IT 214 Database Fundamentals

Fall 2019 – DL1

Destiny 2 Community

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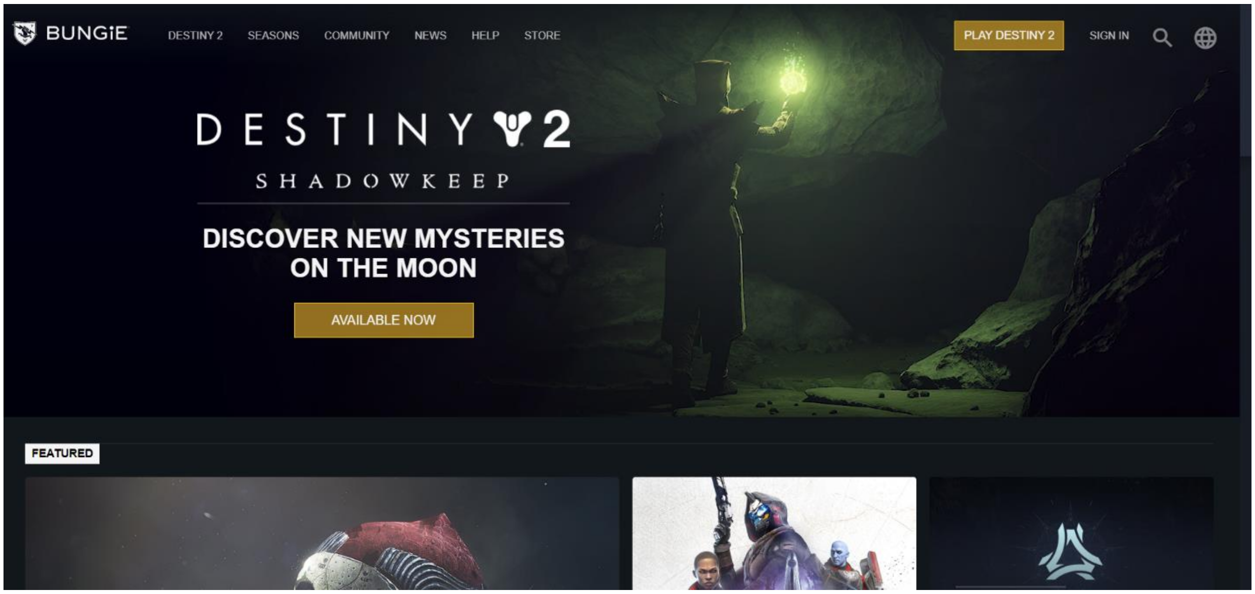


Section 1:

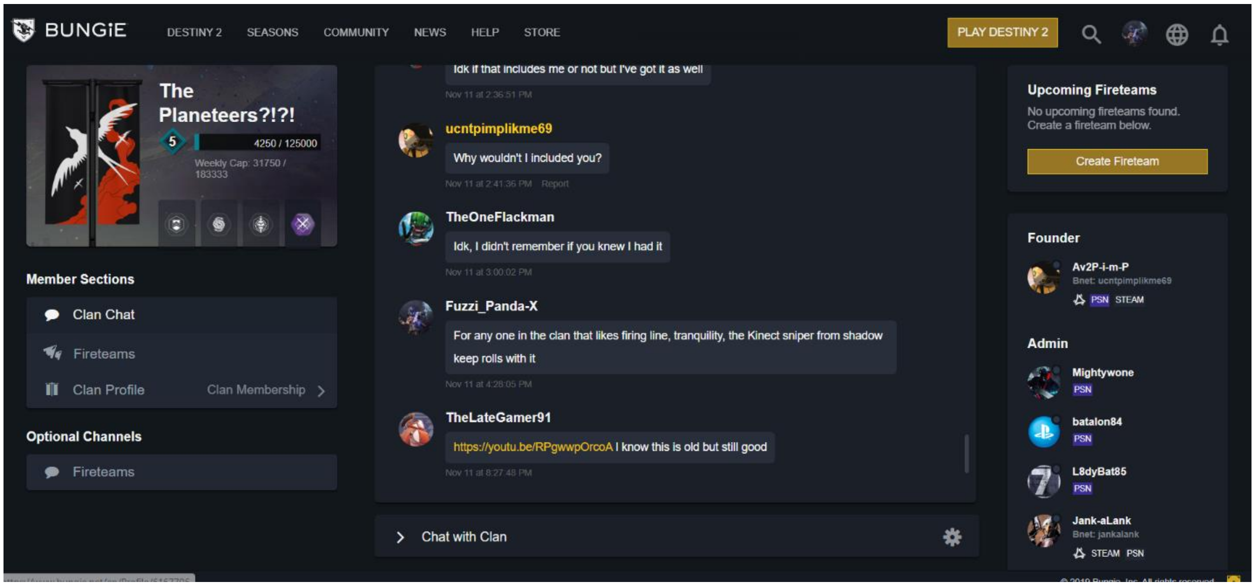
1.1 Bungie

https://www.bungie.net/

The Communities that make up Destiny 2

1.2 My Clan

URL: https://www.bungie.net/en/ClanV2/Chat?groupId=2161489



Idk if that includes me or not but I've got it as well

Nov 11 at 2:36:51 PM

ucntpimplikme69

Why wouldn't I included you?

Nov 11 at 2:41:36 PM Report

TheOneFlackman

Idk, I didn't remember if you knew I had it

Nov 11 at 3:00:02 PM

Fuzzi_Panda-X

For any one in the clan that likes firing line, tranquility, the Kinect sniper from shadow keep rolls with it

Nov 11 at 4:28:05 PM

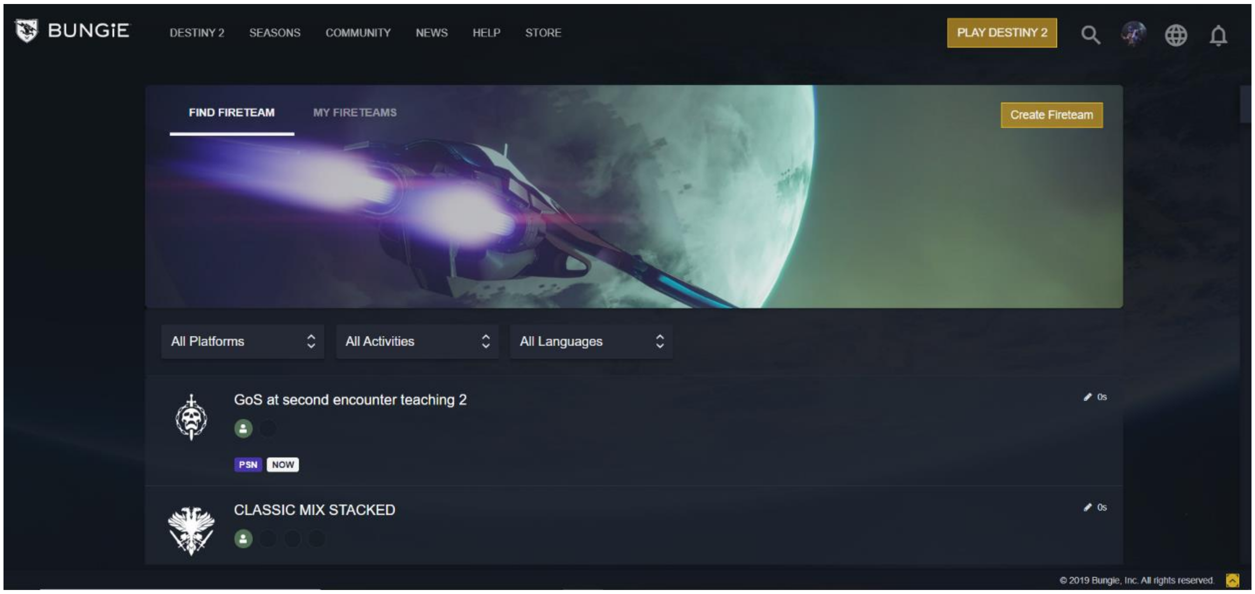
TheLateGamer91

https://youtu.be/RPgwwpOrcoA I know this is old but still good

Nov 11 at 8:27:48 PM

1.3 Firteams

URL: https://www.bungie.net/en/ClanV2/FireteamSearch?activityType=0&platform=0



GoS at second encounter teaching 2

CLASSIC MIX STACKED

Section 2: Database Description

2.1 Bungie

Bungie is a video game development company currently in Bellevue, Washington. Bungie was founded in 1991. When the people at Bungie were forming their studio they did it with two goals in mind making really great games with the latest technology and sell enough copies of their games to fund their studio. They have developed both the Halo franchise and their current franchise Destiny. Destiny is a first-person looter shooter with unique story telling and interesting game mechanics. Destiny became more than just a game it also became a community. Within the game there is a system called Clans were you and your friends can form a group with a special name you guys give it.

