

## ENSF 608

### Databases

#### SQL Queries document

1. Get user by email (USERS table):

```
SELECT * FROM stock_recommendation_system_db.users WHERE  
email = %s
```

2. Check if an investment preference exists:

```
SELECT COUNT(*)  
FROM stock_recommendation_system_db.investment_preferences  
WHERE preferred_region = %s AND preferred_exchange = %s  
AND risk_tolerance = %s AND asset_type = %s
```

3. Fetch preference\_id for a specific investment preference:

```
SELECT preference_id  
FROM stock_recommendation_system_db.investment_preferences  
WHERE preferred_region = %s AND preferred_exchange = %s  
AND risk_tolerance = %s AND asset_type = %s
```

4. Check if a user-investment preference relationship exists:

```
SELECT COUNT(*)  
FROM  
stock_recommendation_system_db.user_investment_preferences  
WHERE user_id = %s AND preference_id = %s
```

5. Check if a stock exists:

```
SELECT COUNT(*)  
FROM stock_recommendation_system_db.stocks  
WHERE stock_symbol = %s
```

6. Fetch stock\_id for an existing stock:

```
SELECT stock_id  
FROM stock_recommendation_system_db.stocks  
WHERE stock_symbol = %s
```

7. Check if a stock-investment preference relationship exists:

```
SELECT COUNT(*)  
FROM  
stock_recommendation_system_db.stock_investment_preference  
s  
WHERE stock_id = %s AND preference_id = %s
```

8. Get bookmarked stocks for a user:

```
SELECT s.stock_id, s.stock_symbol, s.company_name,  
s.sector, s.market_cap, s.created_at  
FROM Stocks s  
INNER JOIN user_bookmarked_stocks ubs ON s.stock_id =  
ubs.stock_id  
WHERE ubs.user_id = %s  
ORDER BY s.created_at DESC
```

9. Insert a new user (USERS table):

```
INSERT INTO stock_recommendation_system_db.users (name,  
email, password, created_at) VALUES (%s, %s, %s, %s)
```

10. Insert a new investment preference:

```
INSERT INTO
stock_recommendation_system_db.investment_preferences
(preferred_region, preferred_exchange, risk_tolerance,
asset_type)
VALUES (%s, %s, %s, %s)
```

11. Insert a user-investment preference relationship

```
INSERT INTO
stock_recommendation_system_db.user_investment_preferences
(user_id, preference_id) VALUES (%s, %s)
```

12. Insert a new stock:

```
INSERT INTO stock_recommendation_system_db.stocks
(stock_symbol, company_name, sector, market_cap,
created_at)
VALUES (%s, %s, %s, %s, %s)
```

13. Insert a stock-investment preference relationship:

```
INSERT INTO
stock_recommendation_system_db.stock_investment_preference
s (stock_id, preference_id)
VALUES (%s, %s)
```

14. Insert bookmarked stocks for a user:

```
INSERT IGNORE INTO user_bookmarked_stocks (user_id,
stock_id) VALUES (%s, %s)
```

15. Update an investment preference:

```
UPDATE
stock_recommendation_system_db.investment_preferences
SET risk_tolerance = %s, asset_type = %s, preferred_region
= %s, preferred_exchange = %s
WHERE preferred_region = %s AND preferred_exchange = %s
AND risk_tolerance = %s AND asset_type = %s
```