.htaccess

```
<FilesMatch "\.(php|inc)$">
    Deny from all
</FilesMatch>

<Files "index.php">
    Allow from all
</Files>

<Files "LogoutPHP.php">
    Allow from all
</Files>

<Files "LoginPHP.php">
    Allow from all
</Files>

<Files "SignupPHP.php">
    Allow from all
</Files>
```

'users' table adnu_cevas.sql

```
Table: users
Create Table: CREATE TABLE `users` (
  `id` int(11) NOT NULL AUTO_INCREMENT,
  `full_name` varchar(255) NOT NULL,
  `email` varchar(255) NOT NULL,
  `password` varchar(255) NOT NULL,
  `created_at` timestamp NULL DEFAULT current_timestamp(),
  `id_number` varchar(50) NOT NULL,
  PRIMARY KEY (`id`),
  UNIQUE KEY `email` (`email`),
  UNIQUE KEY `id_number` (`id_number`)
) ENGINE=InnoDB AUTO_INCREMENT=6 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_uca1400_ai_ci
```

'certificates' table adnu_cevas.sql

```
Table: certificates
```

```
Create Table: CREATE TABLE `certificates` (
  `id` int(11) NOT NULL AUTO_INCREMENT,
  `student_id` varchar(50) NOT NULL,
  `certificate_name` varchar(255) NOT NULL,
  `date_issued` date NOT NULL,
  `hash` varchar(255) NOT NULL,
  PRIMARY KEY (`id`),
  KEY `student_id` (`student_id`),
  CONSTRAINT `certificates_ibfk_1` FOREIGN KEY (`student_id`) REFERENCES
`users` (`id_number`) ON DELETE CASCADE
) ENGINE=InnoDB AUTO_INCREMENT=3 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_uca1400_ai_ci
```

db.php

```
JavaScript
<?php
$host = "localhost";
$dbname = "adnu_cevas";
$username = "root";
$password = "root";

                                           //*IMPORTANT*
ini_set('session.cookie_httponly', 1); //Prevent access to session cookies via
JavaScript
ini_set('session.cookie_secure', 1);  //Ensure cookies are sent over HTTPS
ini_set('session.use_strict_mode', 1); //Reject uninitialized session IDs

try {
    $pdo = new PDO("mysql:host=$host;dbname=$dbname", $username, $password);
    $pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
} catch (PDOException $e) {
    die("Database connection failed: " . $e->getMessage());
}
?>
```

index.php

```
JavaScript
<!DOCTYPE html>
<html lang="en">
<head>
    <link rel="preconnect" href="https://fonts.googleapis.com">
```

```html
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;700&display=swa
p" rel="stylesheet">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>AdNU CEVAS</title>
    <style>
      * { font-family: Poppins; }
      body, html { margin: 0; padding: 0; width: 100%; height: 100%;
background-color: #f9f9f9; display: flex; justify-content: center; align-items:
center; }
      .headcontainer { display: flex; flex-direction: column; height: 100%;
width: 100%; }
      .header { background-color: #003366; color: white; display: flex;
align-items: center; padding: 10px 20px; gap: 15px; flex-shrink: 0; }
      .header .logo { width: 55px; height: 55px; }
      .header h1 { font-size: 20px; margin: 0; }
      .content { flex: 1; display: flex; flex-direction: column;
justify-content: center; align-items: center; text-align: center; padding:
20px; box-sizing: border-box; }
      .welcome-section { max-width: 600px; padding: 20px; }
      .logo { width: 150px; height: auto; margin-bottom: 20px; }
      h2 { font-size: 24px; color: #333; margin-bottom: 15px; }
      .description { font-size: 16px; color: #666; line-height: 1.5;
margin-bottom: 30px; }
      .continue-button { background-color: #b38f4d; color: white; font-size:
16px; padding: 10px 20px; border: none; border-radius: 5px; cursor: pointer;
transition: background-color 0.3s; }
      .continue-button:hover { background-color: #a27d3c; }
    </style>
</head>
<body>
    <div class="headcontainer">
        <header class="header">
            <img src="/images/adnulogo.png" alt="AdNU Logo" class="logo">
            <h1>Ateneo Certificate Validation System</h1>
        </header>
        <main class="content">
            <div class="welcome-section">
                <img src="/images/adnulogo.png" alt="AdNU Logo" class="logo">
                <h2>Welcome to AdNU CEVAS, User!</h2>
                <p class="description">
```

```
                    A certificate validation system that uses cryptographic
hashing to create unique digital fingerprints for certificates issued by Ateneo
de Naga University.
                </p>
                <form method="get" action="LoginPHP.php">
                    <button class="continue-button">Continue</button>
                </form>
            </div>
        </main>
    </div>
</body>
</html>
```

