

CPSC 304 Project Cover Page

Milestone #: 2

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Group Number: 83

Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
Anthony Baek	99870842	H4U2B	baekanthony@gmail.com
Robin Cryer	91600189	Z5W2B	cryerrobin@yahoo.com
Tyler Silva	36041978	N4G3B	tylers123789@gmail.com

By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

CHANGE LOG

Changed all names to use lowercase and underscores

Changed player to add lvl attribute, functionally determines health and strength

Changed name for keys: guild (g_name), item (i_name), npc (n_id), location (l_name), region (r_name), admin (a_name)

Changed IsConnectedTo to Connected to for brevity's sake

Moved SpawnRate from Mob to Spawns, so the same mob can spawn at different rates in different places

Removed p_name and a_name from primary keys

SCHEMA:

ENTITY TABLES:

player(p_id: int, p_name: char(30), join_date: date, money: int, lvl: int, strength: int, health: int, **l_name**: char(30))

PK: p_id

CK: p_name, p_id, join_date, money, lvl, strength, health, l_name

Unique: p_name

Not-Null: p_name, join_date, money, lvl, strength, health

guild(g_name: char(30), logo: char(500))

PK: g_name

CK: g_name, logo

admin(a_id: char(30), a_name: char(30))

PK: a_id

CK: a_id, a_name

Unique: a_name

Not-Null: a_name

item(i_name: char(30), value: Int, rarity: char(30))

__PK: i_name

CK: i_name, value, rarity

server(r_name: char(30), s_num: int, **a_id**: char(30))

PK: r_name, s_num

CK: r_name, s_num, a_id

Not-Null: a_id

region(r_name: char(30))

PK: r_name

CK: r_name

location(l_name: char(30))

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PK: l_name

CK: l_name

town(**l_name**: char(30), architecture_style: char(30))

PK: l_name

CK: l_name, architecture_style

dungeon(**l_name**: char(30), enemy_difficulty: char(30))

PK: l_name

CK: l_name, enemy_difficulty

npc(**n_id**: int, name: char(30))

PK: n_id

CK: n_id, name

Not-Null: name

mob(**n_id**: int, kills: int, deaths: int, health: int, damage: int)

PK: n_id

CK: n_id, kills, deaths, health

Not-Null: health, damage

villager(**n_id**: int, job: char(30), **l_name**: char(30))

PK: n_id

CK: n_id, job, l_name

RELATIONSHIP TABLES:

member_of(**p_id**: int, **g_name**: char(30), role: char(30))

PK: p_id, g_name

CK: p_id, g_name, role

Not-Null: role

is_on(**p_id**: int, **r_name**: char(30), **s_num**: int, connection_status: char(30))

PK: p_id, r_name, s_num

CK: p_id, r_name, s_num, connection_status

friends_with(**p_id1**: int, **p_id2**: int)

PK: p_id1, p_id2

CK: p_id1, p_id2

owns(**p_id**: int, **i_name**: char(30))

PK: p_id, i_name

CK: p_id, i_name

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has(r_name: char(30), s_num: int, l_name: char(30))

PK: r_name, s_num, l_name

CK: r_name, s_num, l_name

connected_to(l_name1: char(30), l_name2: char(30))

PK: l_name1, l_name2

CK: l_name1, l_name2

drops(n_id: int, i_name: char(30))

PK: n_id, i_name

CK: n_id, i_name

spawns(l_name: char(30), n_id: int, spawn_rate: int)

PK: l_name, n_id

CK: l_name, n_id, spawn_rate

sells(i_name: char(30), n_id: int)

PK: i_name, n_id

CK: i_name, n_id

Functional Dependencies:

player:

FD:

lvl -> strength

lvl -> health

(p_name: char(30), p_id: int, join_date: date, money: int, lvl: int, strength: int, health: int,

l_name: char(30))

-> (lvl, strength), (p_name: char(30), p_id: int, join_date: date, money: int, lvl: int, health: int,

l_name: char(30))

