

Project Description

Short Description:

After login, we can go to community_list, then we can choose a community to look in blogs in the community.

Our schema has changed for this MileStone 4. We deleted the Birthday_Age schema that we intentionally made for decomposition in MileStone 2, as this schema will cause problems in creating the foreign key.

Insert Operation:

File: blog_detail.php (also register.php)

Code:

```
function handleAddCommentRequest() {
    global $db_conn;
    $blogID = $_SESSION['blog'];
    $userID = $_SESSION['username'];
    $content = $_POST['content'];
    $checkBan = OCI_Fetch_Array(executePlainSQL("SELECT ban_status FROM Blog_Users WHERE userID = $userID"));
    if ($checkBan[0] == 0) {
        $total = oci_fetch_row(executePlainSQL("SELECT Count(*) FROM Comment_Create_Follows WHERE blogID = $blogID"));
        if ($total[0] == 1) {
            $newest = oci_fetch_row(executePlainSQL("SELECT comment_order FROM Comment_Create_Follows WHERE blogID = $blogID"));
            $order = $newest[0] + 1;
        } else {
            $newest = oci_fetch_row(executePlainSQL("SELECT comment_order FROM Comment_Create_Follows C2 WHERE NOT EXISTS
            (SELECT * FROM Comment_Create_Follows C1 WHERE C1.comment_order > C2.comment_order OR C2.blogID <> $blogID)"));
            $order = $newest[0] + 1;
        }

        if ($content != '') {
            executePlainSQL("INSERT INTO Comment_Create_Follows VALUES($order, $blogID, $userID, '$content')");
            OCICommit($db_conn);
            echo "The comment has been posted successfully";
            header("refresh:2;url=blog_detail.php");
        } else {
            echo "<br>Make sure to input the content.<br>";
        }
    } else {
        echo "<br>You are banned.<br>";
    }
}
```

```
if($row[0]==$userID){
    echo "UserID already exists!";
}else{
    $cmd = "INSERT INTO blog_users VALUES($userID,'$username','$birthday','$password',0)";
    executePlainSQL($cmd);

    $cmd = "INSERT INTO SecurityInfo_Of VALUES($userID,'$email','$security_question','$answer')";
    executePlainSQL($cmd);

    echo "Succesfully created!";
    header('refresh:3; url=login.html');
}
OCICommit($db_conn);
disconnectFromDB();
```

ScreenShots:

Before:

Enter content and click Post to create a new comment

comment 1 cool a

Post

Enter the comment # to delete a comment, 0 represent the blog itself

Delete

Note: only the sender can delete their own comment or blog

New Anime Song Release Today!

Posted by 3040001, 0001-01-01 00:00:00

This one is so cool.

Comment #1 - Posted by 3040005

Amazing!

After:

Delete

Note: only the sender can delete their own comment or blog

New Anime Song Release Today!

Posted by 3040001, 0001-01-01 00:00:00

This one is so cool.

Comment #1 - Posted by 3040005

Amazing!

Comment #2 - Posted by 3040001

comment 1 cool a

Comment #3 - Posted by 3040001

comment 1 cool a

3040001The comment has been posted successfully

Blog

30400101

Goog

...

...

2000-01-05

abcd

abc

abc

confirm

Login

Let's check:

Super Administrator

You can access two attributes from any table you want

userName

birthday

Blog_Users

userID

30400101

confirm

Input two attribute you want to select, the name of the table, and constraint of field1 = var1.

Result

userName	birthday
Goog	2000-01-05

Delete Operation:

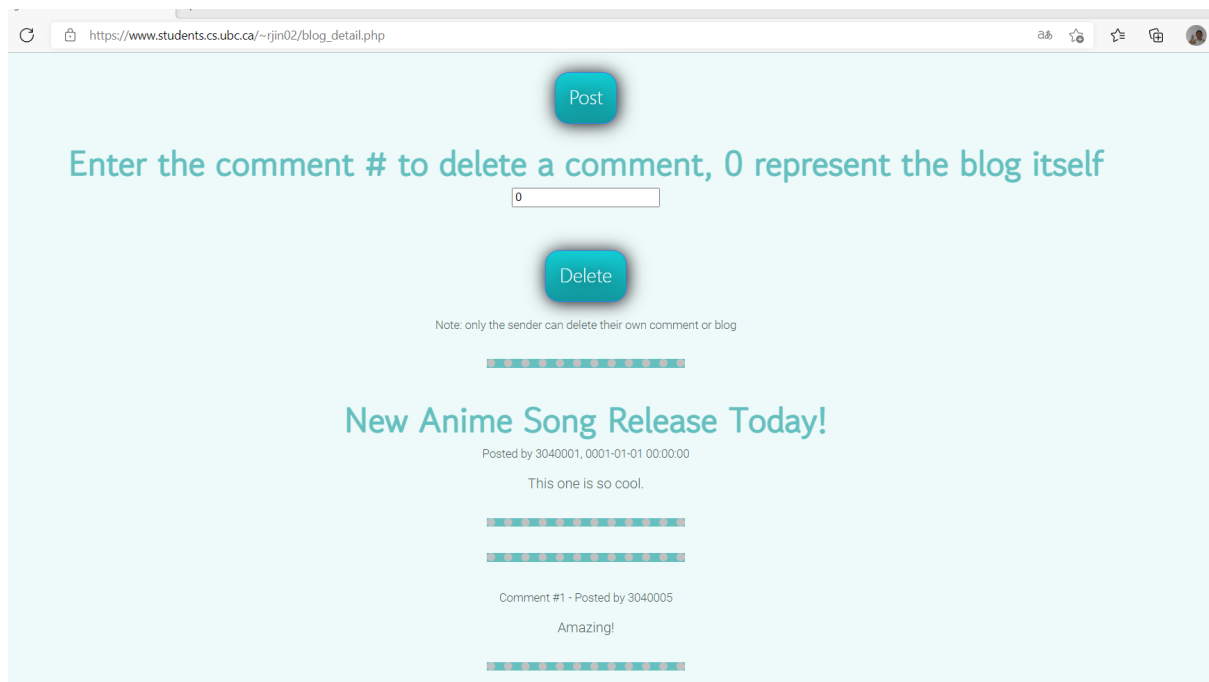
File: blog_detail.php

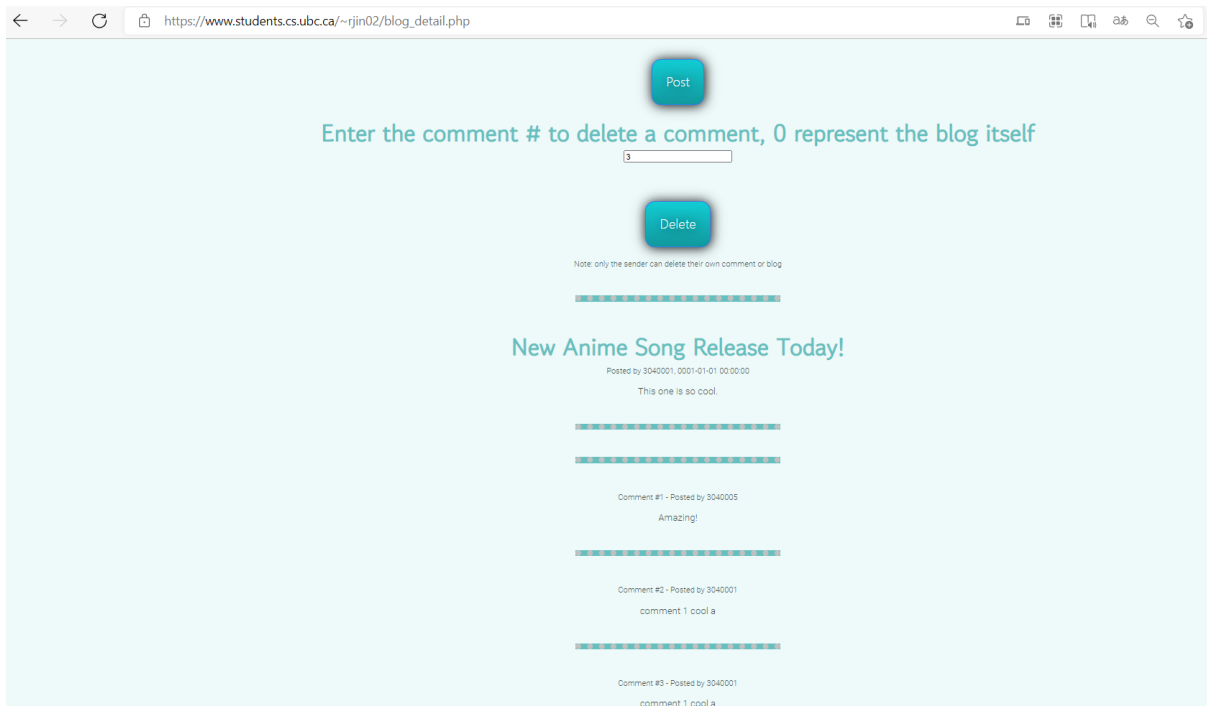
Code:

```
function handleDeleteRequest() {
    global $db_conn;
    $blogID = $_SESSION['blog'];
    $order = $_POST['order'];
    $userID = $_SESSION['username'];
    if ($order == '0') {
        $senderID = oci_fetch_row(executePlainSQL("SELECT userID FROM BID WHERE blogId = $blogID"));
        if ($userID == $senderID[0]) {
            executePlainSQL("DELETE FROM BID WHERE blogId = $blogID");
            OCICommit($db_conn);
            echo "The blog has been deleted successfully";
            header("refresh:2;url=blog_list.php");
        } else {
            echo "You don't have permission to do this";
        }
    } else if ($order != '') {
        $senderID = oci_fetch_row(executePlainSQL("SELECT userID FROM Comment_Create_Follows WHERE blogId = $blogID AND comment_order = $order"));
        if ($userID == $senderID[0]) {
            executePlainSQL("DELETE FROM Comment_Create_Follows WHERE blogId = $blogID AND comment_order = $order");
            OCICommit($db_conn);
            echo "The comment has been deleted successfully";
            header("refresh:2;url=blog_detail.php");
        } else {
            echo "You don't have permission to do this";
        }
    } else {
        echo "<br>Please enter order.<br>";
    }
}
```

