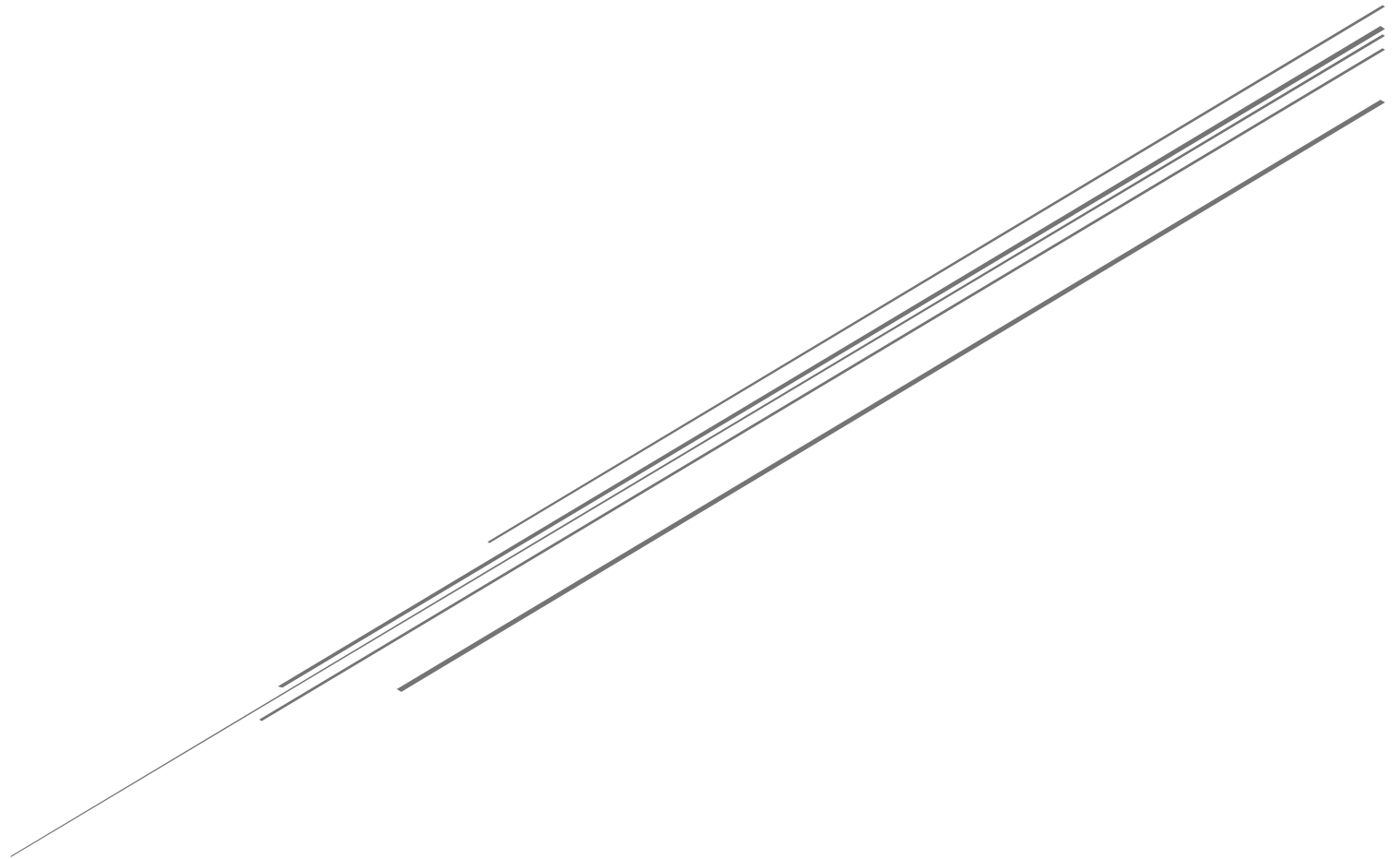


# MUSIC STREAMING APP

Database Management System Project



Dated: May 2, 2025

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<b>GitHub Link:</b>	<a href="https://github.com/Hassan-Anwar1/Music-Streaming-App-in-DBMS">https://github.com/Hassan-Anwar1/Music-Streaming-App-in-DBMS</a>