LoginPHP.php

JavaScript

```php
<?php
session_start();
require 'db.php';

$error = '';

if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $email = $_POST['email'];
    $password = $_POST['password'];

    $stmt = $pdo->prepare("SELECT * FROM users WHERE email = ?");
    $stmt->execute([$email]);
    $user = $stmt->fetch();

    if ($user && password_verify($password, $user['password'])) {
        session_regenerate_id(true);    //*IMPORTANT* Prevents session fixation
        $_SESSION['user_id'] = $user['id'];
        header('Location: ValidatePHP.php');
        exit();
    } else {
        $error = 'Invalid email or password.';
    }
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
```

```html
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link
href="https://fonts.googleapis.com/css2?family=Poppins:ital,wght@0,100;0,200;0,
300;0,400;0,500;0,600;0,700;0,800;0,900&display=swap" rel="stylesheet">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>ADNU CEVAS | Log in</title>
    <style>
      * { font-family: Poppins; }
      body, h1, h2, h3, p, a, input, button { margin: 0; padding: 0;
box-sizing: border-box; }
      body { background-color: #f9f9f9; display: flex; flex-direction: column;
height: 100vh; margin: 0; }
      .full-screen-container { display: flex; flex-direction: column; height:
100%; }
      .header { background-color: #003366; color: white; display: flex;
align-items: center; padding: 10px 20px; gap: 15px; flex-shrink: 0; }
      .header .logo { width: 55px; height: 55px; }
      .header h1 { font-size: 20px; font-weight: bold; }
      .login-section { display: flex; align-items: center; justify-content:
center; flex-grow: 1; padding: 20px; background-color: #f9f9f9; }
      .login-box { width: 100%; max-width: 400px; padding: 20px; text-align:
center; box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1); border-radius: 8px; }
      .logo-container { margin-bottom: 15px; }
      .cevas-logo { width: 60px; height: 60px; margin-bottom: 5px; }
      h2 { font-size: 22px; margin-bottom: 15px; color: #003366; }
      .welcome-text { font-size: 18px; margin-bottom: 25px; color: #333333; }
      .login-form { width: 100%; margin-bottom: 20px; }
      .form-group { margin-bottom: 20px; width: 100%; }
      .form-group input { width: 100%; padding: 12px; font-size: 14px; border:
1px solid #ddd; border-radius: 4px; outline: none; transition: border-color
0.3s; }
       .form-group input:focus { border-color: #003366; }
      .form-actions { display: flex; justify-content: space-between;
align-items: center; font-size: 12px; margin-bottom: 20px; }
       .forgot-password { color: #003366; text-decoration: none; }
       .forgot-password:hover { text-decoration: underline; }
      .btn { display: inline-block; padding: 12px; font-size: 14px; border:
none; border-radius: 4px; cursor: pointer; text-align: center; color: white;
transition: background-color 0.3s; }
       .login-btn { background-color: #003366; width: 100%; margin-bottom:
10px; }
      .login-btn:hover { background-color: #002244; }
```

```
        .register-link { font-size: 12px; color: #333333; }
        .register-link a { color: #003366; text-decoration: none; font-weight:
bold; }
        .register-link a:hover { text-decoration: underline; }
        .cevas-logo { width: 150PX; height: 150px; padding-bottom: 1rem; }
    </style>
</head>
<body>
    <div class="full-screen-container">
        <header class="header">
            <a>
                <img src="/images/adnulogo.png" alt="AdNU Logo" class="logo">
            </a>
            <h1>Ateneo Certificate Validation System</h1>
        </header>
        <main class="login-section">
            <div class="login-box">
                <div class="logo-container">
                    <img src="./images/adnulogo.png" alt="CEVAS Logo"
class="cevas-logo">
                    <h2>AdNU CEVAS</h2>
                </div>
                <h3 class="welcome-text">Welcome Back!</h3>
                <?php if (!empty($error)): ?>
                    <p style="color: red;"><?= htmlspecialchars($error) ?></p>
                <?php endif; ?>
                <form method="POST" class="login-form">
                    <div class="form-group">
                        <input type="email" name="email" placeholder="Enter
your email" required>
                    </div>
                    <div class="form-group">
                        <input type="password" name="password"
placeholder="Enter your password" required>
                    </div>
                    <div class="form-actions">
                        <label>
                            <input type="checkbox" name="remember"> Remember me
                        </label>
                    </div>
                    <button type="submit" class="btn login-btn">Login</button>
                </form>
                <p class="register-link">
```

```
                    Don't have an account? <a href="SignupPHP.php">Create
Account</a>
                </p>
            </div>
        </main>
    </div>
</body>
</html>
```

