Task C: Creating and Loading Relations

Contains the SQL script to create all necessary tables (`create.sql`), a data loading script (`load.sql`), and a list of CSV files used for bulk loading dummy data into the database.

1. Create.sql

```
CREATE TABLE User (
 User_ID INT NOT NULL AUTO_INCREMENT,
 Username VARCHAR(50) NOT NULL,
 Password VARCHAR(60) NOT NULL,
 Email VARCHAR(100) NOT NULL,
 Profile_Image VARCHAR(255),
 PRIMARY KEY (User_ID),
 UNIQUE (Username),
 UNIQUE (Email)
);

CREATE TABLE Pack (
 Pack_ID INT NOT NULL AUTO_INCREMENT,
 Pack_Name VARCHAR(100) NOT NULL,
 Pack_Image VARCHAR(255),
 PRIMARY KEY (Pack_ID)
);

CREATE TABLE Card (
 Card_ID INT NOT NULL AUTO_INCREMENT,
 Card_Name VARCHAR(100) NOT NULL,
 Rarity VARCHAR(50) NOT NULL,
 Artist VARCHAR(100),
 Card_Type VARCHAR(50) NOT NULL,
 Card_Image VARCHAR(255),
 Card_Description TEXT,
 PRIMARY KEY (Card_ID)
);

CREATE TABLE Pokemon_Card (
 Card_ID INT NOT NULL,
 Stage VARCHAR(50),
 Ability VARCHAR(100),
 Type VARCHAR(50) NOT NULL,
 Weakness VARCHAR(50),
 HP INT,
 Retreat_Cost INT DEFAULT 0,
```

```sql
  PRIMARY KEY (Card_ID),
  FOREIGN KEY (Card_ID) REFERENCES Card(Card_ID) ON DELETE CASCADE
);

CREATE TABLE Pokemon_Card_Attack (
  Card_ID INT NOT NULL,
  Attack_Name VARCHAR(100) NOT NULL,
  Attack_Damage INT DEFAULT 0,
  Attack_Description TEXT,
  PRIMARY KEY (Card_ID, Attack_Name),
  FOREIGN KEY (Card_ID) REFERENCES Card(Card_ID) ON DELETE CASCADE
);

CREATE TABLE Trainer_Card (
  Card_ID INT NOT NULL,
  Trainer_Card_Type VARCHAR(50) NOT NULL,
  PRIMARY KEY (Card_ID),
  FOREIGN KEY (Card_ID) REFERENCES Card(Card_ID) ON DELETE CASCADE
);

CREATE TABLE Collection (
  Collection_ID INT NOT NULL AUTO_INCREMENT,
  User_ID INT NOT NULL,
  PRIMARY KEY (Collection_ID),
  FOREIGN KEY (User_ID) REFERENCES User(User_ID) ON DELETE CASCADE
);

CREATE TABLE Collections_Cards (
  Collection_ID INT NOT NULL,
  Card_ID INT NOT NULL,
  Quantity_In_Collection INT NOT NULL DEFAULT 1,
  PRIMARY KEY (Collection_ID, Card_ID),
  FOREIGN KEY (Collection_ID) REFERENCES Collection(Collection_ID) ON DELETE
CASCADE,
  FOREIGN KEY (Card_ID) REFERENCES Card(Card_ID) ON DELETE CASCADE
);

CREATE TABLE Deck (
  Deck_ID INT NOT NULL AUTO_INCREMENT,
  Deck_Name VARCHAR(100) NOT NULL,
  Deck_Type VARCHAR(30),
  Deck_Description TEXT,
  User_ID INT NOT NULL,
  PRIMARY KEY (Deck_ID),
```

```
 FOREIGN KEY (User_ID) REFERENCES User(User_ID) ON DELETE CASCADE
);

CREATE TABLE Deck_Cards (
 Deck_ID INT NOT NULL,
 Card_ID INT NOT NULL,
 Quantity_In_Deck INT NOT NULL DEFAULT 1,
 PRIMARY KEY (Deck_ID, Card_ID),
 FOREIGN KEY (Deck_ID) REFERENCES Deck(Deck_ID) ON DELETE CASCADE,
 FOREIGN KEY (Card_ID) REFERENCES Card(Card_ID) ON DELETE CASCADE
 CHECK (Quantity_In_Deck <= 4)
);
```

