# 데이터베이스 프로젝트 Airline CRM

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# 01. 개발 환경 및 주제

### 백엔드 개발환경



### 프론트엔드 개발 환경



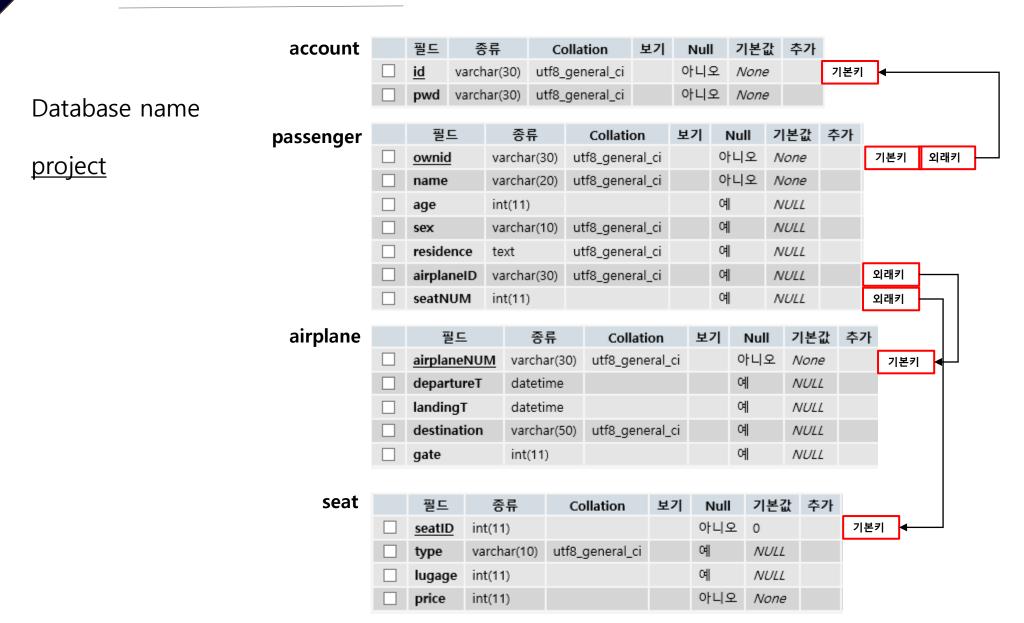








# 01. 데이터베이스 구성



### 01. 데이터베이스 구성 Query

### passenger CREATE TABLE passenger( ownid varchar(30) NOT NULL, name varchar(20) NOT NULL, age int, sex varchar(10), residence text, airplaneID varchar(30) NULL, seatNUM int, PRIMARY KEY (ownid), FOREIGN KEY ( airplaneID ) REFERENCES airplane( airplaneNUM ) ON UPDATE CASCADE, FOREIGN KEY ( seatNUM ) REFERENCES seat( seatID ) ON DELETE CASCADE ) ENGINE = innodb;

#### account

CREATE TABLE account(

id varchar( 30 ) NOT NULL ,
 pwd varchar( 30 ) NOT NULL ,

PRIMARY KEY ( id ) ,

FOREIGN KEY ( id ) REFERENCES passenger( ownid )
) ENGINE = innodb;

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### 01. 데이터베이스 구성 Query

airplane	seat
CREATE TABLE airplane(	CREATE TABLE seat(
airplaneNUM varchar( 30 ) NOT NULL , departureT datetime, landingT datetime, destination varchar( 50 ) , gate int,	seatID int, type varchar( 10 ) , lugage int, price int NOT NULL ,
PRIMARY KEY ( airplaneNUM )	PRIMARY KEY ( seatID ) ) ENGINE = innoDB;
) ENGINE = innodb:	

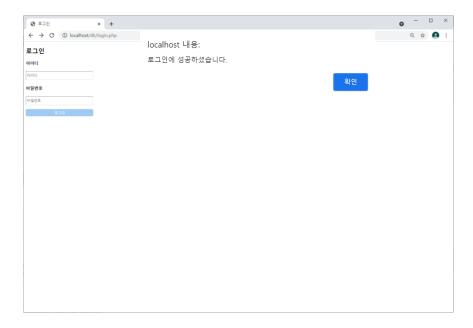
#### 유의사항

• INNODB를 사용하였기 때문에 외래키에 유의. 테이블 생성 시 airplane/seat → passengers → account 순서로 생성 되어야 함.

