E-Gaming Hub

Welcome to the E-Gaming Hub, your one-stop destination for an immersive gaming experience.

COHNDSE233F – 025
COHNDSE233F – 027
COHNDSE233F – 048
COHNDSE233F – 084
COHNDSE233F – 092

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INTRODUCTION

A Gaming Platform Website is a platform where game developers can list games for customers to browse and buy online. It helps the platform manage sales and track purchases, making the process simple for both developers and gamers.
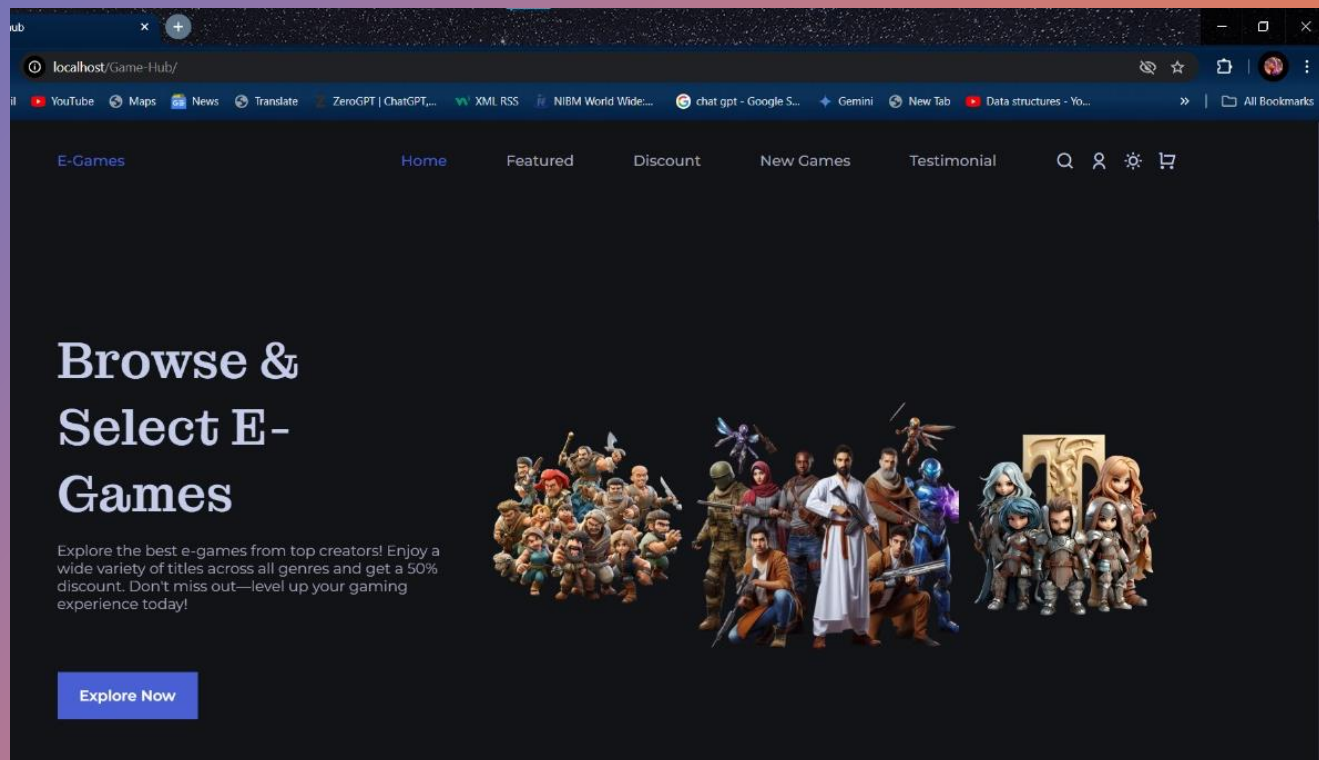
USED TECHNOLOGIES

PHP powers the backend functionality, handling user interactions and data management.

