

# **Database Systems**

## **Project 2**

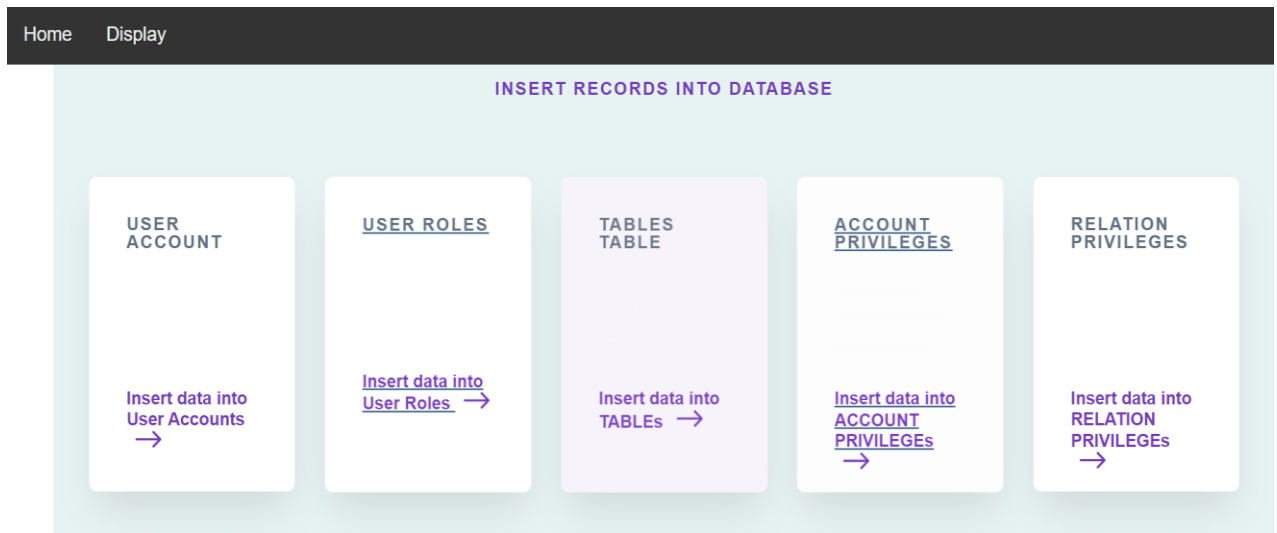
By:

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## For Insertion of records :

Each card represents each task in the modules,

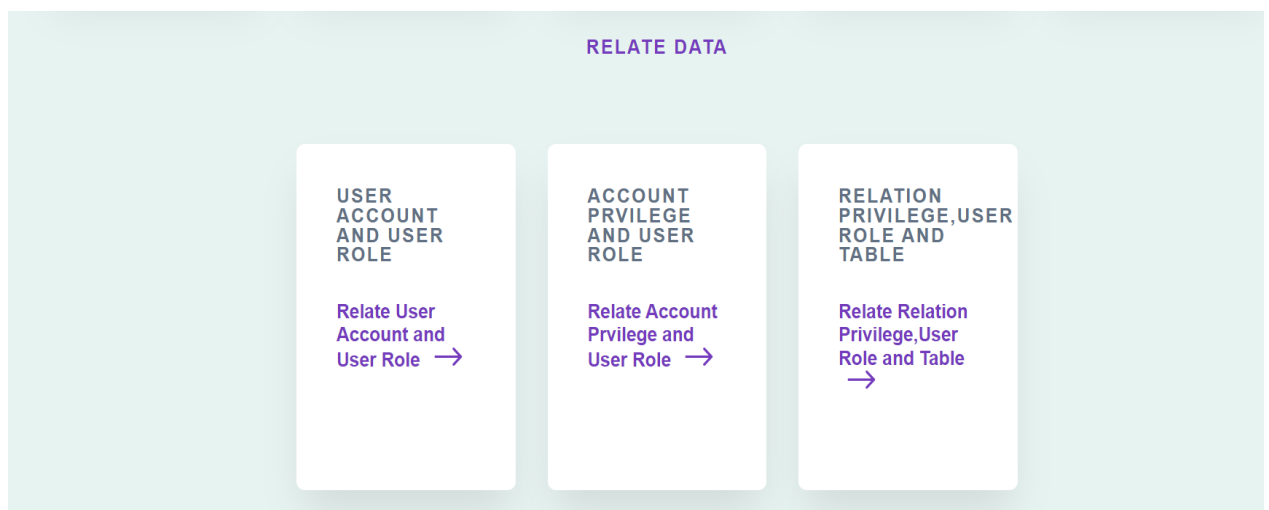
- i. User Account
- ii. User Roles
- iii. Table
- iv. Account Privileges
- v. Relation Privileges