-> (lvl, strength), (lvl, health), (p_name: char(30), p_id: int, join_date: date, money: int, lvl: int,

l_name: char(30))

item:

FD:

rarity -> value

(i_name: char(30), value: Int, rarity: char(30))_

-> (rarity,value), (i_name, rarity)

Normalization:

ENTITY TABLES:

player (lvl, health), (p_name: char(30), p_id: int, join_date: date, money: int, lvl: int, **l_name**: char(30))

PK: p_id

CK: p_id, p_name, join_date, money, lvl, l_name

Unique: p_name

Not-Null: p_name, join_date, money, lvl

lvl_stats(lvl: int, strength: int, health: int)

PK: lvl

CK: lvl, strength, health

guild(g_name: char(30), logo: char(500))

PK: g_name

CK: g_name, logo

admin(id: char(30), a_name: char(30))

PK: id

CK: id, a_name

Unique: a_name

Not-Null: a_name

item(i_name: char(30), rarity: char(30))
__PK: i_name
CK: i_name, rarity

rv(rarity: char(30), value: Int)
PK: rarity
CK: rarity

server(**r_name**: char(30), s_num: int, **id**: char(30))
PK: r_name, s_num
CK: r_name, s_num, id
Not-Null: a_id

region(r_name: char(30))
PK: r_name
CK: r_name

location(l_name: char(30))
PK: l_name
CK: l_name

town(**l_name**: char(30), architecture_style: char(30))
PK: l_name
CK: l_name, architecture_style

dungeon(**l_name**: char(30), enemy_difficulty: char(30))
PK: l_name
CK: l_name, enemy_difficulty

npc(n_id: int, name: char(30))
PK: n_id
CK: n_id, name
Not-Null: name

mob(**n_id**: int, kills: int, deaths: int, health: int, damage)
PK: n_id
CK: n_id, kills, deaths, health, damage
Not-Null: health, damage

villager(**n_id**: int, job: char(30), **l_name**: char(30))
PK: n_id
CK: n_id, job, l_name

RELATIONSHIP TABLES:

member_of(p_id: int, g_name: char(30), role: char(30))

PK: p_id, g_name

CK: p_id, g_name, role

Not-Null: role

is_on(p_id: int, r_name: char(30), s_num: int, connection_status: char(30))

PK: p_id, r_name, s_num

CK: p_id, r_name, s_num, connection_status

friends_with(p_id1: int, p_id2: int)

PK: p_id1, p_id2

CK: p_id1, p_id2

owns(p_id: int, i_name: char(30))

PK: p_id, i_name

CK: p_id, i_name

has(r_name: char(30), s_num: int, i_name: char(30))

PK: r_name, s_num, i_name

CK: r_name, s_num, i_name

connected_to(i_name1: char(30), i_name2: char(30))

PK: i_name1, i_name2

CK: i_name1, i_name2

drops(n_id: int, i_name: char(30))

PK: n_id, i_name

CK: n_id, i_name

spawns(i_name: char(30), n_id: int, spawn_rate: int)

PK: i_name, n_id

CK: i_name, n_id, spawn_rate

sells(i_name: char(30), n_id: int)

PK: i_name, n_id

CK: i_name, n_id

SQL DDL Tables:

```
CREATE TABLE admin (  
  a_id int PRIMARY KEY,  
  a_name char(30) NOT NULL UNIQUE  
);
```

```
CREATE TABLE region (  
  r_name char(30) PRIMARY KEY  
);
```

```
CREATE TABLE server (  
  r_name char(30) REFERENCES region(r_name) ON DELETE CASCADE,  
  s_num int,  
  a_id int NOT NULL REFERENCES admin(a_id),  
  PRIMARY KEY (r_name, s_num));
```

```
CREATE TABLE location (  
  l_name char(30) PRIMARY KEY  
);
```

```
CREATE TABLE town (  
  l_name char(30) PRIMARY KEY,  
  architecture_style char(30),  
  FOREIGN KEY (l_name) REFERENCES location (l_name) ON DELETE CASCADE  
);
```

```
CREATE TABLE dungeon (  
  l_name char(30) PRIMARY KEY,  
  enemy_difficulty char(30),  
  FOREIGN KEY (l_name) REFERENCES location (l_name) ON DELETE CASCADE  
);
```

```
CREATE TABLE connected_to (  
  l_name1 char(30),  
  l_name2 char(30),  
  PRIMARY KEY (l_name1, l_name2),  
  FOREIGN KEY (l_name1) REFERENCES location (l_name),  
  FOREIGN KEY (l_name2) REFERENCES location (l_name)  
);
```

```
CREATE TABLE rv (  
  rarity char(30) PRIMARY KEY,  
  value int  
);
```