MySQL serves as the database, securely storing user information and game data.

HTML, JS and CSS create the user interface, ensuring a seamless and visually appealing experience.

Visual Studio Code is the development environment, enhancing productivity and streamlining the coding process.

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FEATURES OF THE E-GAMING HUB

Sign Up

Create an account to personalize your gaming experience and access exclusive features.

Log In

Log in to your account to access your game library, purchase games, and connect with other gamers.

Edit Account

Manage your profile information, update your preferences, and customize your settings.

Delete Account

Safely and securely delete your account if you no longer wish to use the platform.

Bank Details Verifications

Verify bank details and ensure secure transactions.

SECURITY FEATURES

Bank Details Verifications


```javascript
function validateForm() {
    const accountNumber = document.getElementById('account_number').value;
    const cvv = document.getElementById('cvv').value;

    //// Regular expression for validation
    if (!/^\d{16}$/.test(accountNumber)) {
        alert("Account number must be 16 digits.");
        return false;
    }
    if (!/^\d{3}$/.test(cvv)) {
        alert("CVV must be 3 digits.");
        return false;
    }
    return true;
}
```

DATABSE & DATABASE CONNECTION

register.php ×

C: > xampp > htdocs > Game-Hub > actions > register.php

```php
 1   <?php
12
13       try{
14           $hashedPassword = password_hash($password, PASSWORD_DEFAULT);
15           $query = "INSERT INTO users (userName, userEmail, userPass) VALUES (?, ?, ?)";
16           $stmt = $connection->prepare($query);
17           $stmt->bind_param("sss", $name, $email, $hashedPassword);
18
19           if($stmt->execute()){
20               $_SESSION["logged"]=$email;
21               header("Location: ../index.php");
22           } else{
23               $_SESSION["logged"]="";
24               echo "Register Failed. <a href='../index.php'>Click</a> to redirect to homepage";
25           }
26       }
27       catch(Exception $e){
28           $_SESSION["logged"]="";
29           echo "<h1>Something went wrong.</h1>Error: {$e->getMessage()}<br /> <br /><a href='../index.php'>Click</a> to redirect to homepage"
30       }
31
32       $stmt->close();
33       $connection->close();
```