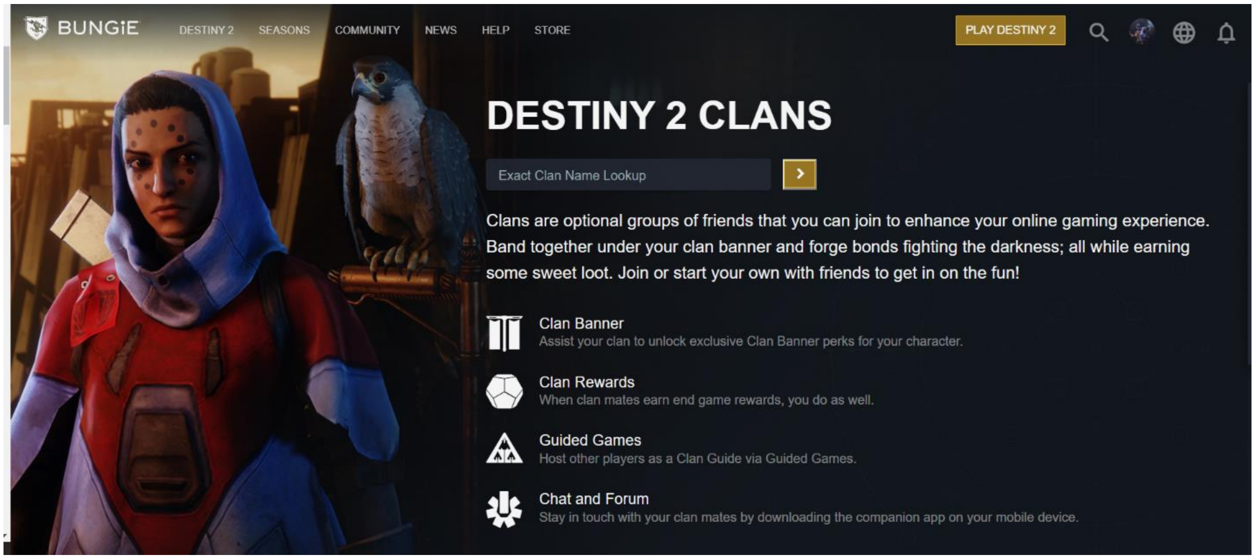
Source: https://www.bungie.net/en/AboutUs/Index#!page=index

2.2 Destiny Community

The Destiny community is made of a few different community pieces. These community pieces are a way to find other to play and socialize with. Together these pieces make the Destiny experience that much greater. My database will cover two aspects of the community that deal with most of the in-game community activities. Descriptions of the two that will be covered in this database are below. First being clans and the second being fireteams.

Clans are groups of community members within the game Destiny 2. Clans allow people to have an easier time in completing objectives within the game and providing a more enjoyable experience. Clans are broken up by a founder, admins and then clan members. Clan founders are those who create the clan and are the leaders, admins help maintain order and have some founder responsibilities like approving new members of a clan.

Source: https://www.bungie.net/en/ClanV2/MyClans



DESTINY 2 CLANS

Clans are optional groups of friends that you can join to enhance your online gaming experience. Band together under your clan banner and forge bonds fighting the darkness; all while earning some sweet loot. Join or start your own with friends to get in on the fun!

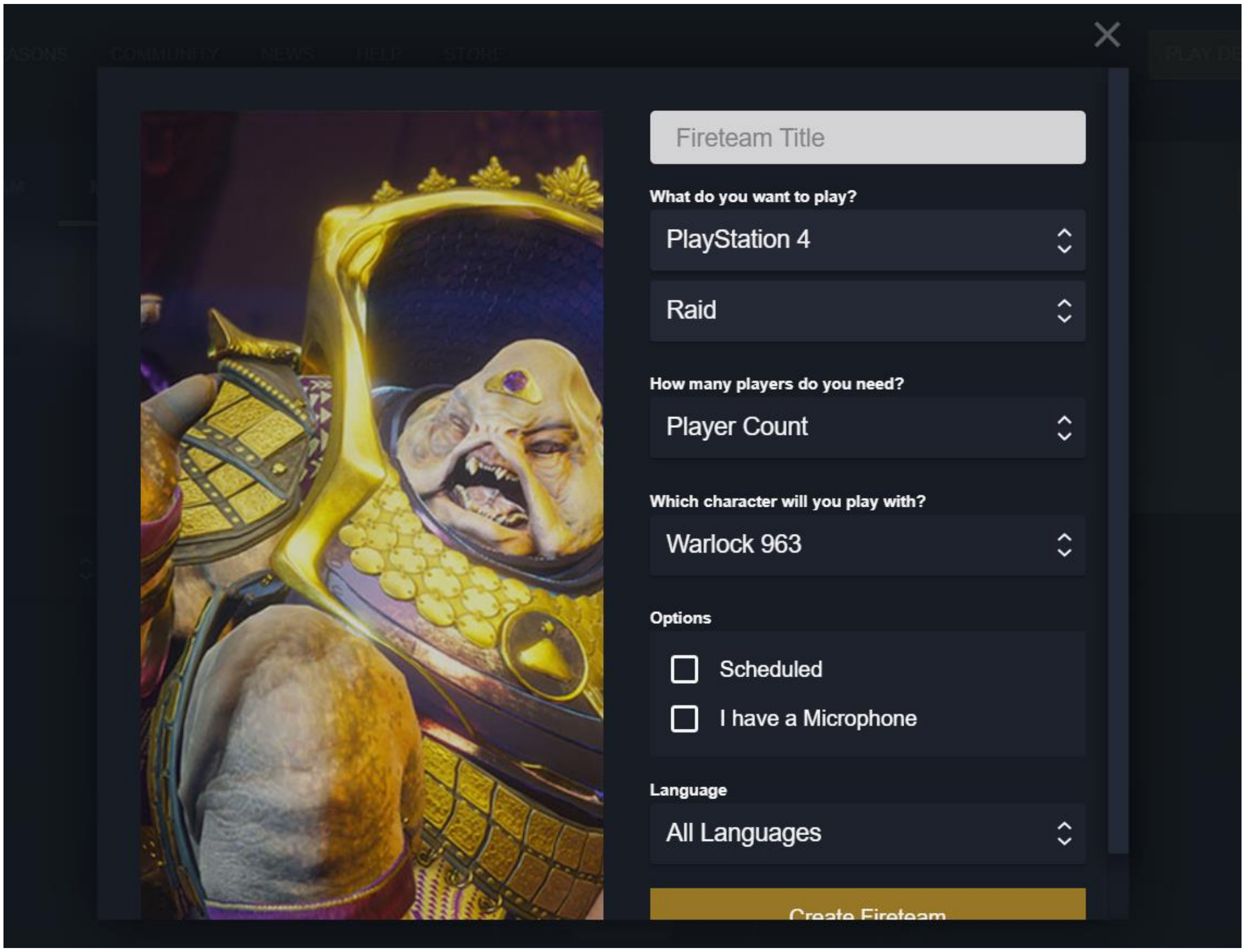
Clan Banner
Assist your clan to unlock exclusive Clan Banner perks for your character.

Clan Rewards
When clan mates earn end game rewards, you do as well.

Guided Games
Host other players as a Clan Guide via Guided Games.

Chat and Forum
Stay in touch with your clan mates by downloading the companion app on your mobile device.

Fireteams are how players are grouped together in Destiny. They consist of 3 players from the game. The 3 players can be any character from the game. The system in place makes it easier to find people to play with when friends are unavailable. In order to find a fireteam a person makes a post, where they name the activity they are trying to complete, and the specifications of what kind of fireteam they are looking to team up with.



Fireteam Title

What do you want to play?

PlayStation 4

Raid

How many players do you need?

Player Count

Which character will you play with?

Warlock 963

Options

□ Scheduled

□ I have a Microphone

Language

All Languages

Source: https://www.bungie.net/en/ClanV2/FireteamSearch?activityType=0&platform=0

2.3 Managing the Destiny Community

My database will be managing a small portion of the Destiny community. It will allow players to find other players and groups of players. It will also allow access to in game character information for players and the activities in which a player can participate in.

- Players (or account holders)
- Fireteams
- Clans
- Characters
- Class Types
- Activities

Section 3: Database Requirements

The following requirements were identified for the database:

R1: The database will keep track of the following types of items: Players, clan Members, Fireteam Members, Characters and their class, and types of Activities in the game.

R2: Player attributes are as listed: an player name, years played, a picture, the platform they play on (PC/PS4/XBOX/Stadia), and a clan tag if applicable.

R3: Players also have a description about their rank within player versus player activities.

R4: A player has one description. One player description belongs to a player.

R5: Players make a clan. Clans have clan names and a member count. Clans are broken down by clan members.

R6: Clan members will be organized by their roles in a clan, i.e founder, admin or just a regular member (no responsibility other than participating with the clan). Clan members have their account name, account photo and their role title.

R7: Clans can have one or more clan members. There can be one or more clan members in a Clan

R8: Players make fireteams. Fireteam attributes are: title, platform, activity, player count, character to be played

R9: Fireteams consist of fireteam members which are all have attributes; account name, character type, character class.

R:10 One Fireteam consist of one to three fireteam members. One to three fireteam member can be apart of a fireteam

R11: Activities are things clans and fireteams can complete in Destiny. Activities have a name and a classification.

R12: Players make character. Characters are broken down by name and race (exo, awoken, human)

R13: A player can have one to three characters. One to 3 characters can have one player

R14: Characters are made of class types. Class types have a name, energy type, and path type

R15: Characters can have many class types. One class type belongs to a character.

R16: Many clan members can participate in activities. Many activities are participated by clan members

R17: Many fireteam members can participate in activities. Many activities are participated by fireteam members.