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```
CREATE TABLE item (  
i_name char(30) PRIMARY KEY,  
rarity char(30) REFERENCES rv(rarity)  
);
```

```
CREATE TABLE npc (  
n_id int PRIMARY KEY,  
n_name char(30) NOT NULL  
);
```

```
CREATE TABLE villager(  
n_id int PRIMARY KEY REFERENCES npc(n_id) ON DELETE CASCADE,  
job char(30),  
l_name char(30) REFERENCES town(l_name)  
);
```

```
CREATE TABLE mob (  
n_id int PRIMARY KEY REFERENCES npc(n_id) ON DELETE CASCADE,  
health int NOT NULL,  
damage int NOT NULL,  
kills int,  
deaths int  
);
```

```
CREATE TABLE sells (  
n_id int REFERENCES villager(n_id),  
i_name char(30) REFERENCES item(i_name),  
PRIMARY KEY (n_id,i_name)  
);
```

```
CREATE TABLE drops (  
n_id int REFERENCES mob(n_id),  
i_name char(30) REFERENCES item(i_name),  
PRIMARY KEY (n_id,i_name)  
);
```

```
CREATE TABLE spawns(  
l_name char(30) REFERENCES dungeon(l_name),  
n_id int REFERENCES mob(n_id),  
spawn_rate int,  
PRIMARY KEY (l_name, n_id)  
);
```

```
CREATE TABLE lvl_stats(  
lvl int PRIMARY KEY,  
strength int,
```

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```
health int  
);
```

```
CREATE TABLE player (  
  p_id int PRIMARY KEY,  
  p_name char(30) NOT NULL UNIQUE,  
  join_date date,  
  money int,  
  lvl int NOT NULL REFERENCES lvl_stats(lvl),  
  l_name char(30) NOT NULL REFERENCES location(l_name)  
);
```

```
CREATE TABLE friends_with(  
  p_id1 int,  
  p_id2 int,  
  PRIMARY KEY (p_id1, p_id2),  
  FOREIGN KEY (p_id1) REFERENCES player(p_id),  
  FOREIGN KEY (p_id2) REFERENCES player(p_id)  
);
```

```
CREATE TABLE guild (  
  g_name char(30) PRIMARY KEY,  
  logo char(500)  
);
```

```
CREATE TABLE member_of(  
  p_id int,  
  g_name char(30),  
  role char(30),  
  PRIMARY KEY (p_id, g_name),  
  FOREIGN KEY (p_id) REFERENCES player(p_id),  
  FOREIGN KEY (g_name) REFERENCES guild(g_name)  
);
```

```
CREATE TABLE owns(  
  p_id int REFERENCES player(p_id),  
  i_name char(30) REFERENCES item(i_name),  
  PRIMARY KEY (p_id, i_name)  
);
```

```
CREATE TABLE is_on(  
  p_id int REFERENCES player(p_id),  
  r_name char(30),  
  s_num int,
```

```
con_status char(30),  
PRIMARY KEY (p_id, r_name, s_num),  
FOREIGN KEY (r_name, s_num) REFERENCES server(r_name, s_num)  
);
```

```
CREATE TABLE has(  
r_name char(30),  
s_num int,  
l_name char(30) REFERENCES location(l_name),  
PRIMARY KEY (r_name, s_num, l_name),  
FOREIGN KEY (r_name,s_num) REFERENCES server(r_name, s_num)  
);
```