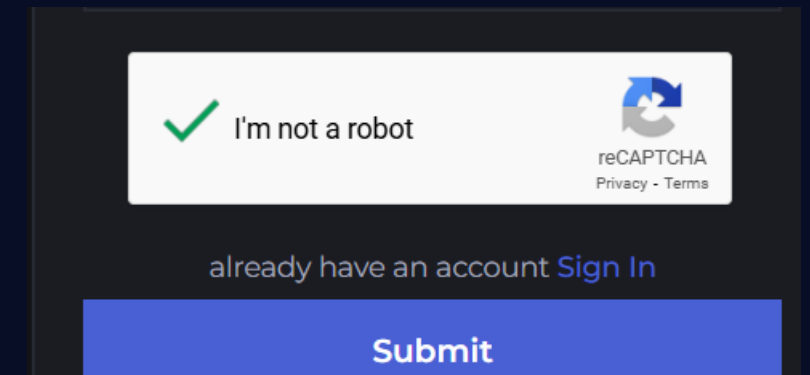| id	userName	userEmail	userPass
1	John Doe	johndoe@example.com	$2y$10$WjwG..EwZbYJPsFYGH/L8vV2l.k9m1jX6qgUtLrTz9o...
4	ima	ima@gmail.com	$2y$10$uLe/ESQfZz/Mp/r70FyV/uu9HGj6xjy/lhpB2cseqMc...
5	John Doe	john.doe@gmail.com	$2y$10$E1R9uJLm1y3P7IWh10IM0ehLX/jPsHODcmZPI61s.bq...
6	Jane Smith	jane.smith@gmail.com	$2y$10$U.e1R9uJLm1y3P7IWh10IM0ejPsHODcmZPI61s.bqBR...
7	Alice Johnson	alice.j@gmail.com	$2y$10$wBqE1R9uJLm1y3P7IWh10IM0ejPsHODcmZPI61s.bqB...
8	Bob Brown	bob.brown@gmail.com	$2y$10$PLm1y3P7IWh10IM0ehLX/jPsHODcmZPI61s.bqBReEn...
9	Charlie Green	charlie.g@gmail.com	$2y$10$ZpYx1E1R9uJLm1y3P7IWh10IM0ejPsHODcmZPI61s.b...
10	Diana Miller	diana.m@gmail.com	$2y$10$.bqReEnrCQJW3R9uJLm1y3P7IWh10IM0ehLX/jPsHOD...
11	Ethan Clark	ethan.c@gmail.com	$2y$10$10IM0ehLX/jPsHODcmZPI61s.bqBReEnrCQJW3R9uJL...
12	Fiona White	fiona.w@gmail.com	$2y$10$HODcmZPI61s.bqBReEnrCQJW3R9uJLm1y3P7IWh10IM...
13	George Black	george.b@gmail.com	$2y$10$I61s.bqBReEnrCQJW3R9uJLm1y3P7IWh10IM0ehLX/j...
14	Hannah Gray	hannah.g@gmail.com	$2y$10$3R9uJLm1y3P7IWh10IM0ehLX/jPsHODcmZPI61s.bqB...
15	Ishini	ishu@gmail.com	ishu1
17	Dilnuka	dil@gmail.com	dil
18	Anne	anne@gmail.com	$2y$10$FiSlquecrEbPGK1NRS1U8OzKO.Swzni/NnjUVx4VtUl...

C: > xampp > htdocs > Game-Hub > actions > register.php

```php
 1       <?php
 8
 9           $name = $_POST["SignUp-Name"];
10           $email = $_POST["SignUp-email"];
11           $password = $_POST["SignUp-pass"];
12
13           try{
14               $hashedPassword = password_hash($password, PASSWORD_DEFAULT);
15               $query = "INSERT INTO users (userName, userEmail, userPass) VALUES (?, ?
16               $stmt = $connection->prepare($query);
17               $stmt->bind_param("sss", $name, $email, $hashedPassword);
18
19               if($stmt->execute()){
20                   $_SESSION["logged"]=$email;
21                   header("Location: ../index.php");
22               } else{
23                   $_SESSION["logged"]="";
24                   echo "Register Failed. <a href='../index.php'>Click</a> to redirect
25               }
26           }
27           catch(Exception $e){
28               $_SESSION["logged"]="";
29               echo "<h1>Something went wrong.</h1>Error: {$e->getMessage()}<br /> <br
30           }
31
```