Section 4: Entities

The following entities were identified:

- Player
- Player description
- Clan
- Clan member
- Fireteam
- Fireteam member
- Character
- Class type
- Activity
- Clan Activity (Bridge)
- Fireteam Activity (Bridge)

Section 5: Relationships

The following relationships were identified:

Player **has a** player description

Clan members **are a type of** player

Clan members **have roles** in a clan

Fireteam members **are a type of** player

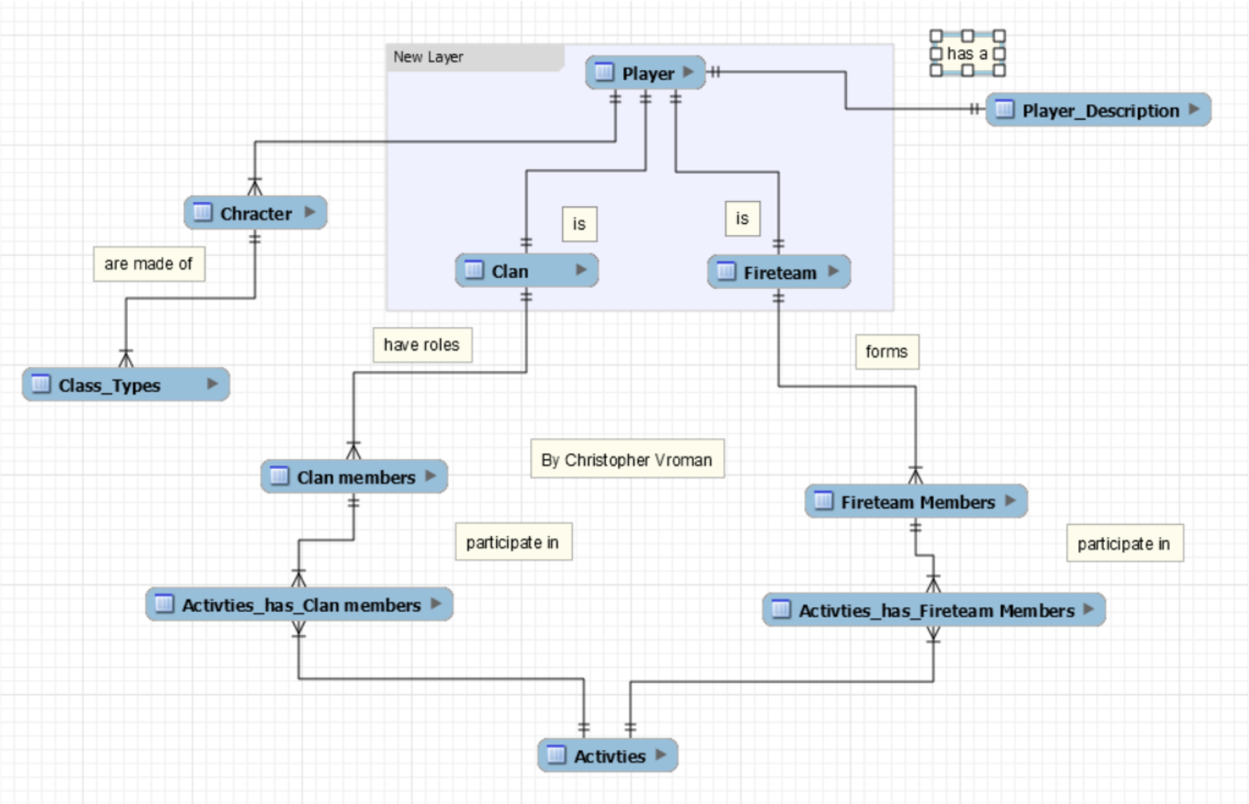
Fireteam members **form a** fireteam

Characters **are made of** class types

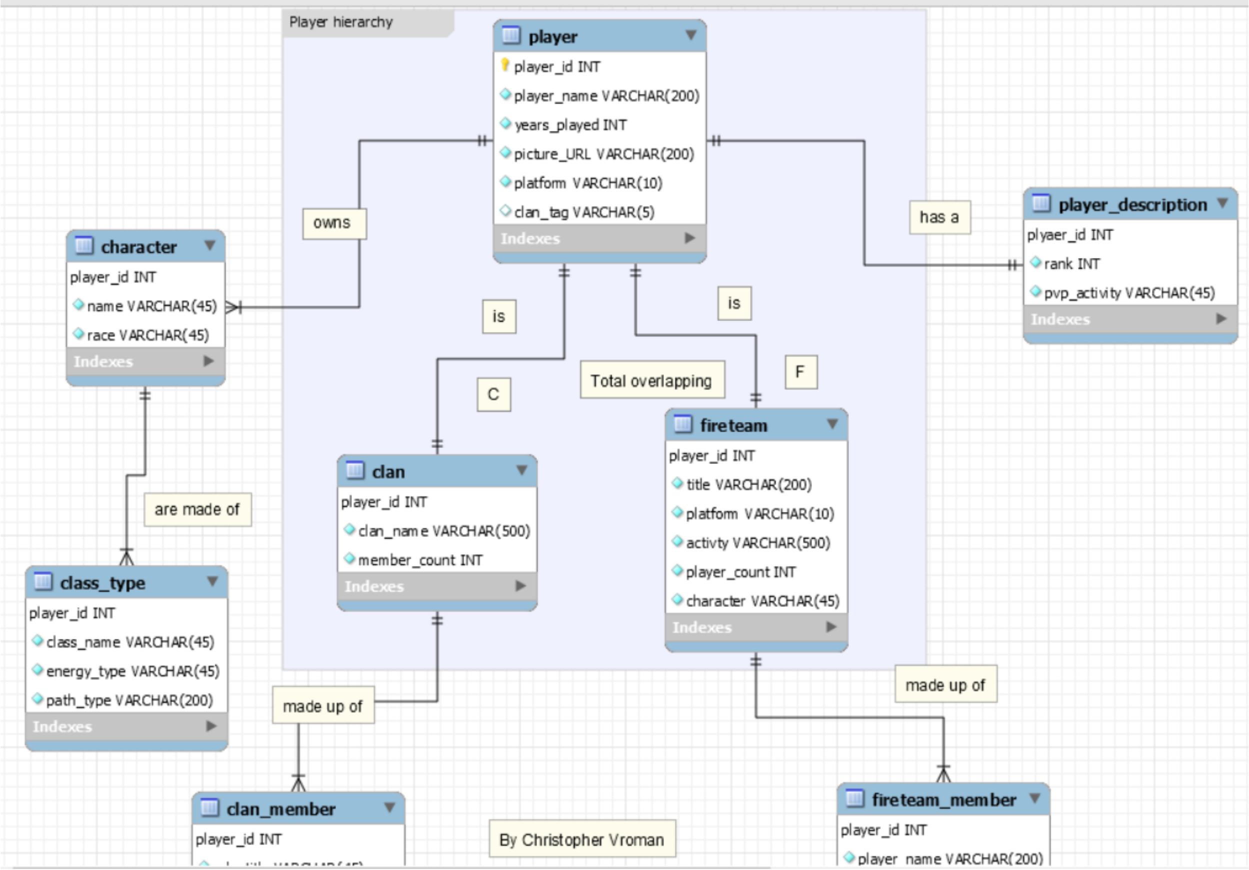
Fireteams **participate in** Activities

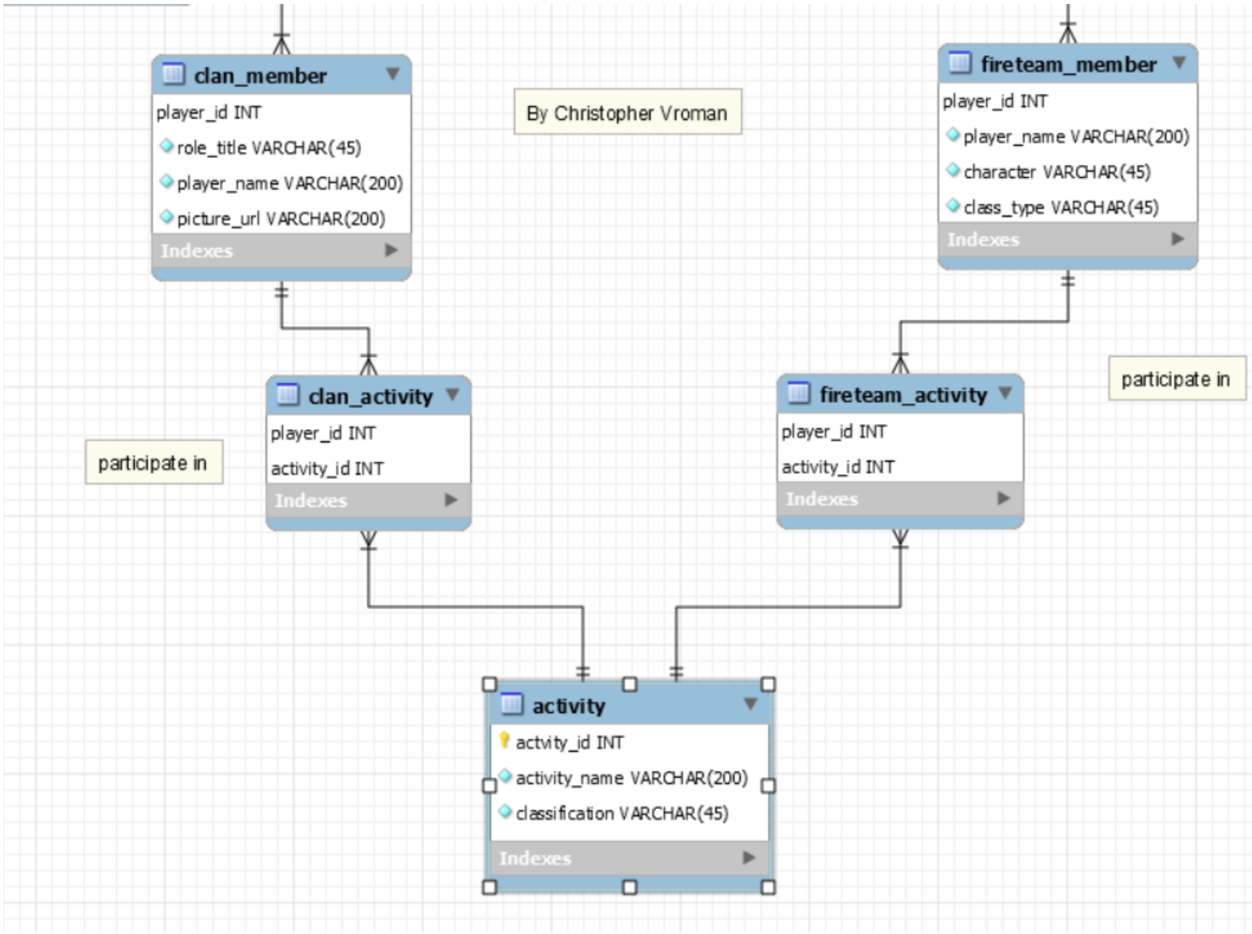
Clans **participate** in Activities

Section 6: ERD



Section 7: Detailed ERD


Player hierarchy
player
player_id INT
player_name VARCHAR(200)
years_played INT
picture_URL VARCHAR(200)
platform VARCHAR(10)
clan_tag VARCHAR(5)
Indexes
owns
has a
player_description
plyaer_id INT
rank INT
pvp_activity VARCHAR(45)
Indexes
character
player_id INT
name VARCHAR(45)
race VARCHAR(45)
Indexes
is
is
C
Total overlapping
F
fireteam
player_id INT
title VARCHAR(200)
platform VARCHAR(10)
activty VARCHAR(500)
player_count INT
character VARCHAR(45)
Indexes
clan
player_id INT
clan_name VARCHAR(500)
member_count INT
Indexes
are made of
class_type
player_id INT
class_name VARCHAR(45)
energy_type VARCHAR(45)
path_type VARCHAR(200)
Indexes
made up of
made up of
clan_member
player_id INT
By Christopher Vroman
fireteam_member
player_id INT
player_name VARCHAR(200)


clan_member
player_id INT
role_title VARCHAR(45)
player_name VARCHAR(200)
picture_url VARCHAR(200)
Indexes
By Christopher Vroman
fireteam_member
player_id INT
player_name VARCHAR(200)
character VARCHAR(45)
class_type VARCHAR(45)
Indexes
clan_activity
player_id INT
activity_id INT
Indexes
fireteam_activity
player_id INT
activity_id INT
Indexes
participate in
participate in
activity
actvity_id INT
activity_name VARCHAR(200)
classification VARCHAR(45)
Indexes

Section 8: Entities Explanation

8.1 Entity: player

A player is the sole purpose of the database. Without the player you would not have anyone to play the game or be apart of the Destiny community

Requirements:

- R1: The database will keep track of the following types of items: Players, clan Members, Fireteam Members, Characters and their class, and types of Activities in the game.
- R2: Player attributes are as listed: a player name, years played, a picture, the platform they play on (PC/PS4/XBOX/Stadia), and a clan tag if applicable.

Primary Key:

- I created a simple primary key using numbers. There are millions of players that play Destiny and it would be easier to track each player by their assigned number when registering their account instead of their account name.
- The primary key being integer allows me to avoid any semantic meanings that come with account names.
- The primary key is also a single and simple attribute

Attribute: player_id (primary key)

- Domain: Integer
- Simple attribute because it has no semantic meaning
- Single value because each player only has one id associated
- Required because each player must be indefinable and easily tracked within the database
- Unique as no player will have the same player_id

Attribute: player_name

- Domain: VARCHAR (200), because the values have different length, but a player name can’t be too long. Set limit 200 characters
- Simple attribute because it doesn’t have any semantic meaning
- Single value because a player can only have one player name
- Required because a player must have a name to have an account
- Unique because each player must have a name and their name can’t be the same as another player

Attribute: years_played

- Domain: Integer
- Simple attribute because it has no semantic meaning
- Single value because a player can only have a certain amount of time played
- Required because a player has an amount time played

- Unique, a player time played is unique on to themselves as time is an investment that another player may or may not have.

Attribute: picture_URL

- Domain: VARCHAR (200), because the values have different lengths, set a max of 200 for longer urls
- Simple attribute because it has no semantic meaning
- Single value because a player can only have one picture for their profile
- Required because a player must have picture of for their profile
- Non-unique, because there are a default group of pictures a player can choose from and may have the same picture as another player

Attribute: platform

- Domain: VARCHAR (10), because values have different length, but platform titles are not very long. Typically tracked by a platform's initials
- Simple attribute because it has no semantic meaning
- Single value because a player can only be on one platform at a time
- Required because a player must have a platform to play the game
- Non-unique, because players can play on the same platform as other players

Attribute: clan_tag

- Domain: VARCHAR (5), because values have different length. A clan tag represents the whole name of the clan and shows you belong to a clan
- Simple attribute because it has no semantic meaning
- Single value because a player can only have one clan tag
- Not required, a player may not belong to a clan
- Non-unique, because a player can be in a clan with another player (2 different players same clan)

8.2 Entity: class_type