POPULATION:

```
INSERT INTO admin VALUES (5214, 'bob');
INSERT INTO admin VALUES (4042332452, 'thomas');
INSERT INTO admin VALUES (5125, 'tom');
INSERT INTO admin VALUES (5892341, 'suzie');
INSERT INTO admin VALUES (123321, 'billy');
```

```
INSERT INTO region VALUES ('NA');
INSERT INTO region VALUES ('EU');
INSERT INTO region VALUES ('CHN');
INSERT INTO region VALUES ('SEA');
INSERT INTO region VALUES ('SA');
```

```
INSERT INTO server VALUES ('NA',3,5214);
INSERT INTO server VALUES ('NA',1,5125);
INSERT INTO server VALUES ('EU',2,4042332452);
INSERT INTO server VALUES ('CHN',5,123321);
INSERT INTO server VALUES ('NA',5,5892341);
```

```
INSERT INTO location VALUES ('Christmas Land');
INSERT INTO location VALUES ('Cool Town');
INSERT INTO location VALUES ('Spooky Dungeon');
INSERT INTO location VALUES ('Gingerbread Village');
INSERT INTO location VALUES ('Scary Land');
INSERT INTO location VALUES ('Firefly Treehouse');
INSERT INTO location VALUES ('Red Garden');
INSERT INTO location VALUES ('Big bad house');
INSERT INTO location VALUES ('Small bad house');
INSERT INTO location VALUES ('Dungeon #5');
```

```
INSERT INTO town VALUES ('Christmas Land', 'Candy');
INSERT INTO town VALUES ('Cool Town', 'Brutalism');
INSERT INTO town VALUES ('Gingerbread Village', 'Candy');
INSERT INTO town VALUES ('Firefly Treehouse', 'Nature');
INSERT INTO town VALUES ('Red Garden', 'Nature');
```

```
INSERT INTO dungeon VALUES ('Spooky Dungeon', 'Hard');
INSERT INTO dungeon VALUES ('Scary Land', 'Easy');
INSERT INTO dungeon VALUES ('Big bad house', 'Hard');
INSERT INTO dungeon VALUES ('Small bad house', 'Easy');
INSERT INTO dungeon VALUES ('Dungeon #5', 'Normal');
```

```
INSERT INTO connected_to VALUES ('Cool Town','Christmas Land');
INSERT INTO connected_to VALUES ('Christmas Land','Gingerbread Village');
INSERT INTO connected_to VALUES ('Gingerbread Village','Dungeon #5');
```

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```
INSERT INTO connected_to VALUES ('Red Garden','Scary Land');
INSERT INTO connected_to VALUES ('Small bad house','Big bad house');
```

```
INSERT INTO rv VALUES ('NULL',0);
INSERT INTO rv VALUES ('Common', 1);
INSERT INTO rv VALUES ('Rare',20);
INSERT INTO rv VALUES ('Epic',100);
INSERT INTO rv VALUES ('Legendary', 10000);
```

```
INSERT INTO item VALUES ('Broadsword','Common');
INSERT INTO item VALUES ('Big bad Club','Legendary');
INSERT INTO item VALUES ('Sunglasses','Epic');
INSERT INTO item VALUES ('Stick','Common');
INSERT INTO item VALUES ('Wood Slab','NULL');
```

```
INSERT INTO npc VALUES (123512,'Ogre');
INSERT INTO npc VALUES (1257854,'Arnolda');
INSERT INTO npc VALUES (95434,'Billington');
INSERT INTO npc VALUES (5234,'Anchovy Jones');
INSERT INTO npc VALUES (65858,'Green Slime');
INSERT INTO npc VALUES (23454,'Sneaky Joe');
INSERT INTO npc VALUES (999,'Big Bad');
INSERT INTO npc VALUES (45435,'Small Bad');
INSERT INTO npc VALUES (5794,'Arlington The Great');
INSERT INTO npc VALUES (34535,'Billiard Bobby');
```