## For relating the records :

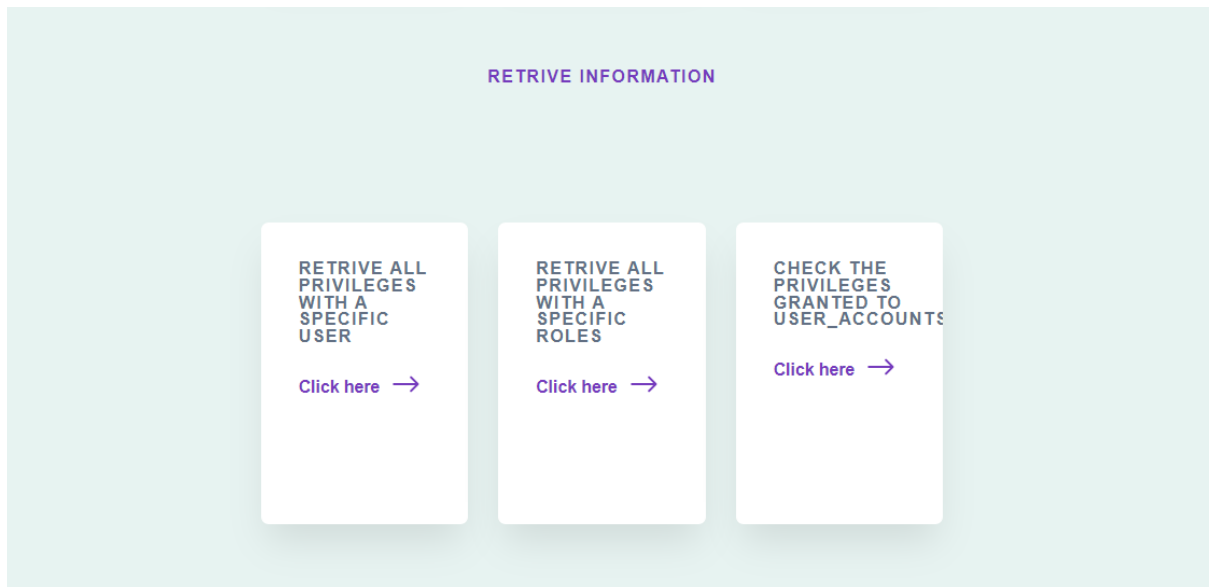
Records can be made in 3 ways:

- vi. Relate User Account and User Role.
- vii. Relate Account Privileges and User Role.
- viii. Relate Relation Privileges and User Role and Table.



### For retrieving questions:

- I. Retrieving all privileges associated with a specific user
- II. Retrieving all privileges associated with a specific role
- III. Check the privileges associated with a user account



### 3.1 The first transaction is to add all the information about a new USER\_ACCOUNT

testing

testing@gmail.com

tester|

Submit

The above data will be inserted into the tables, After Insertion the table looks as shown below:

Table Name : USER\_ACCOUNTs

IdNo	Name	Email	UserRole
1	Vishwanth	vish@email.com	2
2	Rishitha	rish@email.com	4
3	Reddy	red@email.com	3
4	Yashwanth	yash@email.com	4
5	Rahul	rah@email.com	2
6	Deeksha	dee@email.com	1
7	harish	harry@email.com	1
8	Ranjan	ranjan@email.com	2
9	Sharma	shrma@email.com	3
10	Dash	dash@email.com	1
12	Elmasri	elmasri@email.com	1
13	Patel	patel@email.com	1
14	Professor	prof@email.com	2
15	Student	student@email.com	3
16	Sai	joe@utab.com	2
27	testing 1	test1@email.com	Admin

### 3.2 The second transaction is to Add all the information about new Role

The image shows a web form for adding a new role. The form is centered on a purple-to-pink gradient background. It contains three input fields: 'HRID' with the value '1', 'new HRID' with the value '2', and a 'Submit' button.