A class type is broken down by the three that are in the game. You can either be Hunter, Warlock or Titan. A class type allows other know what you like to play and if you can be any use in an activity another player is trying to play.

Requirements:

- R14: Characters are made of class types. Class types have a name, energy type, and path type

Primary Key:

- I created a simple primary key using numbers. There are millions of players that play Destiny and it would be easier to track each player by their assigned number when registering their account instead of their account name.
- The primary key being integer allows me to avoid any semantic meanings that come with account names.
- The primary key is also a single and simple attribute

Foreign Key:

- The foreign key is also the primary key. As all attribute in the database belongs to one player.
- Allows for a stronger relationship between all entities.

Attribute: player_id (primary/foreign key)

- Domain: Integer
- Simple attribute because it has no semantic meaning
- Single value because each player only has one id associated
- Required because each player must be indefinable and easily tracked within the database
- Unique as no player will have the same player_id

Attribute: class_name

- Domain: VARCHAR (45) because class names have different length, 45 characters for a standard value
- Simple attribute because it has no semantic meaning
- Single value because each class type can only have one name
- Required because a class type must have a class name
- Non-unique because there can be many hunters, many titans and many warlocks

Attribute: energy_type

- Domain: VARCHAR (45) because the name of energy types has different lengths, 45 characters for a standard value
- Simple attribute because it has no semantic meaning
- Single value because each class type can only be one energy type in a single instance
- Required because each class type must have an energy type
- Non-unique because there can be the same energy type for different class type instance

Attribute: path_type

- Domain: VARCHAR (200) because the name of path types has different lengths, 200 character because path names are long
- Simple attribute because it has no semantic meaning
- Single value because each class type can only be one path type
- Required because each class type must have a path type

- Non-unique because there can be the same path type for a different class type instance

8.3 Entity: Activity

Activities are things players can do in the game. It allows for players to connect with others and allow players to have fun. Activities are tracked so players know what activities are in the game and what other players are playing when looking for someone to play with

Requirements:

- R11: Activities are things clans and fireteams can complete in Destiny. Activities have a name and a classification.

Primary Key:

- I created a simple primary key for activities because there are not many activities in the game. It will be an easier way to track them.
- The primary key is simple as it they are single value attributes
- The primary key will be made of numbers because of the low number of activities

Attribute: activity_id

- Domain: Integer
- Simple attribute because it does not have semantic meaning
- Single value because only one id number per activity
- Required because each activity must have an id
- Unique each activity must be uniquely identifiable

Attribute: activity_name

- Domain: VARCHAR (200) because activity names have different character lengths, and 200 max value because some of the activity names are long
- Simple attribute because it does not have semantic meaning
- Single value because there is only one name per activity
- Required because each activity must have a name
- Non-unique because players across the entire community can do the same activity with other players

Attribute: classification

- Domain: VARCHAR(45) because classifications of activities have different character lengths. They are not as long as activity names so the standard 45 characters will work
- Simple attribute because it does not have semantic meaning
- Single value because there is only one classification per activity
- Required because each activity must be classified
- Non-unique because classification can be the same across activity instances.

Section 9: Relationship Explanation

9.1 Relationship: player has a player description/ player description describes a player

Requirements:

- R3: Players also have a description about their rank within player versus player activities.
- R4: A player has one description. One player description belongs to a player.

One to one relationship (1:1)

- One player has ONE player description
- A player description describes ONE player

Strong Relationship

- The PK of the child entity (player_description) contains the PK of the parent entity (player)

A player has mandatory participation in the relationship because a player description must describe at least one player

player_description has mandatory participation in the relationship because a player must have a player description

The foreign key (FK) is defined in the parent entity player, attribute player_id, and it will reference the PK of the parent entity: player(player_id)

9.2 Relationship: Character are made of class type/ class type makes up a character

Requirements:

- R14: Characters are made of class types. Class types have a name, energy type, and path type
- R15: Characters can have many class types. One class type belongs to a character.