LoginPHP.php (VULNERABLE)

```
JavaScript
<?php
session_start();
require 'db.php';

ini_set('display_errors', 1);
ini_set('display_startup_errors', 1);
error_reporting(E_ALL);

$error = '';

if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $full_name = $_POST['full_name'];
    $password = $_POST['password'];

    try {
        $query = "SELECT * FROM users WHERE full_name = '$full_name'";
//VULNERABLE
        $result = $pdo->query($query);
        $user = $result->fetch();
    } catch (PDOException $e) {
        die("Database Error: " . $e->getMessage());
    }

    //Check if user exists and verify password
    if ($user && password_verify($password, $user['password'])) {
        session_regenerate_id(true); //Prevents session fixation
        $_SESSION['user_id'] = $user['id'];
        header('Location: ValidatePHP.php');
        exit();
    } else {
        $error = 'Invalid username or password.';
```

```
            }
    }
    ?>
    <!DOCTYPE html>
    <html lang="en">
    <head>
        <link rel="preconnect" href="https://fonts.googleapis.com">
        <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
        <link
    href="https://fonts.googleapis.com/css2?family=Poppins:ital,wght@0,100;0,200;0,
    300;0,400;0,500;0,600;0,700;0,800;0,900&display=swap" rel="stylesheet">
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>ADNU CEVAS | Log in</title>
        <style>
            * { font-family: Poppins; }
            body, h1, h2, h3, p, a, input, button { margin: 0; padding: 0;
    box-sizing: border-box; }
            body { background-color: #f9f9f9; display: flex; flex-direction: column;
    height: 100vh; margin: 0; }
            .full-screen-container { display: flex; flex-direction: column; height:
    100%; }
            .header { background-color: #003366; color: white; display: flex;
    align-items: center; padding: 10px 20px; gap: 15px; flex-shrink: 0; }
            .header .logo { width: 55px; height: 55px; }
            .header h1 { font-size: 20px; font-weight: bold; }
            .login-section { display: flex; align-items: center; justify-content:
    center; flex-grow: 1; padding: 20px; background-color: #f9f9f9; }
            .login-box { width: 100%; max-width: 400px; padding: 20px; text-align:
    center; box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1); border-radius: 8px; }
            .logo-container { margin-bottom: 15px; }
            .cevas-logo { width: 60px; height: 60px; margin-bottom: 5px; }
            h2 { font-size: 22px; margin-bottom: 15px; color: #003366; }
            .welcome-text { font-size: 18px; margin-bottom: 25px; color: #333333; }
            .login-form { width: 100%; margin-bottom: 20px; }
            .form-group { margin-bottom: 20px; width: 100%; }
            .form-group input { width: 100%; padding: 12px; font-size: 14px; border:
    1px solid #ddd; border-radius: 4px; outline: none; transition: border-color
    0.3s; }
            .form-group input:focus { border-color: #003366; }
            .form-actions { display: flex; justify-content: space-between;
    align-items: center; font-size: 12px; margin-bottom: 20px; }
            .forgot-password { color: #003366; text-decoration: none; }
            .forgot-password:hover { text-decoration: underline; }
```

```
        .btn { display: inline-block; padding: 12px; font-size: 14px; border:
none; border-radius: 4px; cursor: pointer; text-align: center; color: white;
transition: background-color 0.3s; }
        .login-btn { background-color: #003366; width: 100%; margin-bottom:
10px; }
        .login-btn:hover { background-color: #002244; }
        .register-link { font-size: 12px; color: #333333; }
        .register-link a { color: #003366; text-decoration: none; font-weight:
bold; }
        .register-link a:hover { text-decoration: underline; }
        .cevas-logo { width: 150PX; height: 150px; padding-bottom: 1rem; }
    </style>
</head>
<body>
    <div class="full-screen-container">
        <header class="header">
            <a>
                <img src="/images/adnulogo.png" alt="AdNU Logo" class="logo">
            </a>
            <h1>Ateneo Certificate Validation System</h1>
        </header>
        <main class="login-section">
            <div class="login-box">
                <div class="logo-container">
                    <img src="./images/adnulogo.png" alt="CEVAS Logo"
class="cevas-logo">
                    <h2>AdNU CEVAS</h2>
                </div>
                <h3 class="welcome-text">Welcome Back!</h3>
                <?php if (!empty($error)): ?>
                    <p style="color: red;"><?= htmlspecialchars($error) ?></p>
                <?php endif; ?>
                <form method="POST" class="login-form">
                    <div class="form-group">
                        <input type="text" name="full_name" placeholder="Enter
your username" required>
                    </div>
                    <div class="form-group">
                        <input type="password" name="password"
placeholder="Enter your password" >
                    </div>
                    <div class="form-actions">
                        <label>
                            <input type="checkbox" name="remember"> Remember me
```

```
                    </label>
                </div>
                <button type="submit" class="btn login-btn">Login</button>
            </form>
            <p class="register-link">
                Don't have an account? <a href="SignupPHP.php">Create
Account</a>
            </p>
        </div>
    </main>
</div>
</body>
</html>
```

