

Stephen Oliver

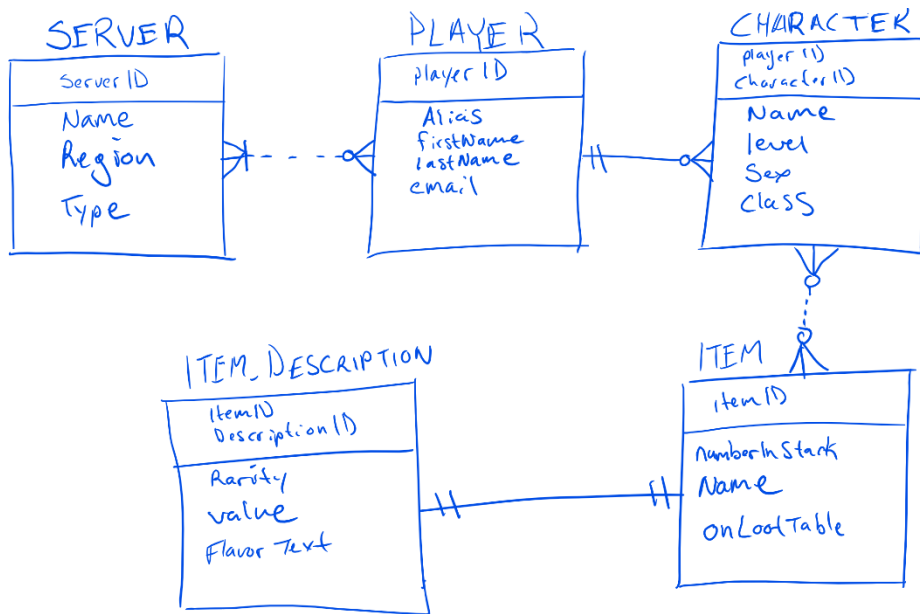
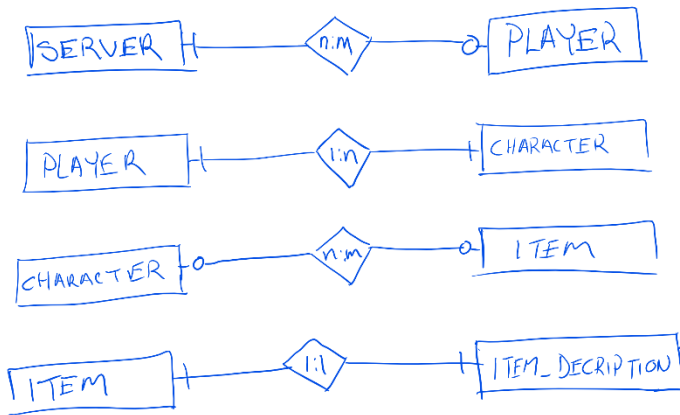
CS 364

SQL Lab 4

Spring 2017

Database Name: soliver

Diagrams::



SERVERS

Column Name	Type	Key	NULL Status	Remarks
ServerID	INT	Primary Key	NOT NULL	
Name	CHAR(20)	No	NOT NULL	
Region	ENUM('US', 'EU')	No	NOT NULL	DEFAULT value = 'US'
Type	ENUM('PvE', 'PvP')	No	NOT NULL	

SERVERS_PLAYERS_INT

Column Name	Type	Key	NULL Status	Remarks
ServerID	INT	Foreign Key	NOT NULL	Primary Key
PlayerID	INT	Foreign Key	NOT NULL	Primary Key

PLAYERS

Column Name	Type	Key	NULL Status	Remarks
PlayerID	INT	Primary Key	NOT NULL	
Alias	CHAR(20)	No	NOT NULL	
FirstName	CHAR(20)	No	NOT NULL	
LastName	CHAR(20)	No	NOT NULL	
Email	CHAR(30)	No	NOT NULL	
acctntCreated	TIMESTAMP	No	NOT NULL	DEFAULT value = CURRENT_TIMESTAMP

CHARACTERS

Column Name	Type	Key	NULL Status	Remarks
PlayerID	INT	Foreign Key	NOT NULL	
CharacterID	INT	Primary Key	NOT NULL	
Name	CHAR(20)	No	NOT NULL	
Level	TINYINT UNSIGNED	No	NOT NULL	
Sex	ENUM('Male', 'Female')	No	NOT NULL	
Class	ENUM('Mage', 'Warrior', 'Priest')	No	NOT NULL	