One to Many (1:M)

- One character has MANY class types
- One class type belongs to a character

Strong Relationship

- The PK of the child entity (class type) contains the PK of the parent entity (character)

A character has mandatory participation in the relationship because a character must have a class type

A class type has mandatory participation in the relationship because a character must have a class type

The foreign key (FK) is defined in the parent entity player, attribute player_id, and it will reference the PK of the parent entity: player(player_id)

9.3 Relationship: clan members can participate in activities /activities are participated by clan members

Requirements:

- R16: Many clan members can participate in activities. Many activities are participated by clan members

Many to Many (M:M)

- Many clan members can participate in activities
- Many activities are participated by clan members

Weak Relationship

- The PK of the child entity (activity) does not contain the PK of the parent entity (clan members)
- A bridge entity is used to bring the two entities together. The bridge entity “clan activity” contains the pk from both entities (clan member, activity)

Clan member has optional participation in an activity as a clan member does not have to participate in an activity

Activity has optional participation in clan member because activities don’t have to have clan member participation

The FK is defined in the bridge entity “clan_activity” and is not defined in the child entity(activity)

Section 10: Self Reflection on Project Design

Issues that I learn during the project design:

- Issue 1 was how little I use the internet to find a database I thought would be worth doing for this project
- Issue 2 how to better my naming conventions.
- Issue 3 is figuring out my weak points in design

Difficult issues:

- Issue 1 was naming conventions. At first, I used what logically to me made sense from what I could remember from the lessons we reviewed over the semester
- Issue 2 was not describing my database well enough for someone who hasn’t seen this information before.
- Issue 3 sticking with the design I laid in front of myself. I saw different avenues I could have went. I’m glad I stuck with what I originally came up with

The section 1 to 10 of the project were fun to complete and very good learning experience.

Section 11 Create a Database:

```
mysql> DROP DATABASE IF EXISTS Destiny_Community;

Query OK, 11 rows affected (1.99 sec)


mysql> CREATE DATABASE Destiny_Community;

Query OK, 1 row affected (0.08 sec)


mysql> USE Destiny_Community;

Database changed

mysql>

mysql> CREATE TABLE player (player_id INT PRIMARY KEY, player_name
VARCHAR(200) NOT NULL UNIQUE, years_played INT NOT NULL, picture_URL
VARCHAR(200) NOT NULL, platform VARCHAR(10) NOT NULL, clan_tag
VARCHAR(5));

Query OK, 0 rows affected (0.71 sec)


mysql>

mysql> DESCRIBE player;

+--------------+--------------+------+-----+---------+-------+

| Field        | Type         | Null | Key | Default | Extra |

+--------------+--------------+------+-----+---------+-------+

| player_id    | int(11)      | NO   | PRI | NULL    |       |

| player_name  | varchar(200) | NO   | UNI | NULL    |       |

| years_played | int(11)      | NO   |     | NULL    |       |

| picture_URL  | varchar(200) | NO   |     | NULL    |       |

| platform     | varchar(10)  | NO   |     | NULL    |       |

| clan_tag     | varchar(5)   | YES  |     | NULL    |       |

+--------------+--------------+------+-----+---------+-------+

6 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM player;

Empty set (0.00 sec)


mysql>

mysql> CREATE TABLE player_description (player_id INT, level INT NOT NULL,
pvp_activity VARCHAR(45) NOT NULL, FOREIGN KEY (player_id) REFERENCES
player(player_id), PRIMARY KEY (player_id));

Query OK, 0 rows affected (0.42 sec)


mysql> DESCRIBE player_description;

+--------------+-------------+------+-----+---------+-------+

| Field        | Type        | Null | Key | Default | Extra |

+--------------+-------------+------+-----+---------+-------+

| player_id    | int(11)     | NO   | PRI | NULL    |       |

| level        | int(11)     | NO   |     | NULL    |       |

| pvp_activity | varchar(45) | NO   |     | NULL    |       |

+--------------+-------------+------+-----+---------+-------+

3 rows in set (0.00 sec)


mysql> SELECT * FROM player_description;

Empty set (0.00 sec)


mysql>

mysql> CREATE TABLE clan (player_id INT, clan_name VARCHAR(500) NOT NULL,
memeber_count INT NOT NULL, FOREIGN KEY (player_id) REFERENCES
player(player_id), PRIMARY KEY (player_id));

Query OK, 0 rows affected (0.47 sec)


mysql>
mysql> DESCRIBE clan;

+---------------+--------------+------+-----+---------+-------+

| Field         | Type         | Null | Key | Default | Extra |

+---------------+--------------+------+-----+---------+-------+

| player_id     | int(11)      | NO   | PRI | NULL    |       |

| clan_name     | varchar(500) | NO   |     | NULL    |       |

| memeber_count | int(11)      | NO   |     | NULL    |       |

+---------------+--------------+------+-----+---------+-------+

3 rows in set (0.02 sec)


mysql> SELECT * FROM clan;

Empty set (0.00 sec)


mysql>

mysql> CREATE TABLE fireteam (player_id INT, title VARCHAR(200) NOT NULL,
platform VARCHAR(10) NOT NULL, activity VARCHAR(500) NOT NULL, player_count
INT NOT NULL, class_type VARCHAR(45), FOREIGN KEY (player_id) REFERENCES
player(player_id), PRIMARY KEY (player_id));

Query OK, 0 rows affected (0.87 sec)


mysql>

mysql> DESCRIBE fireteam;

+--------------+--------------+------+-----+---------+-------+

| Field        | Type         | Null | Key | Default | Extra |

+--------------+--------------+------+-----+---------+-------+

| player_id    | int(11)      | NO   | PRI | NULL    |       |

| title        | varchar(200) | NO   |     | NULL    |       |

| platform     | varchar(10)  | NO   |     | NULL    |       |

| activity     | varchar(500) | NO   |     | NULL    |       |
| player_count | int(11)      | NO   |     | NULL    |       |
| class_type   | varchar(45)  | YES  |     | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
6 rows in set (0.10 sec)


mysql> SELECT * FROM fireteam;
Empty set (0.02 sec)


mysql>
mysql> CREATE TABLE role (player_id INT, name VARCHAR(45) NOT NULL, race VARCHAR(45) NOT NULL, FOREIGN KEY (player_id) REFERENCES player(player_id), PRIMARY KEY (player_id));
Query OK, 0 rows affected (0.94 sec)


mysql>
mysql> DESCRIBE role;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| player_id | int(11)     | NO   | PRI | NULL    |       |
| name      | varchar(45) | NO   |     | NULL    |       |
| race      | varchar(45) | NO   |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)


mysql> SELECT * FROM role;
Empty set (0.00 sec)


mysql>
mysql> CREATE TABLE class_type (player_id INT, class_name VARCHAR(45) NOT NULL,
energy_type VARCHAR(45) NOT NULL, path_type VARCHAR(200) NOT NULL, FOREIGN
KEY (player_id) REFERENCES player(player_id), PRIMARY KEY (player_id));

Query OK, 0 rows affected (0.44 sec)


mysql>

mysql> DESCRIBE class_type;

+-------------+--------------+------+-----+---------+-------+

| Field       | Type         | Null | Key | Default | Extra |

+-------------+--------------+------+-----+---------+-------+

| player_id   | int(11)      | NO   | PRI | NULL    |       |

| class_name  | varchar(45)  | NO   |     | NULL    |       |

| energy_type | varchar(45)  | NO   |     | NULL    |       |

| path_type   | varchar(200) | NO   |     | NULL    |       |

+-------------+--------------+------+-----+---------+-------+

4 rows in set (0.00 sec)


mysql> SELECT * FROM class_type;

Empty set (0.07 sec)


mysql>

mysql> CREATE TABLE clan_member (player_id INT, role_title VARCHAR(45) NOT NULL,
player_name VARCHAR(200) NOT NULL, picture_URL VARCHAR(200) NOT NULL,
FOREIGN KEY (player_id) REFERENCES player(player_id), PRIMARY KEY (player_id));

Query OK, 0 rows affected (0.49 sec)


mysql>

mysql> DESCRIBE clan_member;

+-------------+--------------+------+-----+---------+-------+

| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| player_id   | int(11)      | NO   | PRI | NULL    |       |
| role_title  | varchar(45)  | NO   |     | NULL    |       |
| player_name | varchar(200) | NO   |     | NULL    |       |
| picture_URL | varchar(200) | NO   |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> SELECT * FROM clan_member;
Empty set (0.00 sec)

mysql>
mysql> CREATE TABLE fireteam_member (player_id INT, player_name VARCHAR(200) NOT NULL, role VARCHAR(45) NOT NULL, class_type VARCHAR(45) NOT NULL, FOREIGN KEY (player_id) REFERENCES player(player_id), PRIMARY KEY (player_id));
Query OK, 0 rows affected (0.58 sec)

mysql>
mysql> DESCRIBE fireteam_member;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| player_id   | int(11)      | NO   | PRI | NULL    |       |
| player_name | varchar(200) | NO   |     | NULL    |       |
| role        | varchar(45)  | NO   |     | NULL    |       |
| class_type  | varchar(45)  | NO   |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM fireteam_member;

Empty set (0.00 sec)


mysql>

mysql> CREATE TABLE activity (activity_id INT PRIMARY KEY, activity_name
VARCHAR(200) NOT NULL, classification VARCHAR(45) NOT NULL);

Query OK, 0 rows affected (0.38 sec)


mysql>

mysql> DESCRIBE activity;

+----------------+--------------+------+-----+---------+-------+

| Field          | Type         | Null | Key | Default | Extra |

+----------------+--------------+------+-----+---------+-------+

| activity_id    | int(11)      | NO   | PRI | NULL    |       |

| activity_name  | varchar(200) | NO   |     | NULL    |       |

| classification | varchar(45)  | NO   |     | NULL    |       |

+----------------+--------------+------+-----+---------+-------+

3 rows in set (0.00 sec)


mysql> SELECT * FROM activity;

Empty set (0.00 sec)


mysql>

mysql> CREATE TABLE clan_activity (player_id INT, activity_id INT, FOREIGN KEY
(player_id) REFERENCES player(player_id), FOREIGN KEY (activity_id) REFERENCES
activity(activity_id), PRIMARY KEY (player_id,activity_id));

Query OK, 0 rows affected (0.60 sec)


mysql>
mysql> DESCRIBE clan_activity;

+-------------+---------+------+-----+---------+-------+

| Field       | Type    | Null | Key | Default | Extra |

+-------------+---------+------+-----+---------+-------+

| player_id   | int(11) | NO   | PRI | NULL    |       |

| activity_id | int(11) | NO   | PRI | NULL    |       |

+-------------+---------+------+-----+---------+-------+

2 rows in set (0.00 sec)


mysql> SELECT * FROM clan_activity;

Empty set (0.00 sec)


mysql>

mysql>

mysql> CREATE TABLE fireteam_activity (player_id INT, activity_id INT, FOREIGN KEY
(player_id) REFERENCES player(player_id), FOREIGN KEY (activity_id) REFERENCES
activity(activity_id), PRIMARY KEY (player_id,activity_id));

Query OK, 0 rows affected (0.51 sec)


mysql>

mysql> DESCRIBE fireteam_activity;

+-------------+---------+------+-----+---------+-------+

| Field       | Type    | Null | Key | Default | Extra |

+-------------+---------+------+-----+---------+-------+

| player_id   | int(11) | NO   | PRI | NULL    |       |

| activity_id | int(11) | NO   | PRI | NULL    |       |

+-------------+---------+------+-----+---------+-------+

2 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM fireteam_activity;

Empty set (0.00 sec)
```