SignupPHP.php

```javascript
<?php
require 'db.php';

if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $full_name = $_POST['full_name'];
    $email = $_POST['email'];
    $password = $_POST['password'];
    $confirm_password = $_POST['confirm_password'];
    $id_number = $_POST['id_number'];

    if ($password !== $confirm_password) {
        $error = "Passwords do not match.";
    } else {
        $password_hash = password_hash($password, PASSWORD_DEFAULT);

        try {
            $stmt = $pdo->prepare("INSERT INTO users (full_name, email,
password, id_number) VALUES (?, ?, ?, ?)");
            $stmt->execute([$full_name, $email, $password_hash, $id_number]);
            header("Location: LoginPHP.php");
            exit();
        } catch (PDOException $e) {
            $error = "Error: " . $e->getMessage();
        }
    }
}
```

```
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link
href="https://fonts.googleapis.com/css2?family=Poppins:ital,wght@0,100;0,200;0,
300;0,400;0,500;0,600;0,700;0,800;0,900&display=swap" rel="stylesheet">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>CEVAS | Sign Up</title>
    <style>
      * { font-family: Poppins; }
      body, h1, h2, h3, p, a, input, button { margin: 0; padding: 0;
box-sizing: border-box; }
      body { background-color: #f9f9f9; display: flex; flex-direction: column;
height: 100vh; margin: 0; }
      .full-screen-container { display: flex; flex-direction: column; height:
100%; }
      .header { background-color: #003366; color: white; display: flex;
align-items: center; padding: 10px 20px; gap: 15px; flex-shrink: 0; }
      .header .logo { width: 55px; height: 55px; }
      .header h1 { font-size: 20px; font-weight: bold; }
      .login-section { display: flex; align-items: center; justify-content:
center; flex-grow: 1; padding: 20px; background-color: #f9f9f9; }
      .login-box { background: hsla(0, 4%, 91%, 0.941); width: 100%; max-width:
400px; padding: 70px; text-align: center; box-shadow: 0 4px 6px rgba(0, 0, 0,
0.1); border-radius: 8px; }
      .logo-container { margin-bottom: 15px; }
      .cevas-logo { width: 150px; height: 150px; padding-bottom: 1rem; }
      h2 { font-size: 22px; margin-bottom: 15px; color: #003366; }
      .welcome-text { font-size: 18px; margin-bottom: 25px; color: #333333; }
      .login-form { width: 100%; margin-bottom: 20px; }
      .form-group { margin-bottom: 20px; width: 100%; }
      .form-group input { width: 100%; padding: 12px; font-size: 14px; border:
1px solid #ddd; border-radius: 4px; outline: none; transition: border-color
0.3s; }
      .form-group input:focus { border-color: #003366; }
      .form-actions { display: flex; justify-content: space-between;
align-items: center; font-size: 12px; margin-bottom: 20px; }
      .forgot-password { color: #003366; text-decoration: none; }
      .forgot-password:hover { text-decoration: underline; }
```

```
        .btn { display: inline-block; padding: 12px; font-size: 14px; border:
none; border-radius: 4px; cursor: pointer; text-align: center; color: white;
transition: background-color 0.3s; }
        .signup-section { display: flex; align-items: center; justify-content:
center; flex-grow: 1; padding: 20px; background-color: #f9f9f9; }
        .signup-box { background: #ffffff; width: 100%; max-width: 400px;
padding: 30px; text-align: center; box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
border-radius: 8px; }
        h3.welcome-text { font-size: 18px; margin-bottom: 25px; color: #333333; }
        .signup-btn { background-color: #003366; width: 100%; margin-bottom:
10px; }
        .signup-btn:hover { background-color: #002244; }
        .login-link { font-size: 12px; color: #333333; }
        .login-link a { color: #003366; text-decoration: none; font-weight: bold;
}
        .login-link a:hover { text-decoration: underline; }
    </style>
</head>
<body>
    <div class="full-screen-container">
        <header class="header">
            <a>
                <img src="/images/adnulogo.png" alt="AdNU Logo" class="logo">
            </a>
            <h1>Ateneo Certificate Validation System</h1>
        </header>
        <main class="signup-section">
            <div class="signup-box">
                <div class="logo-container">
                    <img src="/images/adnulogo.png" alt="CEVAS Logo"
class="cevas-logo">
                    <h2>AdNU CEVAS</h2>
                </div>
                <h3 class="welcome-text">Create Your Account</h3>
                <?php if (isset($error)): ?>
                    <p style="color: red;"><?= $error ?></p>
                <?php endif; ?>
                <form method="post" class="signup-form">
                    <div class="form-group">
                        <input type="text" name="full_name" placeholder="Enter
your full name" required>
                    </div>
                    <div class="form-group">
```

```html
                            <input type="email" name="email" placeholder="Enter
your email" required>
                        </div>
                        <div class="form-group">
                            <input type="text" name="id_number" placeholder="Enter
your ID number" required>
                        </div>
                        <div class="form-group">
                            <input type="password" name="password"
placeholder="Create a password" required>
                        </div>
                        <div class="form-group">
                            <input type="password" name="confirm_password"
placeholder="Confirm your password" required>
                        </div>
                        <button type="submit" class="btn signup-btn">Sign
Up</button>
                </form>
                <p class="login-link">
                    Already have an account? <a href="LoginPHP.php">Login
here</a>
                </p>
            </div>
        </main>
    </div>
</body>
</html>
```