CHARACTERS_ITEMS_INT

Column Name	Type	Key	NULL Status	Remarks
CharacterID	INT	Foreign Key	NOT NULL	Primary Key
ItemID	INT	Foreign Key	NOT NULL	Primary Key
numberInStack	TINYINT UNSIGNED	No	NULL	

ITEMS

Column Name	Type	Key	NULL Status	Remarks
ItemID	INT	Primary Key	NOT NULL	
numberInStack	TINYINT UNSIGNED	No	NULL	
Name	CHAR(20)	No	NOT NULL	
OnLootTable	BOOLEAN	No	NOT NULL	DEFAULT value = TRUE

ITEM_DESCRIPTIONS

Column Name	Type	Key	NULL Status	Remarks
ItemID	INT	Foreign Key	NOT NULL	
DescriptionID	INT	Primary Key	NOT NULL	
Rarity	ENUM('Common', 'Rare', 'Legendary')	No	NOT NULL	
Value	MEDIUMINT UNSIGNED	No	NULL	
FlavorText	TEXT(100)	No	NULL	

Alter, Update & Trigger SQL Queries and Results::

Alter Statements:

```
#Oh no the game was not popular in the EU!! :(
ALTER TABLE SERVERS DROP COLUMN Region;

#players wanted to be able to show off how long they have played our game!
ALTER TABLE PLAYERS ADD
    acctCreated    TIMESTAMP        NOT NULL DEFAULT CURRENT_TIMESTAMP;

#Fix it so that Player Aliases are unique
ALTER TABLE PLAYERS ADD CONSTRAINT UniqueAlias UNIQUE(Alias);

#Drop NumberInStack from ITEMS and Put it into the INT table
ALTER TABLE ITEMS DROP COLUMN NumberInStack;
ALTER TABLE CHARACTERS_ITEMS_INT ADD NumberInStack TINYINT UNSIGNED NOT NULL DEFAULT 1;
```

1. Drop the Region column since EU servers didn't do well (i.e. the only other option in the Enum)
2. Add a timestamp acctCreated column to PLAYERS
3. Add a constraint to PLAYERS to ensure that PLAYERS.Alias is a unique value
4. *See comment for the desired result

Update Statements:

```
UPDATE PLAYERS SET acctCreated = CURRENT_TIMESTAMP;
UPDATE PLAYERS SET Email = CONCAT(Alias, '@game.com');
UPDATE CHARACTERS SET Level = 20 WHERE PlayerID = 20;
```

1. Updates the PLAYERS.acctCreated timestamp to the current pc time for all rows.
2. Updates the PLAYERS.Email strings to PLAYERS.alias + '@game.com' (concatenated) for all rows.
3. Updates the CHARACTERS.Level to a value of 20 for all rows belonging to the player with an ID of 20 (i.e. Stephen Oliver).

Triggers:

```
#Pre-emptive clean up statements
DROP TABLE IF EXISTS CHARACTERS_LOGS;
DROP TRIGGER IF EXISTS ins_character;
DROP TRIGGER IF EXISTS update_character;

#Create a log table
CREATE TABLE CHARACTERS_LOGS (
    LogID          INT          NOT NULL
                AUTO_INCREMENT,
    PlayerID       INT          NOT NULL,
    CharacterID    INT          NOT NULL,
    Name           CHAR(20)     NULL,
    Level          TINYINT UNSIGNED NULL,
    Sex            ENUM('Male', 'Female') NULL,
    Class          ENUM('Mage', 'Warrior', 'Priest') NULL,
    modTime        DATETIME     NOT NULL,
    modType        CHAR(20)     NOT NULL,
    CONSTRAINT     characterLogPK PRIMARY KEY(LogID)
);

DELIMITER $$
##INSERT TRIGGER - No need to log all the data, it is in the real table!
CREATE TRIGGER ins_character AFTER INSERT ON CHARACTERS
FOR EACH ROW
INSERT INTO CHARACTERS_LOGS
SET     CharacterID = NEW.CharacterID,
        PlayerID = NEW.PlayerID,
        modTime = NOW(),
        modType = 'NEW';

##UPDATE TRIGGER - log the old data before update
CREATE TRIGGER update_character BEFORE UPDATE ON CHARACTERS
FOR EACH ROW
INSERT INTO CHARACTERS_LOGS
SET     CharacterID = OLD.CharacterID,
        PlayerID = OLD.PlayerID,
        Name = OLD.Name,
        Level = OLD.Level,
        Sex = OLD.Sex,
        Class = OLD.Class,
        modTime = NOW(),
        modType = 'UPDATE';

$$
DELIMITER ;
```