# Project Description

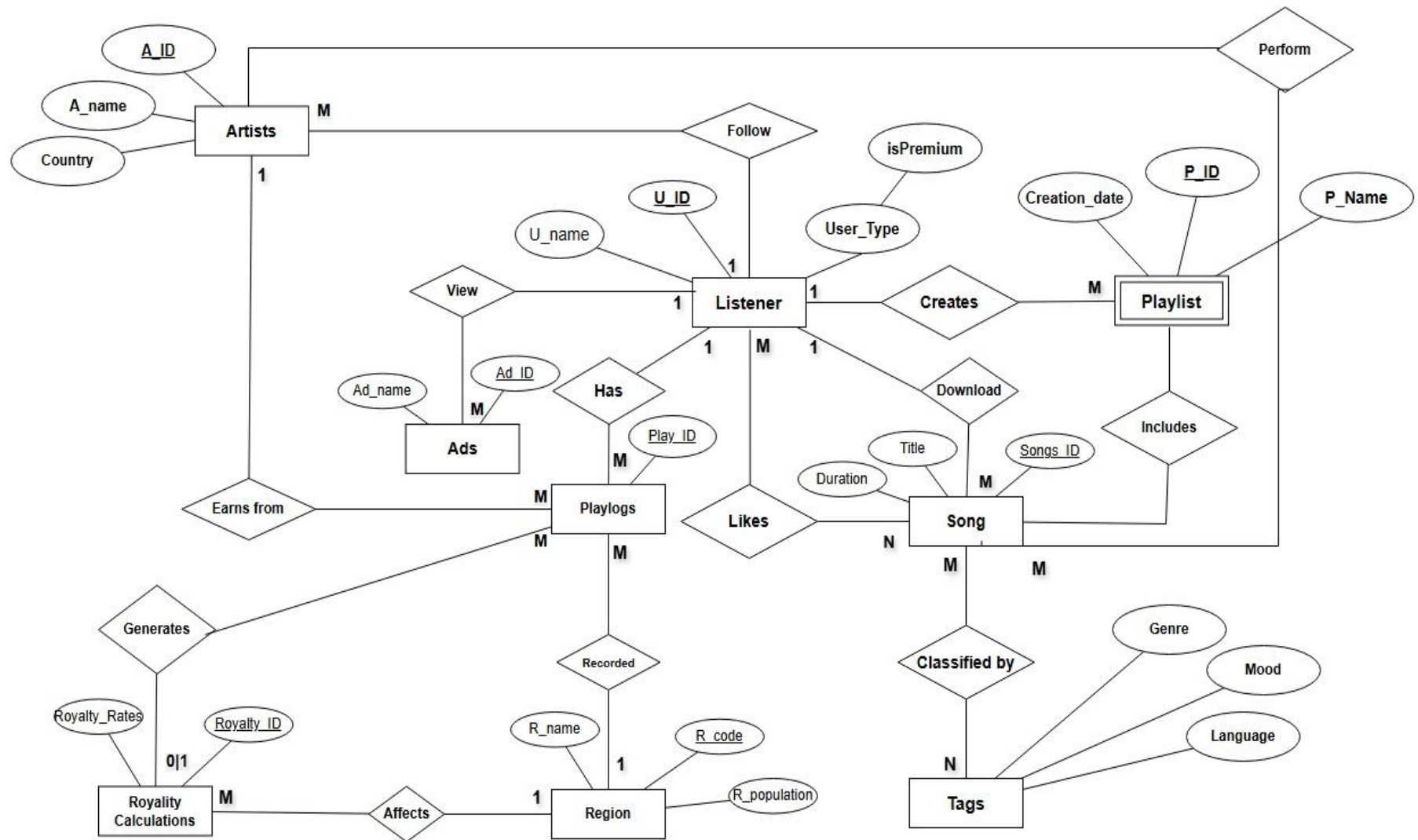
This project is a music streaming platform where users can listen to songs, create custom playlists, like their favorite tracks, and follow artists they enjoy. Each song is tagged with details such as genre, mood, and language to help users discover music that matches their taste.