9

CAPTCHA


```
C: > xampp > htdocs > Game-Hub > components > 🐘 registerForm.php
  1   <form action="./actions/register.php" method="post" class="login__form grid" onSubmit="return registerValidate();" id
  3       <div class="SignUp__group grid">
 32           <script src="https://www.google.com/recaptcha/api.js" async defer></script>
 33           <script>
 34               function onSubmit(token) {
 35                   if (token) {
 36                       // reCAPTCHA was verified successfully
 37                       const submitButton = document.getElementById("loginsubmit");
 38                       submitButton.disabled = false;
 39                       return true;
 40                   } else {
 41                       // reCAPTCHA verification failed, prevent form submission
 42                       alert("Captcha failed");
 43                       return false; // Explicitly return false to prevent form submission
 44                   }
 45               }
 46           </script>
 47           <div class="g-recaptcha"
 48               data-sitekey="6LfP0FwqAAAAAPD9IMCmikdzqEU_weMi_c6-z0wD"
 49               data-callback="onSubmit"
 50               data-size="normal"
 51               style="margin-inline: auto;"></div>
 52
 53       </div>
 54       <div>
 55           <span class="SignUp__signIn">
 56               already have an account <a href="#" onClick="authChange('login');">Sign In</a>
 57           </span>
 58           <button type="submit" id="loginsubmit" class="SignUp__button button" name="submit" disabled>Submit</button>
 59       </div>
```
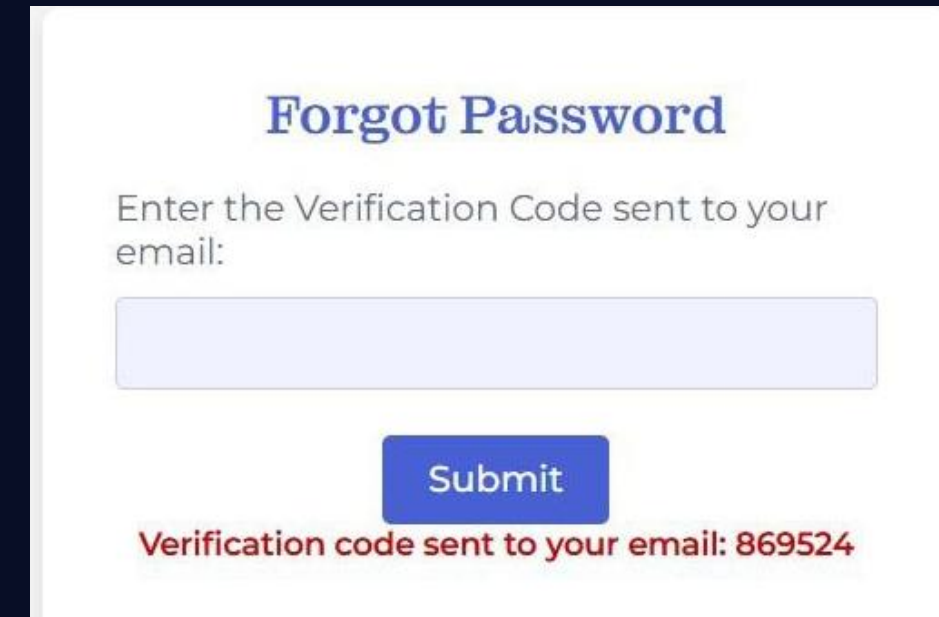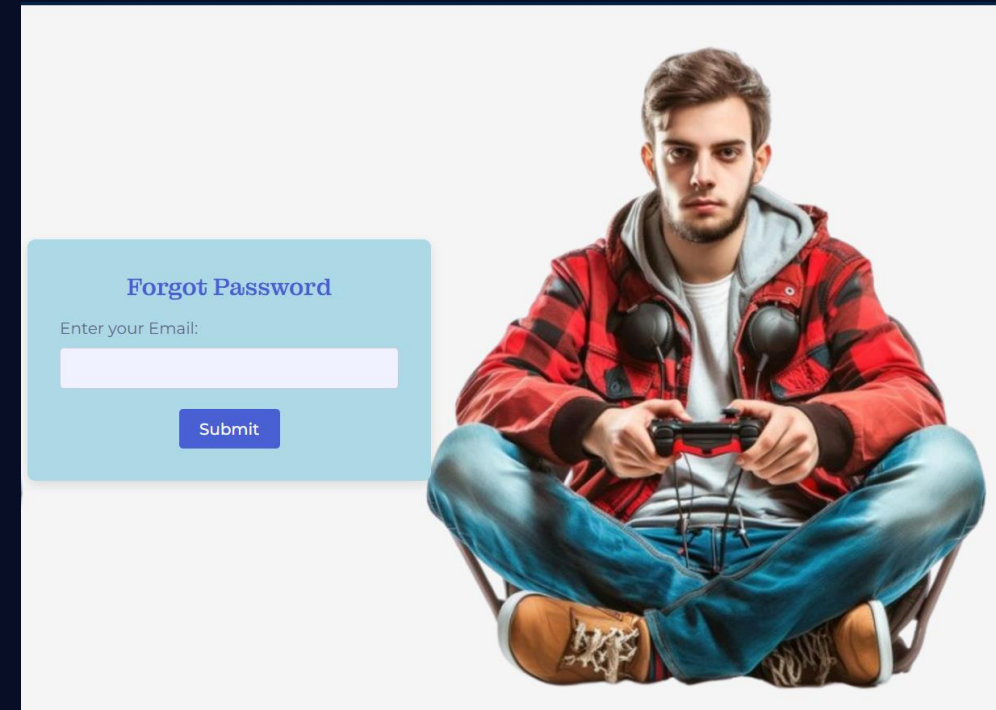
C: > xampp > htdocs > Game-Hub > 🐘 forgotPassword.php

```php
 9
10    $step = $_SESSION['step'];  // Get the current step from session
11    $message = "";
12
13    if (isset($_POST['submit'])) {
14        if ($step == 1 && isset($_POST['email'])) {
15            $email = $_POST['email'];
16
17            // Check if the email exists in the database
18            $query = "SELECT * FROM users WHERE userEmail = '$email'";
19            $result = $connection->query($query);
20
21            if ($result->num_rows > 0) {
22                $verificationCode = rand(100000, 999999);  // Generate verification code
23                $_SESSION['verificationCode'] = $verificationCode;
24                $_SESSION['resetEmail'] = $email;
25
26                // For demo purposes, display the code (replace with email logic)
27                $message = "Verification code sent to your email: $verificationCode";
28                $_SESSION['step'] = 2;  // Move to Step 2 (Verification Code)
29            } else {
30                $message = "Email not found!";
31            }
32        } elseif ($step == 2 && isset($_POST['code'])) {
33            $enteredCode = $_POST['code'];
34            if ($enteredCode == $_SESSION['verificationCode']) {
35                // Verification successful, redirect to updatePassword.php
36                header("Location: updatePassword.php");
37                exit();
38            } else {
```


