

Login System

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;
using TMPro;

public class Login : MonoBehaviour
{
    public TMP_InputField nameField;
    public TMP_InputField passwordField;

    public TMP_Text status;

    public static bool adminAccess;

    public Button submitButton;

    public void CallLogin()
    {
        StartCoroutine(LoginUser());
    }

    IEnumerator LoginUser()
    {
        WWWForm form = new WWWForm();
        form.AddField("name", nameField.text);
        form.AddField("password", passwordField.text);
        WWW www = new WWW("http://localhost/sqlconnect/login.php", form);
        yield return www;
        if (www.text[0] == '0')
        {
            DBManager.username = nameField.text;
            DBManager.loyalty = int.Parse(www.text.Split('\t')[1]);
            if (DBManager.username == "ADMIN222")
            {
                adminAccess = true;
            }
            UnityEngine.SceneManagement.SceneManager.LoadScene(0);
        }
        else
        {
            Debug.Log("User login failed error #" + www.text);
            status.text = "User login failed error #" + www.text;
        }
    }
}
```

```

    }
}

public void VerifyInputs()
{
    submitButton.interactable = (nameField.text.Length >= 8 && passwordField.text.Length >= 8);
}

}

```

Main Menu System

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.SceneManagement;
using UnityEngine.UI;
using TMPro;

public class MainMenu : MonoBehaviour
{
    public Button registerButton;
    public Button loginButton;
    public Button playButton;

    public TMP_Text playerDisplay;
    private void Start()
    {
        if (DBManager.LoggedIn)
        {
            playerDisplay.text = "User: " + DBManager.username;
        }
        registerButton.interactable = !DBManager.LoggedIn;
        loginButton.interactable = !DBManager.LoggedIn;
        playButton.interactable = DBManager.LoggedIn;
    }
    public void GoToRegister()
    {
        SceneManager.LoadScene(1);
    }

    public void GoToLogin()
    {
        SceneManager.LoadScene(2);
    }
}

```

```

public void GoToUsersystem()
{
    if (Login.adminAccess == true)
    {
        SceneManager.LoadScene(5);
    }
    else
    {
        SceneManager.LoadScene(6);
    }
}
}

```

Registration System

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;
using TMPro;

```

```

public class Registration : MonoBehaviour
{
    public TMP_InputField nameField;
    public TMP_InputField passwordField;

    public TMP_Text status;

    public Button submitButton;

    public void CallRegister()
    {
        StartCoroutine(Register());
    }
}

```

```

IEnumerator Register()
{
    WWWForm form = new WWWForm();
    form.AddField("name", nameField.text);
    form.AddField("password", passwordField.text);
    WWW www = new WWW("http://localhost/sqlconnect/register.php", form);
    yield return www;
    if (www.text == "0")
    {

```

```

        Debug.Log("User created successfully.");
        UnityEngine.SceneManagement.SceneManager.LoadScene(0);
    }
    else
    {
        Debug.Log("User creation failed. Error #" + www.text);
        status.text = "User login failed error #" + www.text;
    }
}

public void VerifyInputs()
{
    submitButton.interactable = (nameField.text.Length >= 8 && passwordField.text.Length >= 8);
}
}

```

Customer Page Interface

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;
using TMPro;

public class CustomerMenus : MonoBehaviour
{
    public TMP_Text playerDisplay;
    public TMP_Text loyaltyDisplay;

    private void Awake()
    {
        if (DBManager.username == null)
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene(0);
        }
        playerDisplay.text = "User: " + DBManager.username;
        loyaltyDisplay.text = "Loyalty " + DBManager.loyalty + " stickers";
    }

    public void CallSaveData()
    {
        StartCoroutine(SavePlayerData());
    }
}

```

```

IEnumerator SavePlayerData()
{
    WWWForm form = new WWWForm();
    form.AddField("name", DBManager.username);
    form.AddField("loyalty", DBManager.loyalty);

    WWW www = new WWW("http://localhost/sqlconnect/savedata.php", form);
    yield return www;
    if (www.text == "0")
    {
        Debug.Log("Game Saved");
    }
    else
    {
        Debug.Log("Save Failed. Error #" + www.text);
    }

    DBManager.LogOut();
    UnityEngine.SceneManagement.SceneManager.LoadScene(0);
}

public void GoToAds()
{
    UnityEngine.SceneManagement.SceneManager.LoadScene("Ads");
}

public void GoToHistory()
{
    UnityEngine.SceneManagement.SceneManager.LoadScene("PurchaseHistory");
}

public void GoToRewards()
{
    UnityEngine.SceneManagement.SceneManager.LoadScene("Rewards");
}
}