Table SQL Queries and Results::

```
+-----+
| Tables_in_soliver |
+-----+
| CHARACTERS        |
| CHARACTERS_ITEMS_INT |
| CHARACTERS_LOGS   |
| ITEMS             |
| ITEM_DESCRIPTIONS |
| PLAYERS           |
| PLAYER_CHARACTER  |
| SERVERS           |
| SERVERS_PLAYERS_INT |
+-----+
```

SERVERS

```
DROP TABLE IF EXISTS SERVERS;

CREATE TABLE SERVERS (
    ServerID      INT                NOT NULL AUTO_INCREMENT,
    Name           CHAR(20)           NOT NULL,
    Region         ENUM('US', 'EU')   NOT NULL,
    Type           ENUM('PvE', 'PvP') NOT NULL,
    CONSTRAINT     ServerPK           PRIMARY KEY(ServerID)
);
```

```
INSERT INTO SERVERS (Name, Type) VALUES ('Big Boy', 'PvP');
INSERT INTO SERVERS (Name, Type) VALUES ('Big Girl', 'PvP');
INSERT INTO SERVERS (Name, Type) VALUES ('Lil Boy', 'PvE');
INSERT INTO SERVERS (Name, Type) VALUES ('Lil Girl', 'PvE');
INSERT INTO SERVERS (Name, Type) VALUES ('War Zone', 'PvP');
INSERT INTO SERVERS (Name, Type) VALUES ('Carebear', 'PvE');
INSERT INTO SERVERS (Name, Type) VALUES ('Math Club', 'PvP');
INSERT INTO SERVERS (Name, Type) VALUES ('Byte Club', 'PvP');
INSERT INTO SERVERS (Name, Type) VALUES ('WOU', 'PvE');
INSERT INTO SERVERS (Name, Type) VALUES ('Daggers Point', 'Pvp');
INSERT INTO SERVERS (Name, Type) VALUES ('Stared Twins', 'PvE');
INSERT INTO SERVERS (Name, Type) VALUES ('Lore Hunters', 'PvE');
INSERT INTO SERVERS (Name, Type) VALUES ('Battle Ground', 'PvP');
INSERT INTO SERVERS (Name, Type) VALUES ('Dungeon Run', 'PvE');
INSERT INTO SERVERS (Name, Type) VALUES ('Gank Town', 'PvP');
INSERT INTO SERVERS (Name, Type) VALUES ('Hell', 'PvP');
INSERT INTO SERVERS (Name, Type) VALUES ('Heaven', 'PvE');
INSERT INTO SERVERS (Name, Type) VALUES ('PCC', 'PvE');
INSERT INTO SERVERS (Name, Type) VALUES ('PSU', 'PvP');
INSERT INTO SERVERS (Name, Type) VALUES ('OSU', 'PvP');
```

Field	Type	Null	Key	Default	Extra
ServerID	int(11)	NO	PRI	NULL	auto_increment
Name	char(20)	NO		NULL	
Type	enum('PvE','PvP')	NO		NULL	

ServerID	Name	Type
1	Big Boy	PvP
2	Big Girl	PvP
3	Lil Boy	PvE
4	Lil Girl	PvE
5	War Zone	PvP
6	Carebear	PvE
7	Math Club	PvP
8	Byte Club	PvP
9	WOU	PvE
10	Daggers Point	PvP
11	Stared Twins	PvE
12	Lore Hunters	PvE
13	Battle Ground	PvP
14	Dungeon Run	PvE
15	Gank Town	PvP
16	Hell	PvP
17	Heaven	PvE
18	PCC	PvE
19	PSU	PvP
20	OSU	PvP

PLAYERS

```

DROP TABLE IF EXISTS PLAYERS;

CREATE TABLE PLAYERS(
    PlayerID          INT          NOT NULL AUTO_INCREMENT,
    Alias             CHAR(20)     NOT NULL,
    FirstName         CHAR(20)     NOT NULL,
    LastName          CHAR(20)     NOT NULL,
    Email             CHAR(30)     NOT NULL,
    CONSTRAINT PlayerPK PRIMARY KEY(PlayerID)
);