ScreenShots:

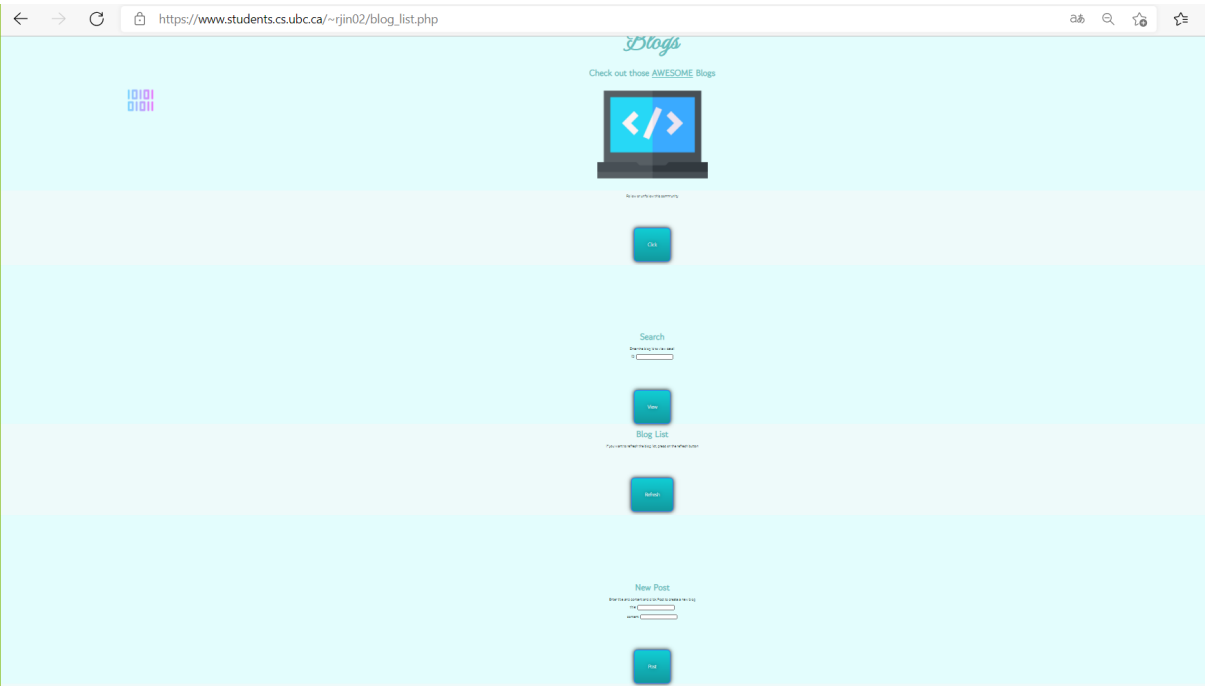
Before:





After (cascade):





Update Operation:

File: superAdmin.php

Code:

```
if(isset($_GET['submit'])){
    // echo "Good";
    if(connectToDB()){
        $cmd = "SELECT $attribute1, $attribute2 FROM $table WHERE $field1 = $var1";
        $result = executePlainSQL($cmd);
        //echo $cmd;
        echo "<br>Result<br>";
        echo "<table>";
        echo "<tr><th>$attribute1</th><th>$attribute2</th></tr>";

        while($row = OCI_Fetch_Array($result, OCI_BOTH)){
            echo "<tr><td>" . $row[0] . "</td><td>" . $row[1] . "</td></tr>";
        }

    }
}
elseif(isset($_GET['submit2'])){
    // echo $vipID;
    // echo $attributeUpdate;
    if(connectToDB()){
        $cmd = "UPDATE VIP SET $attributeUpdate = $value WHERE vipID = $vipID";
        $result = executePlainSQL($cmd);
        OCICommit($db_conn);
    }
}
```

ScreenShots:

Super Administrator can update vip_level and preferred_color in the VIP table. In the following screenshots, I updated the preferred_color and use the selection function in the page to show that it is successfully updated.

Before:

← → ↻ <https://www.students.cs.ubc.ca/~rjin02/superAdmin.php> ☆

You can access two attributes from any table you want

Input two attribute you want to select, the name of the table, and constraint of field1 = var1.

Change VIP

You can update the vip level the preferred color

Input two attribute you want to select, the name of the table, and constraint of field1 = var1.

Go To Admin

If you want to view the Admin page, press on the button

Result

vipID	preferred_color
3040001	red

After:

← → ↻ https://www.students.cs.ubc.ca/~rjin02/superAdmin.php?attribute1=vipID&attribute2=preferred_color&table=VIP&field1=vip_level&var1=3&submit=confirm Ⓐ Ⓔ ☆

You can access two attributes from any table you want

Input two attribute you want to select, the name of the table, and constraint of field1 = var1.

Change VIP

You can update the vip level the preferred color

Input two attribute you want to select, the name of the table, and constraint of field1 = var1.

Go To Admin

If you want to view the Admin page, press on the button

Result

vipID	preferred_color
3040001	blue

Selection:

File: superAdmin.php

Code:

```
if(isset($_GET['submit'])){  
    // echo "Good";  
    if(connectToDB()){  
        $cmd = "SELECT $attribute1, $attribute2 FROM $table WHERE $field1 = $var1";  
        $result = executePlainSQL($cmd);  
        //echo $cmd;  
        echo "<br>Result<br>";  
        echo "<table>";  
        echo "<tr><th>$attribute1</th><th>$attribute2</th></tr>";  
  
        while($row = OCI_Fetch_Array($result, OCI_BOTH)){  
            echo "<tr><td>" . $row[0] . "</td><td>" . $row[1] . "</td></tr>";  
        }  
    }  
}  
elseif(isset($_GET['submit2'])){  
    // echo $vipID;  
    // echo $attributeUpdate;  
    if(connectToDB()){  
        $cmd = "UPDATE VIP SET $attributeUpdate = $value WHERE vipID = $vipID";  
        $result = executePlainSQL($cmd);  
        OCICommit($db_conn);  
    }  
}
```

ScreenShots:

In the following screenshots, we showed that we can both select the vip table and also the user table. The selection conditions are the vip_level and ban_status for this example.

←→↻🔒https://www.students.cs.ubc.ca/~rjin02/superAdmin.php?attribute1=userName&attribute2=birthday&table=Blog_Users&field1=ban_status&var1=0&submit=confirm

confirm

Input two attribute you want to select, the name of the table, and constraint of field1 = var1.

Change VIP

You can update the vip level the preferred color

vipID

attribute you want to update

value

confirm

Input two attribute you want to select, the name of the table, and constraint of field1 = var1.

Go To Admin

If you want to view the Admin page, press on the button

Go

Result

userName

birthday

Amy

2000-01-01

Cindy

2000-01-03

Darwin

2000-01-04

Grace

2000-01-05

John

2000-01-06

←→↻🔒https://www.students.cs.ubc.ca/~rjin02/superAdmin.php?attribute1=vipID&attribute2=preferred_color&table=VIP&field1=vip_level&var1=3&submit=confirm

confirm

Input two attribute you want to select, the name of the table, and constraint of field1 = var1.