```
INSERT INTO villager VALUES (95434,'Smith','Cool Town');
INSERT INTO villager VALUES (1257854,'Milk Maid','Gingerbread Village');
INSERT INTO villager VALUES (23454,'Thief','Cool Town');
INSERT INTO villager VALUES (34535,'Mayor','Firefly Treehouse');
INSERT INTO villager VALUES (5794,'General','Christmas Land');
```

```
INSERT INTO mob VALUES (65858,10,1,0,1000);
INSERT INTO mob VALUES (123512,1000,20,8,891);
INSERT INTO mob VALUES (999,5000,120,1837,8);
INSERT INTO mob VALUES (45435,250,55,346,432);
INSERT INTO mob VALUES (5234,50,999999,7948283,1);
```

```
INSERT INTO sells VALUES (95434,'Broadsword');
INSERT INTO sells VALUES (1257854,'Wood Slab');
INSERT INTO sells VALUES (23454,'Stick');
INSERT INTO sells VALUES (34535,'Sunglasses');
INSERT INTO sells VALUES (5794,'Big bad Club');
```

```
INSERT INTO drops VALUES (65858,'Stick');
INSERT INTO drops VALUES (123512,'Big bad Club');
```

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```
INSERT INTO drops VALUES (999,'Big bad Club');
```

```
INSERT INTO drops VALUES (45435,'Sunglasses');
```

```
INSERT INTO drops VALUES (5234,'Wood Slab');
```

```
INSERT INTO spawns VALUES ('Scary Land',65858,5);
```

```
INSERT INTO spawns VALUES ('Spooky Dungeon',123512,25);
```

```
INSERT INTO spawns VALUES ('Big bad house',999,1000);
```

```
INSERT INTO spawns VALUES ('Small bad house',45435,500);
```

```
INSERT INTO spawns VALUES ('Dungeon #5',5234,9999);
```

```
INSERT INTO lvl_stats VALUES (1,2,3);
```

```
INSERT INTO lvl_stats VALUES (2,3,4);
```

```
INSERT INTO lvl_stats VALUES (3,4,5);
```

```
INSERT INTO lvl_stats VALUES (4,5,6);
```

```
INSERT INTO lvl_stats VALUES (5,6,7);
```

```
INSERT INTO player VALUES (27,'TheLegend27',TO_DATE('2001-03-27','YYYY-MM-DD'),2700000,5,'Dungeon #5');
```

```
INSERT INTO player VALUES (123,'Wong',TO_DATE('2022-12-12','YYYY-MM-DD'),0,1,'Cool Town');
```

```
INSERT INTO player VALUES (35634,'Cheggman',TO_DATE('2021-12-12','YYYY-MM-DD'),27,4,'Cool Town');
```

```
INSERT INTO player VALUES (465456,'Aph',TO_DATE('2010-09-12','YYYY-MM-DD'),3447,3,'Christmas Land');
```

```
INSERT INTO player VALUES (3463,'xXN00bPwn3rXx',TO_DATE('2007-03-04','YYYY-MM-DD'),3,2,'Small bad house');
```

```
INSERT INTO friends_with VALUES (3463,465456);
```

```
INSERT INTO friends_with VALUES (123,35634);
```

```
INSERT INTO friends_with VALUES (123,465456);
```

```
INSERT INTO friends_with VALUES (35634,3463);
```

```
INSERT INTO friends_with VALUES (465456,35634);
```

```
INSERT INTO guild VALUES ('Nerds',
```

```
    -  
    (.v.)  
    //-=-\\  
    (\\=_/)  
    ^^ ^^
```

```
);
```

```
INSERT INTO guild VALUES ('Smiley Friends','(。●_●。)');
```

```
INSERT INTO guild VALUES ('34567890','o.O');
```

```
INSERT INTO guild VALUES ('UBC eSports',';');
```

```
INSERT INTO guild VALUES ('Sad Lads',':((');
```