```



```

INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Pilot', 'Aaron', 'Earl', 'aearl@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Horns', 'Abby', 'Horner', 'ahorner@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Kube', 'Amanda', 'Kubo', 'akubo@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Huntster', 'Brandon', 'Hunt', 'bhunt@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Bruiser', 'Blake', 'Bauer', 'bbauer@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Cleric', 'Alexandria', 'LeClerc', 'aleclerc@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Frank', 'Anthony', 'Franco', 'afranco@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Koi', 'Dakota', 'Koki', 'dkoki@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Hatter', 'Jacob', 'Hatfield', 'jhatfield@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Beard', 'John', 'Mozingo', 'jmozingo@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Jello', 'Jonathan', 'Elliott', 'jelliott@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Fawn', 'Launia', 'Davis', 'ldavis@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Liono', 'Leo', 'Thalman', 'lthalman@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Lee', 'Lijian', 'Nian', 'lnian@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('L', 'Luis', 'Loyh', '@lloyhgame.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Daemon', 'Michael', 'Brown', '@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Tony', 'Nathan', 'Stark', 'nstark@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Friar', 'Nathaniel', 'Frey', 'nfrey@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Monk', 'Nikki', 'Ki', 'nki@game.com');
INSERT INTO PLAYERS (Alias, FirstName, LastName, Email)
VALUES ('Squeaks', 'Stephen', 'Oliver', 'soliver@game.com');

```

Field	Type	Null	Key	Default	Extra
PlayerID	int(11)	NO	PRI	NULL	auto_increment
Alias	char(20)	NO	UNI	NULL	
FirstName	char(20)	NO		NULL	
LastName	char(20)	NO		NULL	
Email	char(30)	NO		NULL	
acctCreated	timestamp	NO		CURRENT_TIMESTAMP	

PlayerID	Alias	FirstName	LastName	Email	acctCreated
1	Pilot	Aaron	Earl	Pilot@game.com	2017-05-15 03:55:02
2	Horns	Abby	Horner	Horns@game.com	2017-05-15 03:55:02
3	Kube	Amanda	Kubo	Kube@game.com	2017-05-15 03:55:02
4	Huntster	Brandon	Hunt	Huntster@game.com	2017-05-15 03:55:02
5	Bruiser	Blake	Bauer	Bruiser@game.com	2017-05-15 03:55:02
6	Cleric	Alexandria	LeClerc	Cleric@game.com	2017-05-15 03:55:02
7	Frank	Anthony	Franco	Frank@game.com	2017-05-15 03:55:02
8	Koi	Dakota	Koki	Koi@game.com	2017-05-15 03:55:02
9	Hatter	Jacob	Hatfield	Hatter@game.com	2017-05-15 03:55:02
10	Beard	John	Mozingo	Beard@game.com	2017-05-15 03:55:02
11	Jello	Jonathan	Elliott	Jello@game.com	2017-05-15 03:55:02
12	Fawn	Launia	Davis	Fawn@game.com	2017-05-15 03:55:02
13	Liono	Leo	Thalman	Liono@game.com	2017-05-15 03:55:02
14	Lee	Lijian	Nian	Lee@game.com	2017-05-15 03:55:02
15	L	Luis	Loyh	L@game.com	2017-05-15 03:55:02
16	Daemon	Michael	Brown	Daemon@game.com	2017-05-15 03:55:02
17	Tony	Nathan	Stark	Tony@game.com	2017-05-15 03:55:02
18	Friar	Nathaniel	Frey	Friar@game.com	2017-05-15 03:55:02
19	Monk	Nikki	Ki	Monk@game.com	2017-05-15 03:55:02
20	Squeaks	Stephen	Oliver	Squeaks@game.com	2017-05-15 03:55:02

PLAYERS_SERVERS_INT

```

DROP TABLE IF EXISTS SERVERS_PLAYERS_INT;

CREATE TABLE SERVERS_PLAYERS_INT (
    ServerID      INT      NOT NULL,
    PlayerID      INT      NOT NULL,
    CONSTRAINT    SPIntPK      PRIMARY KEY(ServerID, PlayerID),
    CONSTRAINT    SPInt_ServerFK FOREIGN KEY(ServerID)
                                REFERENCES SERVERS(ServerID)
                                ON UPDATE NO ACTION
                                ON DELETE CASCADE,
    CONSTRAINT    SPInt_PlayerFK FOREIGN KEY(PlayerID)
                                REFERENCES PLAYERS(PlayerID)
                                ON UPDATE NO ACTION
                                ON DELETE CASCADE
);