Section 12 Database Data:

```
mysql> INSERT INTO player VALUES (01, "SaberWolf", 4, "saberwolf.jpg", "PS4", "KI"),
(02, "YodaFett", 2, "yodafett.jpg", "Steam", "JEDI"), (03, "CapMurica", 1, "capmurica.jpg",
"XBOX", "AVG"), (04, "PokeMan", 2, "pokeman.jpg", "PS4", "E4"), (05, "BlastMan", 3,
"blastman.jpg", "PS4", "E4"), (06, "IronMan", 3, "ironman.jpg", "XBOX", "AVG"), (07,
"DarthMaul", 2, "darthmaul.jpg", "Steam", "SITH"), (08, "Domon", 4, "domon.jpg",
"Steam", "SA"), (09, "MasterAsia", 4, "masterasia.jpg", "Steam", "SA"), (10, "Newbie", 0,
"newbie.jpg", "PS4","NB");

Query OK, 10 rows affected (0.07 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> INSERT INTO player_description VALUES (01, 5500, "Competitive"), (02, 5000,
"Control"), (03, 4500, "Competitive"), (04, 2200, "Control"), (05, 2200, "Competitive"), (06,
3000, "Elimination"), (07, 5500, "Competitive"), (08, 4000, "Elimination"), (09, 5250,
"Elimination"), (10, 500, "Control");

Query OK, 10 rows affected (0.11 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> INSERT INTO clan VALUES (01, "Killer Instinct", 6), (02, "Jedi Order", 10), (03,
"Avengers", 12), (04, "Elite Four", 4), (05, "Elite Four", 4), (06, "Avengers", 12), (07, "Sith
Order", 6), (08, "Shuffle Alliance", 10), (09, "Shuffle Alliance", 10), (10,"Newbies",1);

Query OK, 10 rows affected (0.06 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> INSERT INTO fireteam VALUES (01, "GOS", "PS4", "Raid", 5, "Hunter"), (02,
"Zero Hour", "Steam", "Strike", 2,"Warlock"), (03, "Iron Banner", "XBOX", "Crucible", 3,
"Titan"), (04, "Levaiathan", "PS4", "Raid", 3, "Hunter"),(05, "Levaiathan", "PS4", "Raid", 3,
"Titan"), (06, "Iron Banner", "XBOX", "Crucible", 3, "Warlock"), (07, "Whisper Quest",
"Steam", "Strike", 3, "Warlock"), (08, "Last Wish", "Steam", "Raid", 4, "Hunter"), (09, "Last
Wish", "Steam", "Raid", 4, "Titan"), (10, "Story Mission", "PS4", "Story Mode", 2,
"Hunter");
```

```
Query OK, 10 rows affected (0.10 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> INSERT INTO role VALUES (01, "Wolfman", "Human"), (02, "Yoda", "Awoken"),
(03, "Steve Rodgers", "Human"), (04, "Ash", "Exo"),(05, "Blastoise", "Awoken"), (06,
"Tony Stark", "Human"),(07, "Maul", "EXO"), (08, "Domon", "Human"), (09, "Asia",
"Human"), (10, "Mark", "Awoken");

Query OK, 10 rows affected (0.09 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> INSERT INTO class_type VALUES (01, "Hunter", "Solar", "Gunslinger"), (02,
"Warlock", "Solar", "DawnBlade"), (03, "Titan", "Arc", "Striker"), (04, "Hunter", "Void",
"NightStalker"), (05, "Titan", "Void", "Sentinel"), (06, "Warlock", "Arc", "StormCaller"),
(07, "Warlock", "Solar", "DawnBlade"), (08, "Hunter", "Void", "NightStalker"), (09, "Titan",
"Solar", "SunBreaker"), (10, "Hunter", "Arc", "ArcStrider");

Query OK, 10 rows affected (0.18 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> INSERT INTO clan_member VALUES (01, "Founder", "SaberWolf",
"saberwolf.jpg"), (02, "Founder", "YodaFett", "yodafett.jpg"), (03, "Admin", "CapMurica",
"capmurica.jpg"), (04, "Member", "PokeMan", "pokeman.jpg"), (05, "Admin", "BlastMan",
"blastman.jpg"), (06, "Founder", "IronMan", "ironman.jpg"), (07, "Admin", "DarthMaul",
"darthmaul.jpg"), (08, "Member", "Domon", "domon.jpg"), (09, "Founder", "MasterAsia",
"masterasia.jpg"), (10, "Member", "Newbie", "newbie.jpg");

Query OK, 10 rows affected (0.15 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> INSERT INTO fireteam_member VALUES (01, "SaberWolf", "Hunter",
"Gunslinger"), (02, "YodaFett", "Warlock", "DawnBlade"), (03, "CapMurica", "Titan",
"Striker"), (04, "PokeMan", "Hunter", "NightStalker"), (05, "BlastMan", "Titan", "Sentinel"),
(06, "IronMan", "Warlock", "StormCaller"), (07, "DarthMaul", "Warlock", "DawnBlade"),
(08, "Domon", "Hunter", "NightStalker"), (09, "MasterAsia", "Titan", "SunBreaker"), (10,
"Newbie", "Hunter", "ArcStrider");

Query OK, 10 rows affected (0.08 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> INSERT INTO activity VALUES (100, "Garden of Salvation", "Raid"), (101, "Zero
Hour", "Strike"), (102, "Iron Banner", "Crucible"), (103, "Levaiathan", "Raid"), (104,
"Levaiathan", "Raid"), (105, "Iron Banner", "Crucible"), (106, "Whisper of the Worm",
"Strike"), (107, "Last Wish", "Raid"), (108, "Last Wish", "Raid"), (109, "Red War", "Story
Mode");

Query OK, 10 rows affected (0.11 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> INSERT INTO clan_activity VALUES (01,100), (02, 101), (03, 102), (04, 103), (05,
104), (06, 105), (07, 106), (08, 107), (09, 108), (10, 109);

Query OK, 10 rows affected (0.08 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> INSERT INTO fireteam_activity VALUES (01,100), (02, 101), (03, 102), (04, 103),
(05, 104), (06, 105), (07, 106), (08, 107), (09, 108), (10, 109);

Query OK, 10 rows affected (0.09 sec)

Records: 10  Duplicates: 0  Warnings: 0


mysql>

mysql> SELECT * FROM player;

+-----------+-------------+--------------+----------------+----------+----------+
| player_id | player_name | years_played | picture_URL    | platform | clan_tag |
+-----------+-------------+--------------+----------------+----------+----------+
|         1 | SaberWolf   |            4 | saberwolf.jpg  | PS4      | KI       |
|         2 | YodaFett    |            2 | yodafett.jpg   | Steam    | JEDI     |
|         3 | CapMurica   |            1 | capmurica.jpg  | XBOX     | AVG      |
|         4 | PokeMan     |            2 | pokeman.jpg    | PS4      | E4       |
|         5 | BlastMan    |            3 | blastman.jpg   | PS4      | E4       |
|         6 | IronMan     |            3 | ironman.jpg    | XBOX     | AVG      |
|         7 | DarthMaul   |            2 | darthmaul.jpg  | Steam    | SITH     |
|         8 | Domon       |            4 | domon.jpg      | Steam    | SA       |
|         9 | MasterAsia  |            4 | masterasia.jpg | Steam    | SA       |
|        10 | Newbie      |            0 | newbie.jpg     | PS4      | NB       |
+-----------+-------------+--------------+----------------+----------+----------+
10 rows in set (0.00 sec)

mysql> SELECT * FROM player_description;
+-----------+-------+--------------+
| player_id | level | pvp_activity |
+-----------+-------+--------------+
|         1 |  5500 | Competitive  |
|         2 |  5000 | Control      |
|         3 |  4500 | Competitive  |
|         4 |  2200 | Control      |
|         5 |  2200 | Competitive  |
|         6 |  3000 | Elimination  |
|         7 |  5500 | Competitive  |
|         8 |  4000 | Elimination  |
|         9 |  5250 | Elimination  |
|        10 |   500 | Control      |
+-----------+-------+--------------+
10 rows in set (0.00 sec)

mysql> SELECT * FROM clan;
+-----------+------------------+---------------+
| player_id | clan_name        | memeber_count |
+-----------+------------------+---------------+
|         1 | Killer Instinct  |             6 |
|         2 | Jedi Order       |            10 |
|         3 | Avengers         |            12 |
|         4 | Elite Four       |             4 |
|         5 | Elite Four       |             4 |
|         6 | Avengers         |            12 |
|         7 | Sith Order       |             6 |
|         8 | Shuffle Alliance |            10 |
|         9 | Shuffle Alliance |            10 |
|        10 | Newbies          |             1 |
+-----------+------------------+---------------+
10 rows in set (0.00 sec)

mysql> SELECT * FROM fireteam;
+-----------+---------------+----------+------------+--------------+------------+
| player_id | title         | platform | activity   | player_count | class_type |
+-----------+---------------+----------+------------+--------------+------------+
|         1 | GOS           | PS4      | Raid       |            5 | Hunter     |
|         2 | Zero Hour     | Steam    | Strike     |            2 | Warlock    |
|         3 | Iron Banner   | XBOX     | Crucible   |            3 | Titan      |
|         4 | Levaiathan    | PS4      | Raid       |            3 | Hunter     |
|         5 | Levaiathan    | PS4      | Raid       |            3 | Titan      |
|         6 | Iron Banner   | XBOX     | Crucible   |            3 | Warlock    |
|         7 | Whisper Quest | Steam    | Strike     |            3 | Warlock    |
|         8 | Last Wish     | Steam    | Raid       |            4 | Hunter     |
|         9 | Last Wish     | Steam    | Raid       |            4 | Titan      |
|        10 | Story Mission | PS4      | Story Mode |            2 | Hunter     |
+-----------+---------------+----------+------------+--------------+------------+
10 rows in set (0.00 sec)

mysql> SELECT * FROM role;
+-----------+---------------+--------+
| player_id | name          | race   |
+-----------+---------------+--------+
|         1 | Wolfman       | Human  |
|         2 | Yoda          | Awoken |
|         3 | Steve Rodgers | Human  |
|         4 | Ash           | Exo    |
|         5 | Blastoise     | Awoken |
|         6 | Tony Stark    | Human  |
|         7 | Maul          | EXO    |
|         8 | Domon         | Human  |
|         9 | Asia          | Human  |
|        10 | Mark          | Awoken |
+-----------+---------------+--------+
10 rows in set (0.00 sec)

mysql> SELECT * FROM class_type;
```

```
+-----------+------------+-------------+--------------+
| player_id | class_name | energy_type | path_type    |
+-----------+------------+-------------+--------------+
|         1 | Hunter     | Solar       | Gunslinger   |
|         2 | Warlock    | Solar       | DawnBlade    |
|         3 | Titan      | Arc         | Striker      |
|         4 | Hunter     | Void        | NightStalker |
|         5 | Titan      | Void        | Sentinel     |
|         6 | Warlock    | Arc         | StormCaller  |
|         7 | Warlock    | Solar       | DawnBlade    |
|         8 | Hunter     | Void        | NightStalker |
|         9 | Titan      | Solar       | SunBreaker   |
|        10 | Hunter     | Arc         | ArcStrider   |
+-----------+------------+-------------+--------------+
10 rows in set (0.00 sec)

mysql> SELECT * FROM clan_member;
+-----------+------------+-------------+---------------+
| player_id | role_title | player_name | picture_URL   |
+-----------+------------+-------------+---------------+
|         1 | Founder    | SaberWolf   | saberwolf.jpg |
|         2 | Founder    | YodaFett    | yodafett.jpg  |
|         3 | Admin      | CapMurica   | capmurica.jpg |
|         4 | Member     | PokeMan     | pokeman.jpg   |
|         5 | Admin      | BlastMan    | blastman.jpg  |
|         6 | Founder    | IronMan     | ironman.jpg   |
|         7 | Admin      | DarthMaul   | darthmaul.jpg |
|         8 | Member     | Domon       | domon.jpg     |
|         9 | Founder    | MasterAsia  | masterasia.jpg |
|        10 | Member     | Newbie      | newbie.jpg     |
+-----------+------------+-------------+----------------+
10 rows in set (0.00 sec)

mysql> SELECT * FROM fireteam_member;
+-----------+-------------+---------+--------------+
| player_id | player_name | role    | class_type   |
+-----------+-------------+---------+--------------+
|         1 | SaberWolf   | Hunter  | Gunslinger   |
|         2 | YodaFett    | Warlock | DawnBlade    |
|         3 | CapMurica   | Titan   | Striker      |
|         4 | PokeMan     | Hunter  | NightStalker |
|         5 | BlastMan    | Titan   | Sentinel     |
|         6 | IronMan     | Warlock | StormCaller  |
|         7 | DarthMaul   | Warlock | DawnBlade    |
|         8 | Domon       | Hunter  | NightStalker |
|         9 | MasterAsia  | Titan   | SunBreaker   |
|        10 | Newbie      | Hunter  | ArcStrider   |
+-----------+-------------+---------+--------------+
10 rows in set (0.00 sec)

mysql> SELECT * FROM activity;
+-------------+---------------------+----------------+
| activity_id | activity_name       | classification |
+-------------+---------------------+----------------+
|         100 | Garden of Salvation | Raid           |
|         101 | Zero Hour           | Strike         |
|         102 | Iron Banner         | Crucible       |
|         103 | Levaiathan          | Raid           |
|         104 | Levaiathan          | Raid           |
|         105 | Iron Banner         | Crucible       |
|         106 | Whisper of the Worm | Strike         |
|         107 | Last Wish           | Raid           |
|         108 | Last Wish           | Raid           |
|         109 | Red War             | Story Mode     |
+-------------+---------------------+----------------+
10 rows in set (0.00 sec)

mysql> SELECT * FROM clan_activity;
+-----------+-------------+
| player_id | activity_id |
+-----------+-------------+
|         1 |         100 |
|         2 |         101 |
|         3 |         102 |
|         4 |         103 |
|         5 |         104 |
|         6 |         105 |
|         7 |         106 |
|         8 |         107 |
|         9 |         108 |
|        10 |         109 |
+-----------+-------------+
10 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM fireteam_activity;
+-----------+-------------+
| player_id | activity_id |
+-----------+-------------+
|         1 |         100 |
|         2 |         101 |
|         3 |         102 |
|         4 |         103 |
|         5 |         104 |
|         6 |         105 |
|         7 |         106 |
|         8 |         107 |
|         9 |         108 |
|        10 |         109 |
+-----------+-------------+
10 rows in set (0.00 sec)
```