Forgot Password

Enter your Email:

Submit

Forgot Password

Enter the Verification Code sent to your email:

Submit

Verification code sent to your email: 869524

11

Validate inputs in both frontend and backend, use regex

Log all events (errors, information) into a logfile


```
≣ custom-log.txt          ≣ php_errors.log  ×                    ⊞  ···

C: > xampp > htdocs > Game-Hub > logs > ≣ php_errors.log
    1    [30-Nov-2024 00:22:31 Asia/Colombo] PHP Deprecated:   strtotime(): Passing null to parameter #1 ($datetime) of type string is deprecated in
    2    [30-Nov-2024 00:23:39 Asia/Colombo] PHP Notice:   session_start(): Ignoring session_start() because a session is already active in C:\xampp\
    3    [30-Nov-2024 13:54:40 Asia/Colombo] PHP Deprecated:   strtotime(): Passing null to parameter #1 ($datetime) of type string is deprecated in
    4    [30-Nov-2024 13:54:40 Asia/Colombo] PHP Notice:   session_start(): Ignoring session_start() because a session is already active in C:\xampp\
    5    [30-Nov-2024 14:06:00 Asia/Colombo] PHP Deprecated:   strtotime(): Passing null to parameter #1 ($datetime) of type string is deprecated in
    6    [30-Nov-2024 14:06:00 Asia/Colombo] PHP Notice:   session_start(): Ignoring session_start() because a session is already active in C:\xampp\
    7
```

```
≣ custom-log.txt      ≣ php_errors.log      🐘 login.php  ×

C: > xampp > htdocs > Game-Hub > actions > 🐘 login.php
    6      // Custom logging function
    7      function customLog($message) {
    8          $logFilePath = '../logs/custom-log.txt';  // Make sure the 'logs' directory is writable
    9          $timeStamp = date('Y-m-d H:i:s');          // Add a timestamp to each log
   10          $logMessage = "[" . $timeStamp . "] " . $message . PHP_EOL;
   11          file_put_contents($logFilePath, $logMessage, FILE_APPEND);  // Append the log
   12      }
   13
   14      // Error logging setup
   15      error_reporting(E_ALL);
   16      ini_set('log_errors', 'On');
   17      ini_set('error_log', '../logs/php_errors.log'); // Set the path for error logs
   18
```

```
    1    [2024-11-29 01:03:35] Direct access attempt to login.php
    2    [2024-11-29 01:04:26] Login attempt for email: ishu@gmail.com
    3    [2024-11-29 01:04:26] User not found: ishu@gmail.com.
    4    [2024-11-29 01:12:33] Direct access attempt to login.php
    5    [2024-11-29 01:27:59] Direct access attempt to login.php
    6    [2024-11-29 01:37:24] Login attempt for email: seni@gmail.com
    7    [2024-11-29 01:37:24] Invalid login attempt for email: seni@gmail.com. Remaining attempts: 4.
    8    [2024-11-29 01:38:53] Login attempt for email: Seni@gmail.com
    9    [2024-11-29 01:38:53] Successful login for email: Seni@gmail.com.
   10    [2024-11-29 20:41:22] Direct access attempt to login.php
   11    [2024-11-29 20:42:17] Login attempt for email: ishu@gmail.com
```