Change VIP

You can update the vip level the preferred color

vipID

attribute you want to update

value

confirm

Input two attribute you want to select, the name of the table, and constraint of field1 = var1.

Go To Admin

If you want to view the Admin page, press on the button

Go

Result

vipID

preferred_color

3040001

blue

Projection:

File: admin.php

Code:

```
function handleListUserRequest() {
    $select = array($_POST['selectUserID'], $_POST['selectUserName'], $_POST['selectBirthday'], $_POST['selectPassword'], $_POST['selectBan']);
    $selectString = "";
    $columnString = "<tr>";
    $count = 0;
    foreach ($select as $attribute) {
        if ($attribute != NULL) {
            $selectString = $selectString . $attribute . ",";
            $columnString = $columnString . "<th>" . $attribute . "</th>";
            $count++;
        }
    }
    $selectString = substr($selectString, 0, -1);
    $columnString = $columnString . "</tr>";
    if ($count >= 3) {
        $result = executePlainSQL("SELECT " . $selectString . " FROM blog_users");

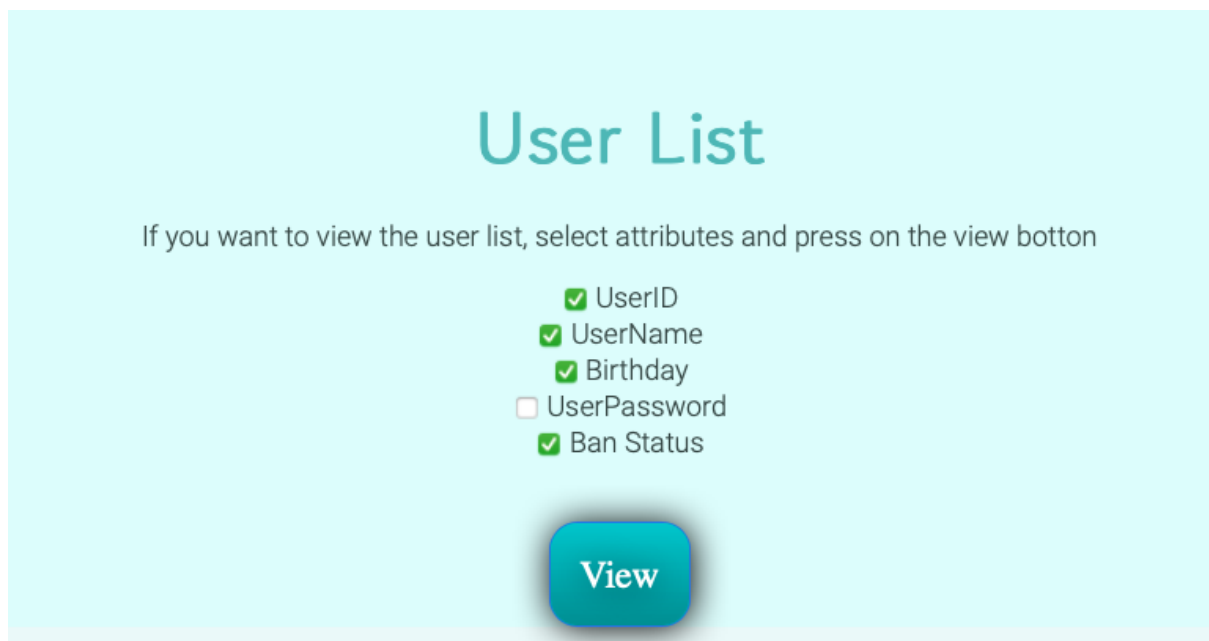
        echo "<br>User List:<br>";
        echo "<table>";

        echo $columnString;

        while ($row = OCI_Fetch_Array($result, OCI_BOTH)) {
            echo "<tr><td>" . $row[0] . "</td><td>" . $row[1] . "</td><td>" . $row[2] . "</td><td>" . $row[3] . "</td><td>" . $row[4] . "</td></tr>";
        }

        echo "</table>";
    } else {
        echo "You have to select at least 3 attributes.";
    }
}
```

ScreenShots:



userID	userName	birthday	ban_status
3040001	Amy	2000-01-01	0
3040002	Bob	2000-01-02	1
3040003	Cindy	2000-01-03	0
3040004	Darwin	2000-01-04	0
3040005	Grace	2000-01-05	0
3040006	John	2000-01-06	0
3040007	Cindy	2000-02-02	1
3040008	Darwin	1998-01-01	1