Section 13: Simple Queries Script

Query 1: Creates a table based on a player’s id and their rank that is greater than the midway of all ranks

```
SELECT player_id,level FROM player_description WHERE (level > (5500/2));

+-----------+-------+

| player_id | level |

+-----------+-------+

|         1 |  5500 |

|         2 |  5000 |

|         3 |  4500 |

|         6 |  3000 |

|         7 |  5500 |

|         8 |  4000 |

|         9 |  5250 |

+-----------+-------+

7 rows in set (0.03 sec)
```

Query 2: Creates a table of players where they are only on the Steam platform and they have more than 2 years played in descending order

```
SELECT player_id,player_name FROM player WHERE ((platform = "Steam") AND
(years_played > 2)) ORDER BY player_id DESC;

+-----------+-------------+

| player_id | player_name |

+-----------+-------------+

|         9 | MasterAsia  |

|         8 | Domon       |

+-----------+-------------+

2 rows in set (0.01 sec)
```

Query 3: Creates a table of players where they are on xbox or ps4 and they have more than 2 years played ordered by player id and years played

```
SELECT player_id, player_name FROM player WHERE ((platform = "PS4") OR (platform = "XBOX") AND (years_played >2)) ORDER BY player_id, years_played;
```

```
+-----------+-------------+
| player_id | player_name |
+-----------+-------------+
|         1 | SaberWolf   |
|         4 | PokeMan     |
|         5 | BlastMan    |
|         6 | IronMan     |
|        10 | Newbie      |
+-----------+-------------+
5 rows in set (0.00 sec)
```