The platform supports both premium and non-premium users. Premium users can download songs and listen offline without interruptions, while non-premium users listen with ads. All ads shown to non-premium users are tracked and logged for billing purposes.

Artist earnings are automatically calculated based on how many times their songs are played and the regions from which users are listening. This ensures a fair and transparent way of distributing revenue to artists.

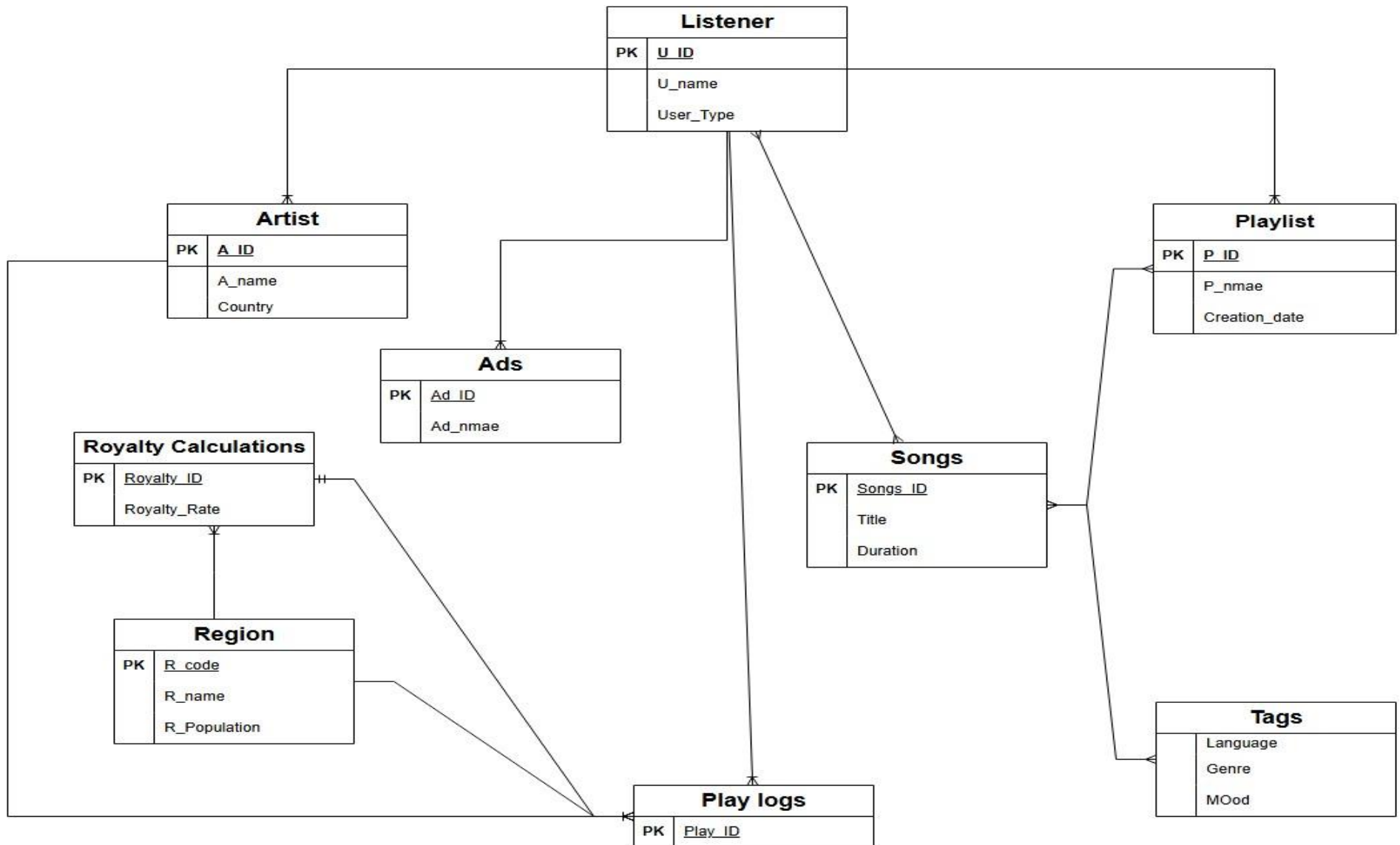
# Entity Relationship Diagram

## Chen Model



# Entity Relationship Diagram

## Crow Foot Model



# Table Schema

- User (U\_id, U\_name, U\_type)
- Artist (A\_id, A\_name, Country)
- Playlist (P\_id, P\_name, Creation\_date)
- Songs (Songs\_id, Title, Duration)
- Tags (Tag\_id, Language, Genre, Mood)
- Region (R\_code, R\_name, R\_Population)
- Royalty\_Calculations (Royalty\_id, Royalty\_Rates)
- Ads (Ad\_id, Ad\_name, U\_type)
- Play\_logs (Play\_id)

# Visual Representation of Tables

Music Streaming App is our Project Related Database

```
mysql> show databases;
+-----+
| Database |
+-----+
| college  |
| information_schema |
| music_streaming_app |
| mysql    |
| performance_schema |
| student  |
| sys      |
+-----+
7 rows in set (0.00 sec)
```

```
mysql> use Music_streaming_app;
```

```
Database changed
```

```
mysql> show tables;
```

Tables_in_music_streaming_app
ads
artist
play_logs
playlist
region
royalty_calculations
songs
tags
user

```
9 rows in set (0.00 sec)
```

```
mysql> desc user;
```