Join:

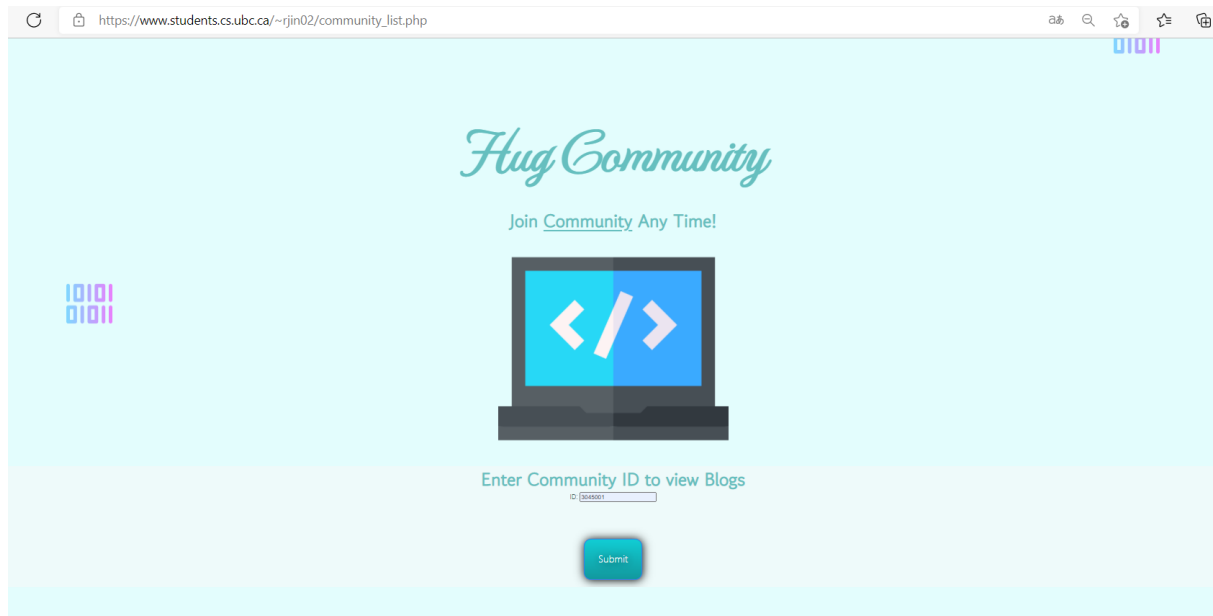
File: blog_list.php

Code:

```
function handleRefreshRequest() {
    $communityID = $_SESSION['community'];
    $result = executePlainSQL("SELECT B.blogId, U.title, B.DATETIME_record
FROM BID B, UID_CID_DATETIME U WHERE B.communityID = $communityID
AND B.DATETIME_record = U.DATETIME_record AND B.userID = U.userID
AND B.communityID = U.communityID");
    echo "<br>Blog List:<br>";
    echo "<table>";
    echo "<tr><th>ID</th><th>Title</th><th>Posted Time</th></tr>";

    while ($row = OCI_Fetch_Array($result, OCI_BOTH)) {
        echo "<tr><td>" . $row[0] . "</td><td>" . $row[1] . "</td><td>" . $row[2] . "</td></tr>";
    }
    $total = oci_fetch_row(executePlainSQL("SELECT Count(*) FROM BID WHERE communityID = $communityID"));
    echo "<tr><td>Total:</td><td>" . $total[0] . "</td></tr>";
    echo "</table>";
}
```

ScreenShots:



https://www.students.cs.ubc.ca/~rjin02/blog_list.php?refreshRequest=&refreshSubmit=Refresh

Blog List

If you want to refresh the blog list, press on the refresh button

Refresh

New Post

Enter title and content and click Post to create a new blog

title:

content:

Post

Blog List:

ID	Title	Posted Time
042001	New Anime Song Release Today!	01-JAN-01
042006	aaa	27-NOV-21
Total:	2	