- INSERT 구문 사용 시 역시나 위 순서로 수행 되어야 함.
- INNODB 사용 시 MYSQL my.ini 파일에 아래 구문 추가해야 함.

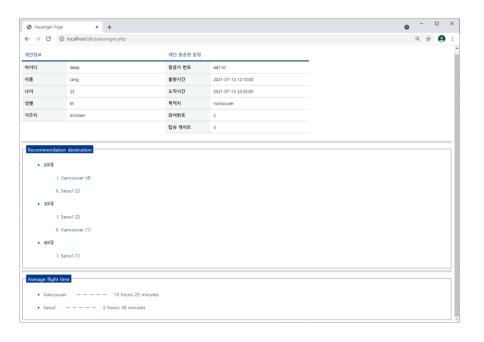
[mysqld] default-storage-engine=innodb

# 02. 웹 구현



#### **Login Page Query**

SELECT pwd from account where id ='{\$id}';

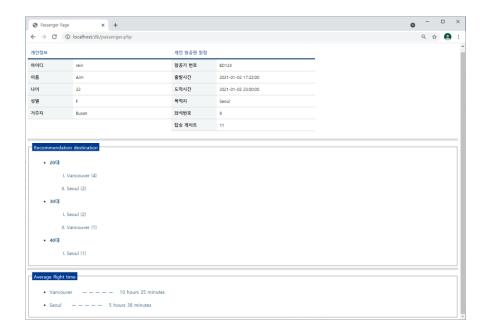


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#### **Passengers Page Query – Personal information**

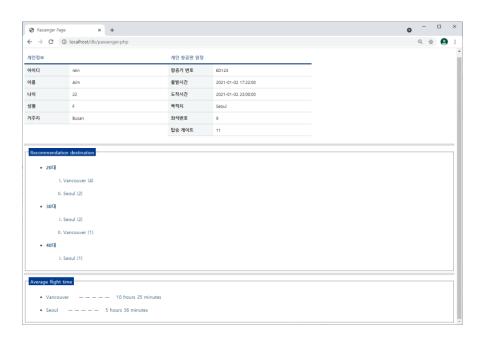
```
SELECT * from passenger
inner join airplane
on passenger.airplaneID = airplane.airplaneNum
where ownid='{$_SESSION['user']}';
```

### 02. 웹 구현



#### Passengers Page Query – Recommendation1

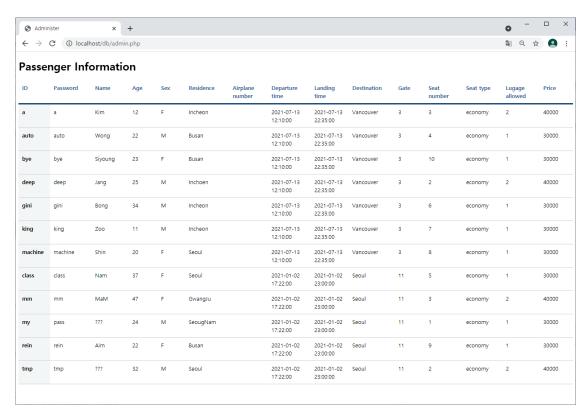
```
SELECT p.age -
MOD( p.age, 10 ) AS age_range, a.destination,
count( p.age ) AS counting
   FROM passenger p, airplane a
   WHERE p.airplaneID = a.airplaneNum
   GROUP BY age_range, a.destination
   HAVING age_range = 20
   ORDER BY counting DESC
  LIMIT 0 , 2;
```



#### **Passengers Page Query – Recommendation2**

```
SELECT destination,avg(TIMESTAMPDIFF(MINUTE,departureT,landingT))
as flight_time
from airplane
group by destination
order by flight_time desc;
```

### 02. 웹 구현



#### **Administer Page Query**

SELECT id,pwd,name,age,sex,residence,airplaneID,departureT,landingT,destination,gate,seatID,type,lugage,price from account account,airplane airplane,passenger passenger,seat seat where account.id=passenger.ownid and airplane.airplaneNum=passenger.airplaneID and seat.seatID=passenger.seatNum;

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