ValidatePHP.php

```javascript
<?php
session_start();
require 'db.php';

//Check if user is logged in
session_start();
if (!isset($_SESSION['user_id'])) {
    header('Location: index.php');
    exit();
}

$message_color = "red";
```

```php
//Fetching logged user details
$user_id = $_SESSION['user_id'];
$stmt = $pdo->prepare("SELECT full_name, id_number FROM users WHERE id = ?");
$stmt->execute([$user_id]);
$user = $stmt->fetch();

//Validatation
$validation_message = null;
if ($_SERVER['REQUEST_METHOD'] === 'POST' && isset($_POST['hash_number'])) {
    $hash_number = $_POST['hash_number'];
    $hash_check_stmt = $pdo->prepare("SELECT * FROM certificates WHERE hash = ?");
    $hash_check_stmt->execute([$hash_number]);
    $certificate = $hash_check_stmt->fetch();

    if ($certificate) {
        $validation_message = "Hash validated successfully!";
        $message_color = "green";
    } else {
        $validation_message = "Hash not found!";
    }
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link
href="https://fonts.googleapis.com/css2?family=Poppins:ital,wght@0,100;0,200;0,300;0,400;0,500;0,600;0,700;0,800;0,900&display=swap" rel="stylesheet">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>AdNU CEVAS - Validate Hash</title>
    <style>
        * { font-family: Poppins; }
      body, html { margin: 0; padding: 0; width: 100%; height: 100%;
background-color: #f9f9f9; }
        .headcontainer { display: flex; flex-direction: column; height: 100%;
width: 100%; }
        .header { background-color: #003366; color: white; display: flex;
align-items: center; padding: 10px 20px; gap: 15px; flex-shrink: 0; }
        .header .logo { width: 55px; height: 55px; }
```

```
        .header h1 { font-size: 20px; margin: 0; }
        .main-content { display: flex; flex: 1; overflow: hidden; }
        .sidebar { background-color: #333; color: white; width: 250px; padding:
20px; display: flex; flex-direction: column; align-items: center; overflow-y:
auto; }
        .user-profile { text-align: center; margin-bottom: 30px; }
        .avatar img { width: 150px; height: 150px; border-radius: 50%; }
        .user-name { font-size: 20px; margin: 10px 0 5px; }
        .user-details, .user-id { font-size: 13px; margin: 0; }
        .menu { width: 100%; }
        .menu-item { display: block; width: 100%; background: none; border: none;
color: white; text-align: left; padding: 10px 20px; margin: 5px 0; font-size:
14px; cursor: pointer; border-radius: 4px; transition: background-color 0.3s; }
        .menu-item:hover, .menu-item.active { background-color: #b38f4d; }
        .content { flex: 1; padding: 40px; overflow-y: auto; }
        .content h2 { font-size: 25px; color: #333; margin-bottom: 10px; }
        .content p { font-size: 16px; color: #666; margin-bottom: 20px; }
        .hash-checker { display: flex; gap: 10px; }
        .hash-input { flex: 1; padding: 10px; font-size: 14px; border: 1px solid
#ccc; border-radius: 4px; }
        .check-button { padding: 10px 20px; font-size: 14px; color: white;
background-color: #b38f4d; border: none; border-radius: 4px; cursor: pointer;
transition: background-color 0.3s; }
        .check-button:hover { background-color: #a27d3c; }
    </style>
</head>
<body>
    <div class="headcontainer">
        <header class="header">
            <a>
                <img src="/images/adnulogo.png" alt="AdNU Logo" class="logo">
            </a>
            <h1>Ateneo Certificate Validation System</h1>
        </header>
        <div class="main-content">
            <aside class="sidebar">
                <div class="user-profile">
                    <div class="avatar">
                        <img src="/images/user.png" alt="User Avatar">
                    </div>
                    <h2 class="user-name"><?=
htmlspecialchars($user['full_name']); ?></h2>
                    <p class="user-details">Test Course</p>
```

```html
                    <p class="user-id"><?=
htmlspecialchars($user['id_number']); ?></p>
                </div>
                <nav class="menu">
                    <button class="menu-item active"
onclick="location.href='ValidatePHP.php'">Validate Hash</button>
                    <button class="menu-item"
onclick="location.href='GeneratePHP.php'">Generate Hash</button>
                    <button class="menu-item"
onclick="location.href='SearchPHP.php'">Search Certificates</button>
                    <button class="menu-item"
onclick="location.href='LogoutPHP.php'">Log Out</button>
                </nav>
            </aside>
            <main class="content">
                <h2>Validate Hash</h2>
                <p>Confirm your hash by checking it here.</p>
                <form method="post" class="hash-checker">
                    <input type="text" name="hash_number" placeholder="Hash
Number" class="hash-input" required>
                    <button type="submit" class="check-button">Check</button>
                </form>
                <?php if ($validation_message): ?>
                    <p class="message" style="color: <?=
htmlspecialchars($message_color); ?>;">
                        <?= htmlspecialchars($validation_message); ?>
                    </p>
                <?php endif; ?>
            </main>
        </div>
    </div>
</body>
</html>
```