Table Name : USER\_ROLEs

RoleId	RoleName	Description
1	Administrator	Reports to manager
2	Customer	Has only read access
3	Manager	Manages with Special access
4	Su	test
7	HR1	New HR

### 3.3 The third transaction is to add all the information about a new TABLE including the owner user of table

A new table will be assigned along with the remark to the giver User Id

TAB27

Content for 27

User Name 27 ▼

Submit

Table Name : TABLEs			
TableId	TableName	Comments	Userid
1	TAB1	Content about 1	1
2	TAB2	Content about 2	3
3	TAB3	Content about 3	5
4	TAB4	Content about 4	7
5	TAB5	Content about 5	9
6	TAB6	Content about 6	2
7	TAB7	Content about 7	4
8	TAB8	Content about 8	6
9	TAB9	Content about 9	8
10	TAB10	Content about 10	10
12	TAB test	test	16
14	TAB27	Content for 27	27

### 3.4 The fourth transaction is to insert a new PRIVILEGE, including the privilege type

Inserting the data into account privilege table

Test PRIV

testing|

Submit

Table Name : ACCOUNT_PRIVILEGEs		
Privilegeld	PrivilegeName	Comments
1	create	creates a table
2	alter	alters previously existing tables.
3	select	displays data from table.
4	view	views the existing table.
5	insert	append new data into existing tables.
6	Drop	drop any existing tables.
7	Updates	updates data of tables.
11	TEST	test
12	Test PRV	testing

Inserting the data into relational privilege table

TestPRIV

Testing the privilege

Submit

After the data insertion the table is displayed in the following way.

Table Name : RELATION_PRIVILEGEs		
Privilegeld	PrivilegeName	Comments
1	Read	Reads the data
2	Write	Write data
3	Update	Update existing data
7	TestPRIV	Testing the privilege

### 3.5 The fifth transaction is to relate a USER\_ACCOUNT to a ROLE

#### Relating the data between User Account and User Role :

Prior to relating the data we can Idno 2 is linked with UserRole 7

IdNo	Name	Email	UserRole
1	Vishwanth	vish@email.com	2
2	Rishitha	rish@email.com	7
3	Reddy	red@email.com	3
4	Yashwanth	yash@email.com	4
5	Rahul	rah@email.com	2
6	Deeksha	dee@email.com	1
7	harish	harry@email.com	1

After relating the Idno 2 with Role 4:

### Relate User Account to Role

User Id: 2

User Role: 4

Submit



### 3.6 The Sixth transaction is to relate an ACCOUNT\_PRIVILEGE to a ROLE

#### Relating Account Privilege and User Role:

When Account privilege and user role are related then the below table specified privileges is updated. Example, privilege id 12 and user 2 are related and the same is updated in the specified\_privileges table.

Table Name : SPECIFIED_PRIVILEGEs	
PrivilegeId	UserRole
4	1
6	1
2	1
1	1
2	3
3	1
1	4
5	2
12	2

### 3.7 The seventh transaction is to relate a RELATION\_PRIVILEGE, ROLE and TABLE.

#### Relate Relation privilege, User role and Table:

When these tables are related, the new relation is appended on the TRACKS table



vii.Relate Account Privileges and User Role.

Retrive PRIVILEGEs associated with USER\_ROLEs

User Role:

1

▼

Submit

ACCOUNT\_PRIVILEGEs

PrivilegeId	PrivilegeName	Comments
2	alter	alters previously existing tables.

Relation\_PRIVILEGEs

PrivilegeId	PrivilegeName	Comments
2	Write	Write data

Go back

viii.Relate Relation Privileges and User Role and Table.

PRIVILEGEs granted to USER\_ACCOUNTs

Privilege:

1

▼

User Account:

1

▼

Submit

Yes, Privilege Id '5' is granted to User Account '5'.

Go back