```

```

INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (1,1);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (1,2);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (1,3);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (2,4);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (3,5);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (4,6);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (4,7);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (5,8);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (5,9);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (10,10);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (10,11);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (11,12);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (12,13);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (13,14);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (14,15);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (20,16);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (20,17);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (20,18);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (20,19);
INSERT INTO SERVERS_PLAYERS_INT (ServerID, PlayerID) VALUES (20,20);

```

Field	Type	Null	Key	Default	Extra
ServerID	int(11)	NO	PRI	NULL	
PlayerID	int(11)	NO	PRI	NULL	

ServerID	PlayerID
1	1
1	2
1	3
2	4
3	5
4	6
4	7
5	8
5	9
10	10
10	11
11	12
12	13
13	14
14	15
20	16
20	17
20	18
20	19
20	20

CHARACTERS

```
DROP TABLE IF EXISTS CHARACTERS;

CREATE TABLE CHARACTERS(
    PlayerID      INT                NOT NULL,
    CharacterID   INT                NOT NULL AUTO_INCREMENT,
    Name          CHAR(20)           NOT NULL,
    Level         TINYINT UNSIGNED   NOT NULL,
    Sex           ENUM('Male', 'Female') NOT NULL,
    Class         ENUM('Mage', 'Warrior', 'Priest') NOT NULL,
    CONSTRAINT CharacterPK PRIMARY KEY(CharacterID),
    CONSTRAINT PlayerFK FOREIGN KEY(PlayerID)
                        REFERENCES PLAYERS(PlayerID)
                        ON UPDATE NO ACTION
                        ON DELETE CASCADE
);
```



```

INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (1, 'Zappo', 1, 'Male', 'Mage');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (2, 'Slashy', 1, 'Male', 'Warrior');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (3, 'Acorn', 2, 'Female', 'Priest');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (4, 'Blank', 1, 'Male', 'Mage');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (5, 'Fireup', 11, 'Female', 'Mage');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (6, 'Jason', 1, 'Male', 'Warrior');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (6, 'Nelly', 15, 'Female', 'Warrior');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (7, 'Icy', 1, 'Female', 'Mage');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (8, 'Dilan', 1, 'Male', 'Priest');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (9, 'Robbie', 18, 'Male', 'Priest');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (10, 'Holyshock', 1, 'Male', 'Priest');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (11, 'Millie', 1, 'Female', 'Mage');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (11, 'Zap', 1, 'Male', 'Mage');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (12, 'Zorg', 1, 'Male', 'Mage');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (13, 'Rage', 20, 'Female', 'Warrior');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (15, 'Roar', 1, 'Male', 'Warrior');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (16, 'Flameon', 20, 'Male', 'Mage');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (17, 'TimeWizard', 1, 'Male', 'Mage');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (18, 'Bubble U', 20, 'Female', 'Priest');
INSERT INTO CHARACTERS (PlayerID, Name, Level, Sex, Class)
VALUES (20, 'Shade', 1, 'Female', 'Mage');

```

Field	Type	Null	Key	Default	Extra
PlayerID	int(11)	NO	MUL	NULL	
CharacterID	int(11)	NO	PRI	NULL	auto_increment
Name	char(20)	NO		NULL	
Level	tinyint(3) unsigned	NO		NULL	
Sex	enum('Male','Female')	NO		NULL	
Class	enum('Mage','Warrior','Priest')	NO		NULL	

PlayerID	CharacterID	Name	Level	Sex	Class
1	1	Zappo	1	Male	Mage
2	2	Slashy	1	Male	Warrior
3	3	Acorn	2	Female	Priest
4	4	Blank	1	Male	Mage
5	5	Fireup	11	Female	Mage
6	6	Jason	1	Male	Warrior
6	7	Nelly	15	Female	Warrior
7	8	Icy	1	Female	Mage
8	9	Dilan	1	Male	Priest
9	10	Robbie	18	Male	Priest
10	11	Holyshock	1	Male	Priest
11	12	Millie	1	Female	Mage
11	13	Zap	1	Male	Mage
12	14	Zorg	1	Male	Mage
13	15	Rage	20	Female	Warrior
15	16	Roar	1	Male	Warrior
16	17	Flameon	20	Male	Mage
17	18	TimeWizard	1	Male	Mage
18	19	Bubble U	20	Female	Priest
20	20	Shade	20	Female	Mage