```

Database Manager

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;

```

```

public static class DBManager
{

```

```

public static string username;
public static int loyalty;
public static int prevPurchase;

public static bool LoggedIn { get { return username != null; } }

public static void LogOut()
{
    username = null;
}
}

```

Main Admin User Information System

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;
using TMPro;

public class MainSystem : MonoBehaviour
{
    public TMP_Text playerDisplay;
    public TMP_Text loyaltyDisplay;
    public TMP_Text currentLoyaltyDisplay;
    public TMP_Text earnedLoyaltyDisplay;

    public static double currentCart = 0;
    public static double earnedLoyalty = 0;

    private void Awake()
    {
        if(DBManager.username == null)
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene(0);
        }
        playerDisplay.text = "User: " + DBManager.username;
        loyaltyDisplay.text = "Loyalty " + DBManager.loyalty + " stickers";
        currentCart = currentCart + BCode.currentGood;
        currentLoyaltyDisplay.text = "Current Cart: " + currentCart.ToString() + " Pesos";
        earnedLoyalty = currentCart / 50;
        earnedLoyalty = Mathf.Round((float)earnedLoyalty);
        earnedLoyaltyDisplay.text = "Earned Loyalty: " + earnedLoyalty + " stickers";
    }
}

```

```
public void CallSaveData()
```

```
{  
    currentCart = 0;  
    earnedLoyalty = 0;  
    StartCoroutine(SavePlayerData());  
}
```

```
IEnumerator SavePlayerData()
```

```
{  
    WWWForm form = new WWWForm();  
    form.AddField("name", DBManager.username);  
    form.AddField("loyalty", DBManager.loyalty);  
    form.AddField("prevPurchase", DBManager.prevPurchase);  
  
    WWW www = new WWW("http://localhost/sqlconnect/savedata.php", form);  
    yield return www;  
    if(www.text == "0")  
    {  
        Debug.Log("Game Saved");  
    }  
    else  
    {  
        Debug.Log("Save Failed. Error #" + www.text);  
    }  
  
    UnityEngine.SceneManagement.SceneManager.LoadScene("userinfo");  
}
```

```
public void IncreaseLoyalty()
```

```
{  
    DBManager.loyalty++;  
    loyaltyDisplay.text = "Loyalty " + DBManager.loyalty + " stickers";  
}
```

```
public void SubtractLoyalty()
```

```
{  
    DBManager.loyalty--;  
    loyaltyDisplay.text = "Loyalty " + DBManager.loyalty + " stickers";  
}
```

```
public void AddEarnedLoyalty()
```

```
{  
    DBManager.prevPurchase = (int)currentCart;  
    DBManager.loyalty = DBManager.loyalty + (int)earnedLoyalty;
```

```

        currentCart = 0;
        earnedLoyalty = 0;
        loyaltyDisplay.text = "Loyalty " + DBManager.loyalty + " stickers";
        currentLoyaltyDisplay.text = "Current Cart: " + currentCart.ToString() + " Pesos";
        earnedLoyaltyDisplay.text = "Earned Loyalty: " + earnedLoyalty + " stickers";

    }

    public void GoToScan()
    {
        UnityEngine.SceneManagement.SceneManager.LoadScene(4);
    }
}

```

Purchase History Page

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;
using TMPro;

public class PurchaseHistory : MonoBehaviour
{
    public TMP_Text playerDisplay;
    public TMP_Text loyaltyDisplay;
    public TMP_Text prevPurchaseDisplay;

    private void Awake()
    {
        if (DBManager.username == null)
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene(0);
        }
        playerDisplay.text = "User: " + DBManager.username;
        loyaltyDisplay.text = "Loyalty " + DBManager.loyalty + " stickers";
        prevPurchaseDisplay.text = "Your last purchase was worth: " + DBManager.prevPurchase + "
pesos";
    }

    public void Back()
    {
        UnityEngine.SceneManagement.SceneManager.LoadScene("CustomerPage");
    }
}

```



