



پایگاه داده‌ها

گروه شماره 2 (سرگروه: روژین، ستگارپور)

موضوع پروژه: طراحی پایگاه داده سایت جیمبو تریپ (سایت رزرو هتل و بلیط هواپیما و قطار)

فاز چهارم پروژه، بخش اول (ساخت جداول پایگاه داده در MySQL)

1. جدول کاربر:

```
CREATE TABLE users
(
    id                INT                NOT NULL AUTO_INCREMENT PRIMARY KEY,
    username           VARCHAR(50)       NOT NULL UNIQUE,
    hashed_password    VARCHAR(128)     NOT NULL,
    gender             TINYINT           NOT NULL,
    national_code      VARCHAR(10)       NOT NULL UNIQUE,
    persian_first_name VARCHAR(30)       NOT NULL,
    persian_last_name  VARCHAR(30)       NOT NULL,
    latin_first_name   VARCHAR(30)       NOT NULL,
    latin_last_name    VARCHAR(30)       NOT NULL,
    phone_number       VARCHAR(15)       NOT NULL UNIQUE,
    email              VARCHAR(254)      NOT NULL UNIQUE,
    credit             INT                NOT NULL
);
```

2. جدول کد تخفیف:

```
CREATE TABLE discount_code
(
    code                VARCHAR(50)      NOT NULL PRIMARY KEY,
    reservation_type    SMALLINT         NOT NULL,
    max_discount_value  INT,
    discount_percentage TINYINT          NOT NULL,
    start_datetime      DATETIME         NOT NULL,
    expiry_datetime     DATETIME         NOT NULL
);
```

3. جدول کاربران مشمول کد تخفیف:

```
CREATE TABLE discount_code_user
(
    code    VARCHAR(50) NOT NULL,
    user_id INT         NOT NULL,
    FOREIGN KEY (code) REFERENCES discount_code(code),
    FOREIGN KEY (user_id) REFERENCES users(id)
);
```

4. جدول ویلای اجاره‌ای:

```
CREATE TABLE villa
(
    id            INT            NOT NULL AUTO_INCREMENT PRIMARY KEY,
    name          VARCHAR(80)    NOT NULL,
    description    VARCHAR(300)  NOT NULL,
    address       VARCHAR(200)   NOT NULL,
    renting_cost  INT            NOT NULL
);
```

5. جدول تصاویر ویلا:

```
CREATE TABLE villa_image
(
    villa_id  int,
    image_url VARCHAR(100) NOT NULL,
    FOREIGN KEY (villa_id) REFERENCES villa(id)
);
```

6. جدول هتل:

```
CREATE TABLE hotel
(
    id            INT            NOT NULL AUTO_INCREMENT PRIMARY KEY,
    name          VARCHAR(80)    NOT NULL,
    description    VARCHAR(300)  NOT NULL,
    address       VARCHAR(300)   NOT NULL,
    stars_count   TINYINT        NOT NULL
);
```

7. جدول تصاویر هتل:

```
CREATE TABLE hotel_image
(
    hotel_id  int,
    image_url VARCHAR(100) NOT NULL,
    FOREIGN KEY (hotel_id) REFERENCES hotel(id)
);
```

8. جدول شماره تلفن های هتل:

```
CREATE TABLE hotel_phone_number
(
    hotel_id  int,
```

```

        phone_number VARCHAR(15) NOT NULL,
        FOREIGN KEY (hotel_id) REFERENCES hotel(id)
    );

```

9. جدول اتاق هتل:

```

CREATE TABLE hotel_room
(
    id            INT            NOT NULL AUTO_INCREMENT PRIMARY KEY,
    hotel_id      INT            NOT NULL,
    type          SMALLINT       NOT NULL,
    price         INT            NOT NULL,
    description   VARCHAR(300)   NOT NULL,
    FOREIGN KEY (hotel_id) REFERENCES hotel(id)
);

```

10. جدول تور:

```

CREATE TABLE tour
(
    id            INT            NOT NULL AUTO_INCREMENT PRIMARY KEY,
    name          VARCHAR(80)    NOT NULL,
    description   VARCHAR(300)   NOT NULL
);

```

11. جدول خط هوایی:

```

CREATE TABLE airline
(
    id    INT            NOT NULL PRIMARY KEY,
    name  VARCHAR(50)    NOT NULL
);

```

12. جدول مبدا خط هوایی:

```

CREATE TABLE airline_origin
(
    name          VARCHAR(50)    NOT NULL PRIMARY KEY,
    origin_country VARCHAR(30)    NOT NULL
);

```

13. جدول مدل هواپیما:

```
CREATE TABLE airplane_model
(
    model_name VARCHAR(50) NOT NULL PRIMARY KEY,
    seats_count SMALLINT NOT NULL
);
```

14. جدول هواپیما:

```
CREATE TABLE airplane
(
    id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
    airline_id INT NOT NULL,
    model VARCHAR(50) NOT NULL,
    FOREIGN KEY (airline_id) REFERENCES airline(id),
    FOREIGN KEY (model) REFERENCES airplane_model(model_name)
);
```

15. جدول شرکت ریلی:

```
CREATE TABLE rail_company
(
    id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
    name VARCHAR(80) NOT NULL,
    daily_trips INT NOT NULL,
    max_allowed_daily_trips INT NOT NULL
);
```

16. جدول مدل قطار:

```
CREATE TABLE train_model
(
    model_name VARCHAR(50) NOT NULL PRIMARY KEY,
    seats_count SMALLINT NOT NULL
);
```