ITEMS

```

DROP TABLE IF EXISTS ITEMS;

CREATE TABLE ITEMS (
    ItemID          INT          NOT NULL AUTO_INCREMENT,
    NumberInStack   TINYINT UNSIGNED NOT NULL,
    Name            CHAR(20)      NOT NULL,
    OnLootTable     BOOL          NOT NULL DEFAULT TRUE,
    CONSTRAINT ItemPK PRIMARY KEY(ItemID)
);

```



```

INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Health Potion', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Mana Potion', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Sword', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Mace', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Wand', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Staff', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Holy Robe', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Scroll', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Helm', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Pointed Hat', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Laser Blaster', FALSE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Nuke', FALSE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('A Rock', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Tent', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Food', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Car', FALSE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Horse', TRUE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('The One Ring', FALSE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Holy Hand Grenade', FALSE);
INSERT INTO ITEMS (Name, OnLootTable) VALUES ('Water', TRUE);

```

Field	Type	Null	Key	Default	Extra
ItemID	int(11)	NO	PRI	NULL	auto_increment
Name	char(20)	NO		NULL	
OnLootTable	tinyint(1)	NO		1	

ItemID	Name	OnLootTable
1	Health Potion	1
2	Mana Potion	1
3	Sword	1
4	Mace	1
5	Wand	1
6	Staff	1
7	Holy Robe	1
8	Scroll	1
9	Helm	1
10	Pointed Hat	1
11	Laser Blaster	0
12	Nuke	0
13	A Rock	1
14	Tent	1
15	Food	1
16	Car	0
17	Horse	1
18	The One Ring	0
19	Holy Hand Grenade	0
20	Water	1

CHARACTERS_ITEMS_INT

```

DROP TABLE IF EXISTS CHARACTERS_ITEMS_INT;

CREATE TABLE CHARACTERS_ITEMS_INT(
    CharacterID      INT      NOT NULL,
    ItemID           INT      NOT NULL,
    CONSTRAINT       CIIInt_PK          PRIMARY KEY(CharacterID, ItemID),
    CONSTRAINT       CIIInt_CharactersFK FOREIGN KEY(CharacterID)
                                REFERENCES CHARACTERS(CharacterID)
                                ON UPDATE NO ACTION
                                ON DELETE CASCADE,
    CONSTRAINT       CIIInt_ItemsFK     FOREIGN KEY(ItemID)
                                REFERENCES ITEMS(ItemID)
                                ON UPDATE NO ACTION
                                ON DELETE CASCADE
);

```

```

INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (1, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (2, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (3, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (4, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (5, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (6, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (7, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (8, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (9, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (10, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (11, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (12, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (13, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (14, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (15, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (16, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (17, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (18, 1, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (18, 2, 20);
INSERT INTO CHARACTERS_ITEMS_INT (CharacterID, ItemID, NumberInStack)
VALUES (19, 1, 20);

```

Field	Type	Null	Key	Default	Extra
CharacterID	int(11)	NO	PRI	NULL	
ItemID	int(11)	NO	PRI	NULL	
NumberInStack	tinyint(3) unsigned	NO		1	

CharacterID	ItemID	NumberInStack
1	1	20
2	1	20
3	1	20
4	1	20
5	1	20
6	1	20
7	1	20
8	1	20
9	1	20
10	1	20
11	1	20
12	1	20
13	1	20
14	1	20
15	1	20
16	1	20
17	1	20
18	1	20
18	2	20
19	1	20

ITEM_DESCRIPTIONS

```

DROP TABLE IF EXISTS ITEM_DESCRIPTIONS;

CREATE TABLE ITEM_DESCRIPTIONS (
    ItemID          INT                NOT NULL,
    DescriptionID    INT                NOT NULL,
    Rarity           ENUM('Common', 'Rare', 'Legendary') NOT NULL
        DEFAULT 'Common',
    Value            MEDIUMINT UNSIGNED NOT NULL
        DEFAULT 0,
    FlavorText       TEXT(100)          NOT NULL,
    CONSTRAINT DescriptionPK PRIMARY KEY (DescriptionID),
    CONSTRAINT UniqueFK    UNIQUE (ItemID),
    CONSTRAINT ItemFK       FOREIGN KEY (ItemID)
        REFERENCES ITEMS (ItemID)
        ON UPDATE NO ACTION
        ON DELETE CASCADE
);