GeneratePHP.php

```php
JavaScript
<?php
session_start();
require 'db.php';

//Check if user is logged in
session_start();
```

```php
if (!isset($_SESSION['user_id'])) {
    header('Location: index.php');
    exit();
}

$generatedHash = "";
$message = "";
$message_color = "red";

try {
    //Fetch logged user details
    if (isset($_SESSION['user_id'])) {
        $stmt = $pdo->prepare("SELECT full_name, id_number FROM users WHERE id = ?");
        $stmt->execute([$_SESSION['user_id']]);
        $user = $stmt->fetch();
    }

    //Submission
    if ($_SERVER['REQUEST_METHOD'] === 'POST') {
        $studentId = $_POST['student_id'];
        $certificateName = $_POST['certificate_name'];
        $dateIssued = $_POST['date_issued'];

        //checks student_id from certifs table if input id exists in id_number
users table
        $stmt = $pdo->prepare("SELECT id_number FROM users WHERE id_number = ?");
        $stmt->execute([$studentId]);
        $student = $stmt->fetch();

        if ($student) {
            //Hash algorithm
            $generatedHash = hash('sha256', $studentId . $certificateName . $dateIssued . time());

            //Save
            $stmt = $pdo->prepare("INSERT INTO certificates (student_id, certificate_name, date_issued, hash) VALUES (?, ?, ?, ?)");
            $stmt->execute([$studentId, $certificateName, $dateIssued, $generatedHash]);

            $message = "Certificate successfully generated!";
            $message_color = "green";
```

```php
        } else {
            $message = "Invalid Student ID. Please make sure the Student ID
exists.";
        }
    }
} catch (PDOException $e) {
    die("Database error: " . $e->getMessage());
}
?>
```
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;700&display=swa
p" rel="stylesheet">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>AdNU CEVAS - Generate Hash</title>
    <style>
        * { font-family: Poppins; }
        body, html { margin: 0; padding: 0; width: 100%; height: 100%;
background-color: #f9f9f9; }
        .headcontainer { display: flex; flex-direction: column; height: 100%;
width: 100%; }
        .header { background-color: #003366; color: white; display: flex;
align-items: center; padding: 10px 20px; gap: 15px; flex-shrink: 0; }
        .header .logo { width: 55px; height: 55px; }
        .header h1 { font-size: 20px; margin: 0; }
        .main-content { display: flex; flex: 1; overflow: hidden; }
        .sidebar { background-color: #333; color: white; width: 250px; padding:
20px; display: flex; flex-direction: column; align-items: center; overflow-y:
auto; }
        .user-profile { text-align: center; margin-bottom: 30px; }
        .avatar img { width: 150px; height: 150px; border-radius: 50%; }
        .user-name { font-size: 20px; margin: 10px 0 5px; }
        .user-details, .user-id { font-size: 13px; margin: 0; }
        .menu { width: 100%; }
        .menu-item { display: block; width: 100%; background: none; border: none;
color: white; text-align: left; padding: 10px 20px; margin: 5px 0; font-size:
14px; cursor: pointer; border-radius: 4px; transition: background-color 0.3s; }
        .menu-item:hover, .menu-item.active { background-color: #b38f4d; }
        .content { flex: 1; padding: 40px; overflow-y: auto; }
```