```

public void ReturnToAdmin()
{
    DBManager.username = "ADMIN222";
    UnityEngine.SceneManagement.SceneManager.LoadScene("AdminPage");
}

public void GoToScanner()
{
    UnityEngine.SceneManagement.SceneManager.LoadScene("usersystem");
}

}

```

Rewards Page

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;
using TMPro;

public class RSPage : MonoBehaviour
{
    public GameObject Reward1;
    public GameObject Reward2;
    public GameObject Reward3;

    public TMP_Text playerDisplay;
    public TMP_Text loyaltyDisplay;

    private void Awake()
    {
        if (DBManager.username == null)
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene(0);
        }
        playerDisplay.text = "User: " + DBManager.username;
        loyaltyDisplay.text = "Loyalty " + DBManager.loyalty + " stickers";
        if (DBManager.loyalty >= 3 && DBManager.loyalty < 4)
        {
            Reward1.GetComponent<Image>().color = Color.yellow;
        }
        else if (DBManager.loyalty >= 4 && DBManager.loyalty < 10)
        {
            Reward1.GetComponent<Image>().color = Color.yellow;

```

```

        Reward2.GetComponent<Image>().color = Color.yellow;
    }
    else if (DBManager.loyalty >= 10)
    {
        Reward1.GetComponent<Image>().color = Color.yellow;
        Reward2.GetComponent<Image>().color = Color.yellow;
        Reward3.GetComponent<Image>().color = Color.yellow;
    }
}

public void Back()
{
    UnityEngine.SceneManagement.SceneManager.LoadScene("CustomerPage");
}
}

```

Advertisement Page

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;
using TMPro;

public class SPage : MonoBehaviour
{
    public TMP_Text playerDisplay;
    public TMP_Text loyaltyDisplay;
    private void Awake()
    {
        if (DBManager.username == null)
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene(0);
        }
        playerDisplay.text = "User: " + DBManager.username;
        loyaltyDisplay.text = "Loyalty " + DBManager.loyalty + " stickers";
    }

    public void Back()
    {
        UnityEngine.SceneManagement.SceneManager.LoadScene("CustomerPage");
    }
}

```

User Search System

```

using System.Collections;

```

```

using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;
using TMPro;

public class UserSearch : MonoBehaviour
{
    public TMP_InputField nameField;
    public TMP_Text status;

    public Button submitButton;

    public void CallUser()
    {
        StartCoroutine(FindUser());
    }

    IEnumerator FindUser()
    {
        WWWForm form = new WWWForm();
        form.AddField("name", nameField.text);
        WWW www = new WWW("http://localhost/sqlconnect/select.php", form);
        yield return www;
        if (www.text[0] == '0')
        {
            DBManager.username = nameField.text;
            DBManager.loyalty = int.Parse(www.text.Split('\t')[1]);
            UnityEngine.SceneManagement.SceneManager.LoadScene("userinfo");
        }
        else
        {
            Debug.Log("User login failed error #" + www.text);
            status.text = "User login failed error #" + www.text;
        }
    }

    public void VerifyInputs()
    {
        submitButton.interactable = (nameField.text.Length >= 8);
    }

    public void Exit()
    {
        Login.adminAccess = false;
    }
}

```

```

        DBManager.LogOut();
        UnityEngine.SceneManagement.SceneManager.LoadScene(0);
    }

}

```

QR Code Reader

```

using System.Collections;
using UnityEngine;
using UnityEngine.UI;
using Vuforia;

public class BCode : MonoBehaviour
{
    public string barcodeAsText;
    public static double currentGood;
    BarcodeBehaviour mBarcodeBehaviour;

    void Start()
    {
        mBarcodeBehaviour = GetComponent<BarcodeBehaviour>();
    }

    void Update()
    {
        if (mBarcodeBehaviour != null && mBarcodeBehaviour.InstanceData != null)
        {
            barcodeAsText = mBarcodeBehaviour.InstanceData.Text;
            currentGood = double.Parse(barcodeAsText);
            UnityEngine.SceneManagement.SceneManager.LoadScene(3);
        }
    }

    public void GoBack()
    {
        UnityEngine.SceneManagement.SceneManager.LoadScene(3);
    }
}

```

Login.php Database Connection System

```

<?php
    $con = mysqli_connect('localhost','root','root','unityaccess');