Group By:
File: topic_list
Code:

```
function handleCommunityLevelRequest() {
    global $db_conn;
    // $topic = $_REQUEST['Topic'];
    $level = $_REQUEST['Level'];
    settype($level, "integer");

    if ($level !== '') {
        $result = executePlainSQL("SELECT topic_name, COUNT(*)
                                from Community C, About A
                                WHERE C.CommunityID = A.CommunityID and C.community_level > '$level'
                                GROUP BY topic_name" );
    } else {
        echo "<br>Please enter level.<br>";
    }

    echo "<br>Hot Topic List:<br>";
    echo "<table>";
    echo "<tr><th>Topic</th><th>Popularity</th></tr>";

    while ($row = OCI_Fetch_Array($result, OCI_BOTH)) {
        echo "<tr><td>" . $row[0] . "</td><td>" . $row[1] . "</td></tr>";
    }

    echo "</table>";
}
```

ScreenShots:

Hunt Topic with Level

Ex. you can find out our hottest topic where level is greater than you expect

Level At Least:

Search

Hot Topic List:

Topic	Popularity
IT	2

Hunt Topic with Level

Ex. you can find out our hottest topic where level is greater than you expect

Level At Least:



Go To Community

If you want to view the community page, press on the button



Hot Topic List:

Topic	Popularity
Sports	1
IT	2

Aggregation with Having:

File: superAdmin.php

Code:

```
}elseif(isset($_GET['submit2'])){  
    // echo $vipID;  
    // echo $attributeUpdate;  
    if(connectToDB()){  
        $cmd = "UPDATE VIP SET $attributeUpdate = $value WHERE vipID = $vipID";  
        $result = executePlainSQL($cmd);  
        OCICommit($db_conn);  
    }  
}elseif(isset($_GET['submit3'])){  
    if(connectToDB()){  
        $cmd = "SELECT ban_status, COUNT(*)  
        from Blog_Users  
        GROUP BY ban_status  
        Having COUNT(*) > $num";  
        $result = executePlainSQL($cmd);  
        OCICommit($db_conn);  
  
        echo "<br>Result<br>";  
        echo "<table>";  
        echo "<tr><th>ban_status</th><th>number</th></tr>";  
  
        while($row = OCI_Fetch_Array($result, OCI_BOTH)){  
            echo "<tr><td>" . $row[0] . "</td><td>" . $row[1] . "</td></tr>";  
        }  
    }  
}
```

ScreenShots:

View number of users according to ban status

View number of users according to ban status which the larger is greater than

Go To Admin

If you want to view the Admin page, press on the button

Result

ban_status	number
1	5
0	7

Nested Aggregation with Group By:

File: admin.php

Code:

```
function handlecountingVIPRequest() {
    $novip = $_REQUEST['novip'];
    // echo $novip;
    $result = executePlainSQL("SELECT v1.vip_level, COUNT(*) as ct
                                FROM VIP v1
                                GROUP BY vip_level
                                HAVING $novip < (SELECT COUNT(*)
                                                  FROM VIP v2
                                                  WHERE v1.vip_level = v2.vip_level)")

    echo "<br> Counting VIP <br>";
    echo "<table>";
    echo "<tr><th>vip level:</th><th>count:</th></tr>";

    while ($row = OCI_Fetch_Array($result, OCI_BOTH)) {
        echo "<tr><td>" . $row[0] . "</td><td>" . $row[1] . "</td></tr>";
    }
}
```

ScreenShots:

← → ↻ https://www.students.cs.ubc.ca/~rjin02/admin.php

View

VIP Data Matters

If you want to view the count the number of vip users, in which there are more than x users in the vip_level, press on the view botton

Number of VIP:

View

Go To Super Admin

If you want to view the Super Admin page, press on the button

Go

Counting VIP

vip level: count:	
5	2
3	3

Division:
File: admin.php
Code:

```
function handleListLoyalUserRequest() {  
    $result = executePlainSQL("SELECT B.userID  
                                FROM Blog_Users B  
                                WHERE NOT EXISTS ((SELECT C.communityID  
                                                    FROM Community C)  
                                MINUS  
                                (SELECT S.communityID  
                                FROM Subscribe S  
                                WHERE S.userID = B.userID)))");  
  
    echo "<br>Loyal User List:<br>";  
    echo "<table>";  
    echo "<tr><th>ID</th></tr>";  
  
    while ($row = OCI_Fetch_Array($result, OCI_BOTH)) {  
        echo "<tr><td>" . $row[0] . "</td></tr>";  
    }  
  
    echo "</table>";  
}
```

ScreenShots:

Loyal User List

If you want to view the loyal user who subscribed all communities, press on the view botton

View

ID	Loyal User List:
3040005	