Query 4: Creates a table of player information where platform is ps4 and the years played is more than 1

```
SELECT * FROM player WHERE ((platform = "PS4") AND (years_played > 1)) ORDER BY player_id DESC;
```

```
+-----------+-------------+--------------+---------------+----------+----------+
| player_id | player_name | years_played | picture_URL   | platform | clan_tag |
+-----------+-------------+--------------+---------------+----------+----------+
|         5 | BlastMan    |            3 | blastman.jpg  | PS4      | E4       |
|         4 | PokeMan     |            2 | pokeman.jpg   | PS4      | E4       |
|         1 | SaberWolf   |            4 | saberwolf.jpg | PS4      | KI       |
+-----------+-------------+--------------+---------------+----------+----------+
3 rows in set (0.00 sec)
```

Query 5: Creates a table that displays the player_id, the players name along with there platfrom and years played where the platform is XBOX and years played is greater than 1.

```
SELECT player_id, CONCAT_WS("/", player_name,platform), years_played FROM player WHERE((platform = "XBOX") AND (years_played >1)) ORDER BY player_id, player_name, years_played DESC;
```

```
+-----------+------------------------------------+--------------+
| player_id | CONCAT_WS("/", player_name,platform) | years_played |
+-----------+--------------------------------------+--------------+
|         6 | IronMan/XBOX                         |            3 |
+-----------+--------------------------------------+--------------+
1 row in set (0.00 sec)
```

Section 14: Complex Queries

Query 1: Forms a table that has the count of the number of players with an account by counting player id

```
SELECT COUNT(DISTINCT player_id) AS "Current Player Count" FROM player;

+----------------------+

| Current Player Count |

+----------------------+

|                   10 |

+----------------------+

1 row in set (0.00 sec)
```

Query 2: Forms a table of the player name and rank of players above the average rank

```
SELECT player.player_name,player_description.level FROM player LEFT JOIN player_description ON player.player_id = player_description.player_id WHERE player_description.level > (SELECT AVG(player_description.level) FROM player_description);

+-------------+-------+

| player_name | level |

+-------------+-------+

| SaberWolf   |  5500 |

| YodaFett    |  5000 |

| CapMurica   |  4500 |

| DarthMaul   |  5500 |

| Domon       |  4000 |

| MasterAsia  |  5250 |

+-------------+-------+

6 rows in set (0.02 sec)
```

Query 3: Forms a table of the player name, their rank and the class they are playing for players with a rank above the average.

```
SELECT player.player_name,player_description.level,class_type.class_name FROM player LEFT JOIN player_description ON player.player_id = player_description.player_id RIGHT JOIN class_type ON player_description.player_id = class_type.player_id  WHERE player_description.level > (SELECT AVG(player_description.level) FROM player_description);
```

```
+-------------+-------+------------+

| player_name | level | class_name |

+-------------+-------+------------+

| SaberWolf   |  5500 | Hunter     |

| YodaFett    |  5000 | Warlock    |

| CapMurica   |  4500 | Titan      |

| DarthMaul   |  5500 | Warlock    |

| Domon       |  4000 | Hunter     |

| MasterAsia  |  5250 | Titan      |

+-------------+-------+------------+

6 rows in set (0.02 sec)
```

Query 4: creates a table of the player, their class and the activity they are participating with a player count greater than average player count

```
SELECT player.player_name, class_type.class_name, fireteam.activity, fireteam.player_count
FROM player LEFT JOIN class_type ON player.player_id = class_type.player_id RIGHT JOIN
fireteam ON class_type.player_id = fireteam.player_id GROUP BY fireteam.player_count >
(SELECT AVG(fireteam.player_count) FROM fireteam);
```

```
+-------------+------------+----------+--------------+

| player_name | class_name | activity | player_count |

+-------------+------------+----------+--------------+

| SaberWolf   | Hunter     | Raid     |            5 |

| YodaFett    | Warlock    | Strike   |            2 |

+-------------+------------+----------+--------------+

2 rows in set (0.10 sec)
```

Query 5: Forms a table of the player name, their clan, their class name and the activity they are seeking players for grouped by player count having a player count greater than 0

```
SELECT player.player_name, clan.clan_name, class_type.class_name, fireteam.activity FROM
player LEFT JOIN clan on player.player_id = clan.player_id RIGHT JOIN class_type ON
clan.player_id = class_type.player_id LEFT JOIN fireteam ON class_type.player_id =
fireteam.player_id GROUP BY fireteam.player_count HAVING fireteam.player_count > 0;
```

```
+-------------+------------------+------------+----------+
| player_name | clan_name        | class_name | activity |
+-------------+------------------+------------+----------+
| SaberWolf   | Killer Instinct  | Hunter     | Raid     |
| YodaFett    | Jedi Order       | Warlock    | Strike   |
| CapMurica   | Avengers         | Titan      | Crucible |
| Domon       | Shuffle Alliance | Hunter     | Raid     |
+-------------+------------------+------------+----------+
4 rows in set (0.04 sec)
```

Query 6: Forms a table of the player, the player rank, and their clan grouped by player rank but players must have a rank greater than the lowest rank

```
SELECT player.player_name, player_description.level, clan.clan_name FROM player LEFT JOIN player_description ON player.player_id = player_description.player_id RIGHT JOIN clan ON player_description.player_id = clan.player_id WHERE player_description.level > (SELECT MIN(player_description.level) FROM player_description) GROUP BY player_description.level;
```

```
+-------------+-------+------------------+
| player_name | level | clan_name        |
+-------------+-------+------------------+
| SaberWolf   |  5500 | Killer Instinct  |
| YodaFett    |  5000 | Jedi Order       |
| CapMurica   |  4500 | Avengers         |
| PokeMan     |  2200 | Elite Four       |
| IronMan     |  3000 | Avengers         |
| Domon       |  4000 | Shuffle Alliance |
| MasterAsia  |  5250 | Shuffle Alliance |
+-------------+-------+------------------+
7 rows in set (0.00 sec)
```

Query 7: Forms a table of the player, the player rank, their clan and the platform they play on grouped by player rank but players must have a rank greater than the lowest rank

```
SELECT player.player_name, player_description.level, clan.clan_name, fireteam.platform FROM player LEFT JOIN player_description ON player.player_id = player_description.player_id RIGHT JOIN clan ON player_description.player_id =
clan.player_id LEFT JOIN fireteam ON clan.player_id = fireteam.player_id WHERE
player_description.level > (SELECT MIN(player_description.level) FROM player_description)
GROUP BY player_description.level;
```

```
+-------------+-------+------------------+----------+
| player_name | level | clan_name        | platform |
+-------------+-------+------------------+----------+
| SaberWolf   |  5500 | Killer Instinct  | PS4      |
| YodaFett    |  5000 | Jedi Order       | Steam    |
| CapMurica   |  4500 | Avengers         | XBOX     |
| PokeMan     |  2200 | Elite Four       | PS4      |
| IronMan     |  3000 | Avengers         | XBOX     |
| Domon       |  4000 | Shuffle Alliance | Steam    |
| MasterAsia  |  5250 | Shuffle Alliance | Steam    |
+-------------+-------+------------------+----------+
7 rows in set (0.00 sec)
```

Query 8: Forms a table of clan members by player name, clan name, their member grouped by clan member count whose clan has a clan count above the average member count

```
SELECT player.player_name, clan.clan_name, clan_member.role_title, clan.member_count
FROM player LEFT JOIN clan ON player.player_id = clan.player_id RIGHT JOIN
clan_member ON clan.player_id = clan_member.player_id GROUP BY clan.member_count
HAVING clan.member_count > (SELECT AVG(clan.member_count) FROM clan);
```

```
+-------------+------------+------------+--------------+
| player_name | clan_name  | role_title | member_count |
+-------------+------------+------------+--------------+
| YodaFett    | Jedi Order | Founder    |           10 |
| CapMurica   | Avengers   | Admin      |           12 |
+-------------+------------+------------+--------------+
2 rows in set (0.04 sec)
```

Query 9: Forms a table of the player name, class_name, platform and the fireteam count where the platform is equaled to PS4 and having a fireteam member count greater than 2

```
SELECT player.player_name, class_type.class_name, fireteam.platform, fireteam.player_count
FROM player LEFT JOIN class_type ON player.player_id = class_type.player_id RIGHT JOIN
fireteam ON class_type.player_id = fireteam.player_id WHERE (fireteam.platform = "PS4")
HAVING fireteam.player_count > 2;
```

```
+-------------+------------+----------+--------------+
| player_name | class_name | platform | player_count |
+-------------+------------+----------+--------------+
| SaberWolf   | Hunter     | PS4      |            5 |
| PokeMan     | Hunter     | PS4      |            3 |
| BlastMan    | Titan      | PS4      |            3 |
+-------------+------------+----------+--------------+
3 rows in set (0.01 sec)
```

Query 10: Forms a table of the player name, class_name, platform and the fireteam count where the platform is equaled to STEAM and having a fireteam member count greater than the minimum fireteam count

```
SELECT player.player_name, class_type.class_name, fireteam.platform, fireteam.player_count
FROM player LEFT JOIN class_type ON player.player_id = class_type.player_id RIGHT JOIN
fireteam ON class_type.player_id = fireteam.player_id WHERE (fireteam.platform = "STEAM")
HAVING fireteam.player_count > (SELECT MIN(fireteam.player_count) FROM fireteam);
```

```
+-------------+------------+----------+--------------+
| player_name | class_name | platform | player_count |
+-------------+------------+----------+--------------+
| DarthMaul   | Warlock    | Steam    |            3 |
| Domon       | Hunter     | Steam    |            4 |
| MasterAsia  | Titan      | Steam    |            4 |
+-------------+------------+----------+--------------+
3 rows in set (0.00 sec)
```