```



```

INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (1, 'Common', 10, 'Restores 5 HP');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (2, 'Common', 10, 'Restores 5 MP');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (3, 'Common', 25, 'I cut you!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (4, 'Common', 30, 'Batter up!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (5, 'Rare', 100, 'the magical fruit');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (6, 'Common', 25, 'Standard Magic Staff');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (7, 'Rare', 110, 'You look holy. ');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (8, 'Common', 15, 'Used to cast spells');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (9, 'Rare', 110, 'You are the man in the iron mask. ');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (10, 'Rare', 110, 'I feel pretty!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (11, 'Legendary', 0, 'Gms ONLY!!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (12, 'Legendary', 0, 'Gms ONLY!!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (13, 'Legendary', 1000, 'Just a rock?!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (14, 'Common', 75, 'Are you sleepy yet?');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (15, 'Common', 15, 'Come and get it!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (16, 'Rare', 0, 'Gms ONLY TRANSPORT!!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (17, 'Rare', 1100, 'Clip Clop, Giddy Up!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (18, 'Legendary', 0, 'Gms ONLY!!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (19, 'Legendary', 0, 'My Precious!');
INSERT INTO ITEM_DESCRIPTIONS (ItemID, Rarity, Value, FlavorText)
VALUES (20, 'common', 5, 'Fresh, straight from the spring!');

```

Field	Type	Null	Key	Default	Extra
ItemID	int(11)	NO	UNI	NULL	
DescriptionID	int(11)	NO	PRI	NULL	auto_increment
Rarity	enum('Common','Rare','Legendary')	NO		Common	
Value	mediumint(8) unsigned	NO		0	
FlavorText	tinytext	NO		NULL	

ItemID	DescriptionID	Rarity	Value	FlavorText
1	1	Common	10	Restores 5 HP
2	2	Common	10	Restores 5 MP
3	3	Common	25	I cut you!
4	4	Common	30	Batter up!
5	5	Rare	100	the magical fruit
6	6	Common	25	Standard Magic Staff
7	7	Rare	110	You look holy.
8	8	Common	15	Used to cast spells
9	9	Rare	110	You are the man in the iron mask.
10	10	Rare	110	I feel pretty!
11	11	Legendary	0	GMs ONLY!!
12	12	Legendary	0	GMs ONLY!!
13	13	Legendary	1000	Just a rock?!
14	14	Common	75	Are you sleepy yet?
15	15	Common	15	Come and get it!
16	16	Rare	0	GMs ONLY TRANSPORT!!
17	17	Rare	1100	Clip Clop, Giddy Up!
18	18	Legendary	0	GMs ONLY!!
19	19	Legendary	0	My Precious!
20	20	Common	5	Fresh, straight from the spring!

View SQL Queries and Results::

```
DROP VIEW IF EXISTS PLAYER_CHARACTER;  
  
CREATE VIEW PLAYER_CHARACTER AS  
    SELECT  P.Alias AS 'Player',  
            C.Name  AS 'Character',  
            C.Level  
    FROM PLAYERS P JOIN CHARACTERS C  
        ON P.PlayerID = C.PlayerID  
    ORDER BY P.PlayerID ASC  
;
```

Field	Type	Null	Key	Default	Extra
Player	char(20)	NO		NULL	
Character	char(20)	NO		NULL	
Level	tinyint(3) unsigned	NO		NULL	

Player	Character	Level
Pilot	Zappo	1
Horns	Slashy	1
Kube	Acorn	2
Huntster	Blank	1
Bruiser	Fireup	11
Cleric	Jason	1
Cleric	Nelly	15
Frank	Icy	1
Koi	Dilan	1
Hatter	Robbie	18
Beard	Holyshock	1
Jello	Millie	1
Jello	Zap	1
Fawn	Zorg	1
Liono	Rage	20
L	Roar	1
Daemon	Flameon	20
Tony	TimeWizard	1
Friar	Bubble U	20
Squeaks	Shade	20