    //check that connection happened

```

```

if(mysqli_connect_errno()){
    echo "1"; //error code #1 = connection failed
    exit();
}

$username = $_POST["name"];
$password = $_POST["password"];

//check if name exists
$namecheckquery = "SELECT username, salt, hash, loyalty, prevPurchase FROM users WHERE
username=" . $username . ",";

$namecheck = mysqli_query($con, $namecheckquery) or die("2: Name check query failed");
//error code #2 - name check query failed

if (mysqli_num_rows($namecheck) != 1){
    echo "5: Either no user with name or more than one"; //error code #5 - numero fnames
    matching does not equal 1
    exit();
}

//get login info from query
$existinginfo = mysqli_fetch_assoc($namecheck);
$salt = $existinginfo["salt"];
$hash = $existinginfo["hash"];

$loginhash = crypt($password, $salt);
if ($hash != $loginhash){
    echo "6: incorrect password"; //error code #6 - password does not hash to match table
    exit();
}

echo "0\t" . $existinginfo["loyalty"];

?>

```

Register.php Database Connection System

```

<?php
    $con = mysqli_connect('localhost','root','root','unityaccess');

    //check that connection happened
    if(mysqli_connect_errno()){
        echo "1"; //error code #1 = connection failed
        exit();
    }

```

```

    }

    $username = $_POST["name"];
    $password = $_POST["password"];

    //check if name exists
    $namecheckquery = "SELECT username FROM users WHERE username='" . $username . "'";

    $namecheck = mysqli_query($con, $namecheckquery) or die("2: Name check query failed");
    //error code #2 - name check query failed

    if(mysqli_num_rows($namecheck) > 0) {
        echo "3: Name already exists"; //error code #3 - name exists cannot register
        exit();
    }

    //add user to the table
    $salt = "\$5\$rounds=5000\$" . "steamedhams" . $username . "\$";
    $hash = crypt($password, $salt);
    $insertuserquery = "INSERT INTO users (username, hash, salt) VALUES ('" . $username . "', '" .
    $hash . "', '" . $salt . "')";
    mysqli_query($con, $insertuserquery) or die("4: Insert player query failed"); //error code #4 -
    insert query failed

    echo("0");

?>

```

Savedata.php to Database System

```

<?php
    $con = mysqli_connect('localhost','root','root','unityaccess');

    //check that connection happened
    if(mysqli_connect_errno()){
        echo "1"; //error code #1 = connection failed
        exit();
    }

    $username = $_POST["name"];
    $newloyalty = $_POST["loyalty"];
    $newPrevPurchase = $_POST["prevPurchase"];

    //double check

```

```

$namecheckquery = "SELECT username FROM users WHERE username=" . $username . " ";

$namecheck = mysqli_query($con, $namecheckquery) or die("2: Name check query failed");
//error code #2 - name check query failed

if (mysqli_num_rows($namecheck) != 1){
    echo "5: Either no user with name or more than one"; //error code #5 - numero fnames
    matching does not equal 1
    exit();
}

$updatequery = "UPDATE users SET loyalty = " . $newloyalty . " WHERE username = " .
$username . " ";
mysqli_query($con, $updatequery) or die("7: save query failed");
$updatequery = "UPDATE users SET prevPurchase = " . $newPrevPurchase . " WHERE
username = " . $username . " ";
mysqli_query($con, $updatequery) or die("7: save query failed"); //error code #7 save failed

echo "0";

?>

```

Select.php User from Database System

```

<?php
$con = mysqli_connect('localhost','root','root','unityaccess');

//check that connection happened
if(mysqli_connect_errno()){
    echo "1"; //error code #1 = connection failed
    exit();
}

$username = $_POST["name"];
$password = $_POST["password"];

//check if name exists
$namecheckquery = "SELECT username, salt, hash, loyalty, prevPurchase FROM users WHERE
username=" . $username . " ";

$namecheck = mysqli_query($con, $namecheckquery) or die("2: Name check query failed");
//error code #2 - name check query failed

if (mysqli_num_rows($namecheck) != 1){

```

```
        echo "5: Either no user with name or more than one"; //error code #5 - numero fnames
matching does not equal 1
        exit();
    }
}
```

```
//get login info from query
$existinginfo = mysqli_fetch_assoc($namecheck);
```

```
echo "0\t" . $existinginfo["loyalty"];
```

?>