17. جدول قطار:

```
CREATE TABLE train
(
    id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
    rail_company_id INT NOT NULL,
    model VARCHAR(50) NOT NULL,
    FOREIGN KEY (rail_company_id) REFERENCES rail_company(id),
);
```

```
FOREIGN KEY (model) REFERENCES train_model(model_name)
);
```

18. جدول صندلی قطار:

```
CREATE TABLE train_seat
(
    id            INT            NOT NULL AUTO_INCREMENT PRIMARY KEY,
    train_id      INT            NOT NULL,
    price         INT            NOT NULL,
    seat_number   SMALLINT NOT NULL,
    FOREIGN KEY (train_id) REFERENCES train(id)
);
```

19. جدول رزرو ویلا:

```
CREATE TABLE villa_reservation
(
    id                INT            NOT NULL AUTO_INCREMENT PRIMARY KEY,
    user_id           INT            NOT NULL,
    villa_id          INT            NOT NULL,
    discount_code     VARCHAR(50),
    entry_datetime    DATETIME NOT NULL,
    departure_datetime DATETIME NOT NULL,
    cancel_datetime    DATETIME,
    FOREIGN KEY (user_id) REFERENCES users(id),
    FOREIGN KEY (villa_id) REFERENCES villa(id),
    FOREIGN KEY (discount_code) REFERENCES discount_code(code)
);
```

20. جدول رزرو هتل:

```
CREATE TABLE hotel_reservation
(
    id                INT            NOT NULL IDENTITY(1,1) PRIMARY KEY,
    user_id           INT            NOT NULL FOREIGN KEY REFERENCES users(id),
    discount_code     VARCHAR(50) FOREIGN KEY REFERENCES discount_code(code),
    price             INT            NOT NULL,
    entry_datetime    DATETIME NOT NULL,
    departure_datetime DATETIME NOT NULL,
    cancel_datetime    DATETIME,
);
```

21. جدول رزرو اتاق هتل:

```
CREATE TABLE hotel_room_reservation
(
    reservation_id INT NOT NULL,
    room_id        INT NOT NULL,
    FOREIGN KEY (reservation_id) REFERENCES hotel_reservation(id),
    FOREIGN KEY (room_id) REFERENCES hotel_room(id)
);
```

22. جدول رزرو تور:

```
CREATE TABLE tour_reservation
(
    id                INT                NOT NULL AUTO_INCREMENT PRIMARY KEY,
    user_id           INT                NOT NULL,
    tour_id           INT                NOT NULL,
    people_count      SMALLINT NOT NULL,
    total_price       INT                NOT NULL,
    reserve_datetime  DATETIME NOT NULL,
    cancel_datetime   DATETIME,
    FOREIGN KEY (user_id) REFERENCES users(id),
    FOREIGN KEY (tour_id) REFERENCES tour(id)
);
```

23. جدول بلیط هواپیما:

```
CREATE TABLE airplane_ticket
(
    id                INT                NOT NULL AUTO_INCREMENT PRIMARY KEY,
    airplane_id       INT                NOT NULL,
    origin_country    VARCHAR(30) NOT NULL,
    destination_country VARCHAR(30) NOT NULL,
    price             INT                NOT NULL,
    seat_id           VARCHAR(10) NOT NULL,
    flight_datetime   DATETIME NOT NULL,
    return_flight_datetime DATETIME,
    FOREIGN KEY (airplane_id) REFERENCES airplane(id)
);
```

24. جدول رزرو پرواز:

```
CREATE TABLE flight_reservation
(
    id                INT                NOT NULL AUTO_INCREMENT PRIMARY KEY,
    user_id           INT                NOT NULL,
    ticket_id         INT                NOT NULL,
```

```

discount_code    VARCHAR(50),
flight_type      SMALLINT NOT NULL,
reserve_datetime DATETIME NOT NULL,
cancel_datetime  DATETIME,
FOREIGN KEY (user_id) REFERENCES users(id),
FOREIGN KEY (ticket_id) REFERENCES airplane_ticket(id),
FOREIGN KEY (discount_code) REFERENCES discount_code(code)
);

```

25. جدول بلیط قطار:

```

CREATE TABLE train_ticket
(
    id            INT            NOT NULL AUTO_INCREMENT PRIMARY KEY,
    train_id      INT            NOT NULL,
    seat_id       INT            NOT NULL,
    origin        VARCHAR(30)    NOT NULL,
    destination   VARCHAR(30)    NOT NULL,
    price         INT            NOT NULL,
    departure_datetime DATETIME  NOT NULL,
    cancel_datetime DATETIME,
    FOREIGN KEY (train_id) REFERENCES train(id),
    FOREIGN KEY (seat_id) REFERENCES train_seat(id)
);

```

26. جدول رزرو قطار:

```

CREATE TABLE train_reservation
(
    id            INT            NOT NULL AUTO_INCREMENT PRIMARY KEY,
    user_id       INT            NOT NULL,
    ticket_id     INT            NOT NULL,
    discount_code VARCHAR(50)    ,
    flight_type   SMALLINT NOT NULL,
    reserve_datetime DATETIME NOT NULL,
    cancel_datetime DATETIME,
    FOREIGN KEY (user_id) REFERENCES users(id),
    FOREIGN KEY (ticket_id) REFERENCES train_ticket(id),
    FOREIGN KEY (discount_code) REFERENCES discount_code(code)
);

```