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```
INSERT INTO member_of VALUES (27,'Sad Lads','Leader');
INSERT INTO member_of VALUES (3463,'Nerds','Co-Leader');
INSERT INTO member_of VALUES (123,'34567890','Member');
INSERT INTO member_of VALUES (35634,'UBC eSports','Janitor');
INSERT INTO member_of VALUES (465456,'Smiley Friends','Friend');
```

```
INSERT INTO owns VALUES (27,'Wood Slab');
INSERT INTO owns VALUES (123,'Sunglasses');
INSERT INTO owns VALUES (35634,'Stick');
INSERT INTO owns VALUES (465456,'Broadsword');
INSERT INTO owns VALUES (465456,'Stick');
```

```
INSERT INTO is_on VALUES (123,'NA',3,'Online');
INSERT INTO is_on VALUES (27,'NA',1,'Online');
INSERT INTO is_on VALUES (35634,'EU',2,'Offline');
INSERT INTO is_on VALUES (465456,'NA',5,'Offline');
INSERT INTO is_on VALUES (3463,'NA',5,'Online');
```

```
INSERT INTO has VALUES ('NA',1,'Dungeon #5');
INSERT INTO has VALUES ('NA',3,'Cool Town');
INSERT INTO has VALUES ('EU',2,'Cool Town');
INSERT INTO has VALUES ('NA',5,'Christmas Land');
INSERT INTO has VALUES ('NA',5,'Small bad house');
```

Tuples:

```
SQL> SELECT * FROM admin;
```

A_ID	A_NAME
5214	bob
4042332452	thomas
5125	tom
5892341	suzie
123321	billy

```
SQL> SELECT * FROM region;
```

R_NAME
CHN
EU
NA
SA
SEA

```
SQL> SELECT * FROM server;
```

R_NAME	S_NUM	A_ID
NA	3	5214
NA	1	5125
EU	2	4042332452
CHN	5	123321
NA	5	5892341

```
SQL> SELECT * FROM location;
```

L_NAME
Big bad house
Christmas Land
Cool Town
Dungeon #5
Firefly Treehouse
Gingerbread Village
Red Garden
Scary Land
Small bad house
Spooky Dungeon

10 rows selected.


```
SQL> SELECT * FROM town;
```

L_NAME	ARCHITECTURE_STYLE
Christmas Land	Candy
Cool Town	Brutalism
Gingerbread Village	Candy
Firefly Treehouse	Nature
Red Garden	Nature

```
SQL> SELECT * FROM dungeon;
```

L_NAME	ENEMY_DIFFICULTY
Spooky Dungeon	Hard
Scary Land	Easy
Big bad house	Hard
Small bad house	Easy
Dungeon #5	Normal

```
SQL> SELECT * FROM connected_to;
```

L_NAME1	L_NAME2
Christmas Land	Gingerbread Village
Cool Town	Christmas Land
Gingerbread Village	Dungeon #5
Red Garden	Scary Land
Small bad house	Big bad house

```
SQL> SELECT * FROM rv;
```

RARITY	VALUE
NULL	0
Common	1
Rare	20
Epic	100
Legendary	10000

```
SQL> SELECT * FROM item;
```

I_NAME	RARITY
Broadsword	Common
Big bad Club	Legendary
Sunglasses	Epic
Stick	Common
Wood Slab	NULL

```
SQL> SELECT * FROM npc;
```

N_ID	N_NAME
123512	Ogre
1257854	Arnolda
95434	Billington
5234	Anchovy Jones
65858	Green Slime
23454	Sneaky Joe
999	Big Bad
45435	Small Bad
5794	Arlington The Great
34535	Billiard Bobby

```
SQL> SELECT * FROM villager;
```

N_ID	JOB	L_NAME
95434	Smith	Cool Town
1257854	Milk Maid	Gingerbread Village
23454	Thief	Cool Town
34535	Mayor	Firefly Treehouse
5794	General	Christmas Land