```
        .content h2 { font-size: 25px; color: #333; margin-bottom: 10px; }
        .content p { font-size: 16px; color: #666; margin-bottom: 20px; }
        .hash-form { display: flex; gap: 10px; max-width: 400px; }
        .input-field { padding: 10px; font-size: 14px; border: 1px solid #ccc;
border-radius: 4px; }
        .generate-button { padding: 10px; font-size: 14px; color: white;
background-color: #b38f4d; border: none; border-radius: 4px; cursor: pointer;
transition: background-color 0.3s; }
        .generate-button:hover { background-color: #a27d3c; }
        .hash-output { margin-top: 20px; }
        .hash-output label { display: block; font-size: 14px; color: #333;
margin-bottom: 5px; }
        .output-box { padding: 10px; background-color: #f0f0f0; border: 1px solid
#ccc; border-radius: 4px; height: 50px; font-size: 14px; color: #333;
overflow-wrap: break-word; }
        .message { font-size: 16px; margin-top: 20px; }
    </style>
</head>
<body>
    <div class="headcontainer">
        <header class="header">
            <a>
                <img src="/images/adnulogo.png" alt="AdNU Logo" class="logo">
            </a>
            <h1>Ateneo Certificate Validation System</h1>
        </header>
        <div class="main-content">
            <aside class="sidebar">
                <div class="user-profile">
                    <div class="avatar">
                        <img src="/images/user.png" alt="User Avatar">
                    </div>
                    <h2 class="user-name"><?=
htmlspecialchars($user['full_name']); ?></h2>
                    <p class="user-details">Test Course</p>
                    <p class="user-id"><?=
htmlspecialchars($user['id_number']); ?></p>
                </div>
                <nav class="menu">
                    <button class="menu-item"
onclick="location.href='ValidatePHP.php'">Validate Hash</button>
                    <button class="menu-item active"
onclick="location.href='GeneratePHP.php'">Generate Hash</button>
```

```
                    <button class="menu-item"
onclick="location.href='SearchPHP.php'">Search Certificates</button>
                    <button class="menu-item"
onclick="location.href='LogoutPHP.php'">Log Out</button>
                </nav>
            </aside>
            <main class="content">
                <h2>Generate Hash</h2>
                <p>Enter the ID Number, Certificate Name, and Date to generate
a hash.</p>
                <form class="hash-form" method="post">
                    <input type="text" name="student_id" class="input-field"
placeholder="Student ID" required>
                    <input type="text" name="certificate_name"
class="input-field" placeholder="Certificate Name" required>
                    <input type="date" name="date_issued" class="input-field"
required>
                    <button type="submit"
class="generate-button">Generate</button>
                </form>
                <div class="hash-output">
                    <label>Generated Hash:</label>
                    <div class="output-box"><?=
htmlspecialchars($generatedHash); ?></div>
                </div>
                <?php if ($message): ?>
                    <p class="message" style="color: <?=
htmlspecialchars($message_color); ?>;">
                        <?= htmlspecialchars($message); ?>
                    </p>
                <?php endif; ?>
            </main>
        </div>
    </div>
</body>
</html>
```

SearchPHP.php

```
JavaScript
<?php
session_start();
require 'db.php';
```

```php
//Check if user is logged in
session_start();
if (!isset($_SESSION['user_id'])) {
    header('Location: index.php');
    exit();
}

$certificates = [];
$message = null;
$searched_id = "";

//fetch logged user details
$user_id = $_SESSION['user_id'] ?? null;
$user_details = [
    'full_name' => 'Guest User',
    'id_number' => 'N/A',
    'course' => 'test course'
];

if ($user_id) {
    $stmt = $pdo->prepare("SELECT full_name, id_number FROM users WHERE id =
?");
    $stmt->execute([$user_id]);
    $user_details = $stmt->fetch(PDO::FETCH_ASSOC) ?: $user_details;
}

if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $searched_id = $_POST['student_id'];

    //Checks for student_id, if positive, fetch certif
    $stmt = $pdo->prepare("SELECT * FROM users WHERE id_number = ?");
    $stmt->execute([$searched_id]);
    $student = $stmt->fetch(PDO::FETCH_ASSOC);

    if ($student) {
        $stmt = $pdo->prepare("SELECT * FROM certificates WHERE student_id =
?");
        $stmt->execute([$searched_id]);
        $certificates = $stmt->fetchAll(PDO::FETCH_ASSOC);

        if (empty($certificates)) {
            $message = "No certificates found.";
        }
```