Secure Coding Practices for Session Management

```php
common.php  ✕

C: > xampp > htdocs > Game-Hub > shared >  common.php
 1   <?php
 2   session_start();
 3   if (session_status() === PHP_SESSION_NONE) {
 4       session_start();
 5   }
 6
 7   // Set session lifetime (15 minutes)
 8   $sessionLifetime = 1 * 60; // 15 minutes in seconds
 9
10   // Check if session variable 'LAST_ACTIVITY' is set
11   if (isset($_SESSION['LAST_ACTIVITY'])) {
12       // Calculate session duration
13       if (time() - $_SESSION['LAST_ACTIVITY'] > $sessionLifetime) {
14           // Last activity was more than 15 minutes ago, destroy the session
15           session_unset(); // Remove all session variables
16           session_destroy(); // Destroy the session
17           header("Location: login.php"); // Redirect to the login page
18           exit();
19       }
20   }
21
22   // Update last activity time
23   $_SESSION['LAST_ACTIVITY'] = time(); // Update last activity timestamp
24   ?>
```

14

SQL injection preventor

```php
<?php

    try{
        $hashedPassword = password_hash($password, PASSWORD_DEFAULT);
        $query = "INSERT INTO users (userName, userEmail, userPass) VALUES (?, ?, ?)";
        $stmt = $connection->prepare($query);
        $stmt->bind_param("sss", $name, $email, $hashedPassword);

        if($stmt->execute()){
            $_SESSION["logged"]=$email;
            header("Location: ../index.php");
        } else{
            $_SESSION["logged"]="";
            echo "Register Failed. <a href='../index.php'>Click</a> to redirect to homepage";
        }
    }
    catch(Exception $e){
        $_SESSION["logged"]="";
        echo "<h1>Something went wrong.</h1>Error: {$e->getMessage()}<br /> <br /><a href='../index.php'>Click</a> to redirect to homepage"
    }

    $stmt->close();
    $connection->close();
```

login.php ✕

C: > xampp > htdocs > Game-Hub > actions > 🐘 login.php

```php
35
36    // Fetch user data using prepared statement
37    $query = "SELECT * FROM users WHERE userEmail = ?";
38    $stmt = $connection->prepare($query);
39    $stmt->bind_param("s", $email);
40    $stmt->execute();
41    $result = $stmt->get_result();
42
```

15

Brute Force Attack


```
31
32    // Anti-brute-force setup
33    $max_failed_attempts = 5;
34    $lockout_duration = 15 * 60; // 15 minutes
35
```

THANK YOU!