2. Load.sql

```
LOAD DATA INFILE 'users.csv'
INTO TABLE User
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(User_ID, Username, Password, Email, Profile_Image);

LOAD DATA INFILE 'packs.csv'
INTO TABLE Pack
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(Pack_ID, Pack_Name, Pack_Image);

LOAD DATA INFILE 'cards.csv'
INTO TABLE Card
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(Card_ID, Card_Name, Rarity, Artist, Card_Type, Card_Image, Card_Description);

LOAD DATA INFILE 'pokemon_cards.csv'
INTO TABLE Pokemon_Card
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
```

```
IGNORE 1 ROWS
(Card_ID, Stage, Ability, Type, Weakness, HP, Retreat_Cost);

LOAD DATA INFILE 'pokemon_card_attacks.csv'
INTO TABLE Pokemon_Card_Attack
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(Card_ID, Attack_Name, Attack_Damage, Attack_Description);

LOAD DATA INFILE 'trainer_cards.csv'
INTO TABLE Trainer_Card
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(Card_ID, Trainer_Card_Type);

LOAD DATA INFILE 'collections.csv'
INTO TABLE Collection
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(Collection_ID, User_ID);

LOAD DATA INFILE 'collections_cards.csv'
INTO TABLE Collections_Cards
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(Collection_ID, Card_ID, Quantity_In_Collection);

LOAD DATA INFILE 'decks.csv'
INTO TABLE Deck
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(Deck_ID, Deck_Name, Deck_Type, Deck_Description, User_ID);

LOAD DATA INFILE 'deck_cards.csv'
```

```
INTO TABLE Deck_Cards
FIELDS TERMINATED BY ','
ENCLOSED BY ""
LINES TERMINATED BY '\n'
IGNORE 1 ROWS
(Deck_ID, Card_ID, Quantity_In_Deck);
```

3. CSV File Summary

- users.csv - Dummy user records

User_ID,Username,Password,Email,Profile_Image
1,ash123,password123,ash@example.com,NULL
2,misty88,waterpass88,misty@example.com,profile2.png
3,brockrock,geodude12,brock@example.com,NULL

- packs.csv - Dummy Pokémon pack entries

Pack_ID,Pack_Name,Pack_Image
1,Base Set,NULL
2,Jungle,NULL
3,Fossil,NULL

- cards.csv - Cards used in decks/collections

Card_ID,Card_Name,Rarity,Artist,Card_Type,Card_Image,Card_Description
1,PikaSpark,Common,NULL,Pokemon,NULL,NULL
2,WaterSplash,Uncommon,Kelly Smith,Pokemon,NULL,NULL
3,Trainer Boost,Common,NULL,Trainer,NULL,Increases attack power

- pokemon_cards.csv - Pokémon-type card details

Card_ID,Stage,Ability,Type,Weakness,HP,Retreat_Cost
1,Basic,Thunder Shock,Electric,Ground,60,1
2,Stage 1,Aqua Jet,Water,Electric,70,1

- pokemon_card_attacks.csv - Attacks linked to Pokémon cards

Card_ID,Attack_Name,Attack_Damage,Attack_Description
1,Thunder Shock,30,May paralyze opponent
1,Volt Flicker,20,NULL
2,Splash,10,Just a splash

- trainer_cards.csv - Trainer-type card info

```
Card_ID,Trainer_Card_Type
3,Item
```

- collections.csv - Collection metadata linked to users

```
Collection_ID,User_ID
1,1
2,2
3,3
```

- collections_cards.csv - Cards within each collection

```
Collection_ID,Card_ID,Quantity_In_Collection
1,1,2
1,2,1
2,3,3
```

- decks.csv - User-built decks

```
Deck_ID,Deck_Name,Deck_Type,Deck_Description,User_ID
1,Electric Fury,Standard,An electric-based deck,1
2,Water Wave,Standard,Focus on water types,2
```

- deck_cards.csv - Cards within each deck

```
Deck_ID,Card_ID,Quantity_In_Deck
1,1,4
2,2,3
1,3,2
```