```
SQL> SELECT * FROM mob;
```

N_ID	HEALTH	DAMAGE	KILLS	DEATHS
65858	10	1	0	1000
123512	1000	20	8	891
999	5000	120	1837	8
45435	250	55	346	432
5234	50	999999	7948283	1

```
SQL> SELECT * FROM sells;
```

N_ID	I_NAME
5794	Big bad Club
23454	Stick
34535	Sunglasses
95434	Broadsword
1257854	Wood Slab

```
SQL> SELECT * FROM drops;
```

N_ID	I_NAME
999	Big bad Club
5234	Wood Slab
45435	Sunglasses
65858	Stick
123512	Big bad Club

```
SQL> SELECT * FROM spawns;
```

L_NAME	N_ID	SPAWN_RATE
Scary Land	65858	5
Spooky Dungeon	123512	25
Big bad house	999	1000
Small bad house	45435	500
Dungeon #5	5234	9999

```
SQL> SELECT * FROM lvl_stats;
```

LVL	STRENGTH	HEALTH
1	2	3
2	3	4
3	4	5
4	5	6
5	6	7

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```
SQL> SELECT * FROM player;
```

P_ID	P_NAME	JOIN_DATE	MONEY	LVL
27	TheLegend27	27-MAR-01	2700000	5
123	Wong	12-DEC-22	0	1
35634	Cheggman	12-DEC-21	27	4

P_ID	P_NAME	JOIN_DATE	MONEY	LVL
465456	Aph	12-SEP-10	3447	3
3463	xXN00bPwn3rXx	04-MAR-07	3	2

```
SQL> SELECT * FROM friends_with;
```

P_ID1	P_ID2
123	35634
123	465456
3463	465456
35634	3463
465456	35634

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```
SQL> SELECT * FROM guild;
```