Field	Type	Null	Key	Default	Extra
U_id	int	NO	PRI	NULL	
U_name	varchar(15)	YES		NULL	
U_type	tinyint(1)	YES		NULL	

```
3 rows in set (0.00 sec)
```



```
mysql> desc artist;
```

Field	Type	Null	Key	Default	Extra
A_id	int	NO	PRI	NULL	
A_name	varchar(15)	YES		NULL	
Country	varchar(10)	YES		NULL	

```
3 rows in set (0.00 sec)
```

```
Error 1146 (42002): Table 'music_streaming_app.playlist' doesn't exist
```

```
mysql> desc playlist;
```

Field	Type	Null	Key	Default	Extra
P_id	int	NO	PRI	NULL	
P_name	varchar(15)	YES		NULL	
Creation_date	int	YES		NULL	

```
mysql> desc songs;
```

Field	Type	Null	Key	Default	Extra
S_id	int	NO	PRI	NULL	
Title	varchar(15)	YES		NULL	
Duration	int	YES		NULL	

```
3 rows in set (0.00 sec)
```

```
mysql> desc tags;
```

Field	Type	Null	Key	Default	Extra
Tag_id	int	NO	PRI	NULL	
language	varchar(10)	YES		NULL	
genre	varchar(10)	YES		NULL	
mood	varchar(10)	YES		NULL	

```
4 rows in set (0.01 sec)
```

```
mysql> desc ads;
```

Field	Type	Null	Key	Default	Extra
Ad_id	int	NO	PRI	NULL	
Ad_name	varchar(20)	YES		NULL	

```
2 rows in set (0.00 sec)
```

```
mysql> desc region;
```

Field	Type	Null	Key	Default	Extra
R_code	int	NO	PRI	NULL	
R_name	varchar(20)	YES		NULL	
R_population	int	YES		NULL	

```
3 rows in set (0.00 sec)
```

```
mysql> desc play_logs;
```

Field	Type	Null	Key	Default	Extra
Play_id	int	NO	PRI	NULL	

1 row in set (0.00 sec)

```
mysql> desc royalty_calculations;
```

Field	Type	Null	Key	Default	Extra
Royalty_id	int	NO	PRI	NULL	
Royalty_rate	int	YES		NULL	

2 rows in set (0.00 sec)