```
G_NAME
```

```
LOGO
```

```
Nerds
```

```
  _  
(.v.)  
//--\\  
(\\=_/)  
  ^^  ^^
```

```
G_NAME
```

```
LOGO
```

```
Smiley Friends  
(????????????????)
```

```
G_NAME
```

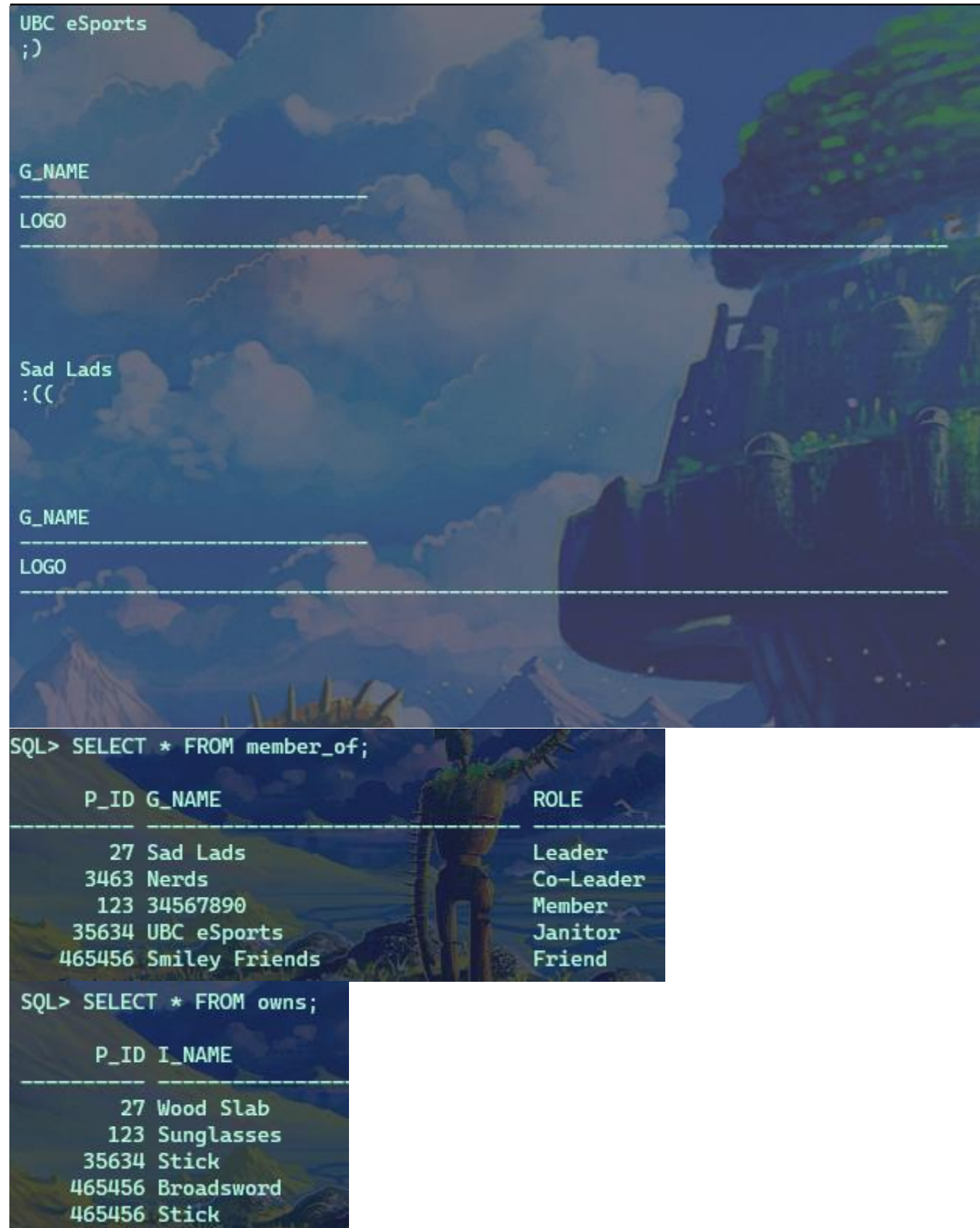
```
LOGO
```

```
34567890  
o.O
```

```
G_NAME
```

```
LOGO
```

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UBC eSports
;)

G_NAME

LOGO

Sad Lads
:((

G_NAME

LOGO

```
SQL> SELECT * FROM member_of;
```

P_ID	G_NAME	ROLE
27	Sad Lads	Leader
3463	Nerds	Co-Leader
123	34567890	Member
35634	UBC eSports	Janitor
465456	Smiley Friends	Friend

```
SQL> SELECT * FROM owns;
```

P_ID	I_NAME
27	Wood Slab
123	Sunglasses
35634	Stick
465456	Broadsword
465456	Stick


```
SQL> SELECT * FROM is_on;
```

	P_ID	R_NAME	S_NUM
--	------	--------	-------

CON_STATUS

Online	123	NA	3
--------	-----	----	---

Online	27	NA	1
--------	----	----	---

Online	3463	NA	5
--------	------	----	---

	P_ID	R_NAME	S_NUM
--	------	--------	-------

CON_STATUS

Offline	465456	NA	5
---------	--------	----	---

Offline	35634	EU	2
---------	-------	----	---

```
SQL> SELECT * FROM has;
```

R_NAME	S_NUM	L_NAME
EU	2	Cool Town
NA	1	Dungeon #5
NA	3	Cool Town
NA	5	Christmas Land
NA	5	Small bad house

QUERIES:

Insertion:

Create a new player in the game

Deletion:

Delete a server from the game

Update:

Change a player's location

Selection:

See the items in a player's inventory

Projection:

Get a list of all players and their current location

Join:

Join player and item table to find the p_name of every player that owns a certain item

Aggregation with Group by:

Average value of all items sold by each Villager

Aggregation with Having:

Locations with at least 10 players in them

Nested Aggregation with Group by

Average value of items dropped by mobs in a dungeon

Division

Get kill/death ratio for all mobs