```php
        } else {
            $message = "Invalid Student ID.";
        }
    }
    ?>
<!DOCTYPE html>
<html lang="en">
<head>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;700&display=swap" rel="stylesheet">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>AdNU CEVAS - Search</title>
    <style>
        * { font-family: Poppins; }
        body, html { margin: 0; padding: 0; width: 100%; height: 100%; background-color: #f9f9f9; }
        .headcontainer { display: flex; flex-direction: column; height: 100%; width: 100%; }
        .header { background-color: #003366; color: white; display: flex; align-items: center; padding: 10px 20px; gap: 15px; flex-shrink: 0; }
        .header .logo { width: 55px; height: 55px; }
        .header h1 { font-size: 20px; margin: 0; }
        .main-content { display: flex; flex: 1; overflow: hidden; }
        .sidebar { background-color: #333; color: white; width: 250px; padding: 20px; display: flex; flex-direction: column; align-items: center; overflow-y: auto; }
        .user-profile { text-align: center; margin-bottom: 30px; }
        .avatar img { width: 150px; height: 150px; border-radius: 50%; }
        .user-name { font-size: 20px; margin: 10px 0 5px; }
        .user-details, .user-id { font-size: 13px; margin: 0; }
        .menu { width: 100%; }
        .menu-item { display: block; width: 100%; background: none; border: none; color: white; text-align: left; padding: 10px 20px; margin: 5px 0; font-size: 14px; cursor: pointer; border-radius: 4px; transition: background-color 0.3s; }
        .menu-item:hover, .menu-item.active { background-color: #b38f4d; }
        .content { flex: 1; padding: 40px; overflow-y: auto; }
        .content h2 { font-size: 25px; color: #333; margin-bottom: 10px; }
        .content p { font-size: 16px; color: #666; margin-bottom: 20px; }
```

```
        .search-form { display: flex; gap: 10px; max-width: 500px; align-items:
center; }
        .input-field { flex: 1; padding: 10px; font-size: 14px; border: 1px
solid #ccc; border-radius: 4px; }
        .search-button { padding: 10px 20px; font-size: 14px; color: white;
background-color: #b38f4d; border: none; border-radius: 4px; cursor: pointer;
transition: background-color 0.3s; }
        .search-button:hover { background-color: #a27d3c; }
        .certificate-list { display: flex; flex-direction: column; gap: 20px; }
        .certificate-card { margin-top: 1rem; padding: 15px; border: 1px solid
#ccc; border-radius: 5px; background-color: #f9f9f9; box-shadow: 0 2px 4px
rgba(0, 0, 0, 0.1); cursor: pointer; transition: transform 0.2s;
text-decoration: none; color: inherit; }
        .certificate-card:hover { transform: scale(1.02); text-decoration:
color: none; }
        .certificate-card h3 { font-size: 16px; margin: 0 0 5px; color: #333; }
        .certificate-card p { margin: 0; font-size: 14px; color: #555; }
    </style>
</head>
<body>
    <div class="headcontainer">
        <header class="header">
            <a>
                <img src="/images/adnulogo.png" alt="AdNU Logo" class="logo">
            </a>
            <h1>Ateneo Certificate Validation System</h1>
        </header>
        <div class="main-content">
            <aside class="sidebar">
                <div class="user-profile">
                    <div class="avatar">
                        <img src="/images/user.png" alt="User Avatar">
                    </div>
                    <h2 class="user-name"><?=
htmlspecialchars($user_details['full_name']); ?></h2>
                    <p class="user-details">Test Course</p>
                    <p class="user-id"><?=
htmlspecialchars($user_details['id_number']); ?></p>
                </div>
                <nav class="menu">
                    <button class="menu-item"
onclick="location.href='ValidatePHP.php'">Validate Hash</button>
                    <button class="menu-item"
onclick="location.href='GeneratePHP.php'">Generate Hash</button>
```

```php
                    <button class="menu-item active"
onclick="location.href='SearchPHP.php'">Search Certificates</button>
                    <button class="menu-item"
onclick="location.href='LogoutPHP.php'">Log Out</button>
                </nav>
            </aside>
            <main class="content">
                <h2>Certificates</h2>
                <p>Use the ID Number of the student to search for
certificates.</p>
                <form class="search-form" method="post">
                    <input type="text" class="input-field" name="student_id"
value="<?= htmlspecialchars($searched_id); ?>" placeholder="Search by Student
ID" required>
                    <button type="submit" class="search-button">Search</button>
                </form>
                <?php if ($message): ?>
                    <p style="color: red;"><?= htmlspecialchars($message);
?></p>
                <?php elseif ($certificates): ?>
                    <div class="certificate-list">
                        <?php foreach ($certificates as $certificate): ?>
                            <a href="ViewCertPHP.php?cert_id=<?=
urlencode($certificate['id']); ?>" class="certificate-card">
                                <h3><?=
htmlspecialchars($certificate['certificate_name']); ?></h3>
                                <p><strong>Date Issued:</strong> <?=
htmlspecialchars($certificate['date_issued']); ?></p>
                                <p><strong>Certified Hash:</strong> <?=
htmlspecialchars($certificate['hash']); ?></p>
                            </a>
                        <?php endforeach; ?>
                    </div>
                <?php endif; ?>
            </main>
        </div>
    </div>
</body>
</html>
```

ViewCertPHP.php

```php
<?php
session_start();
require 'db.php';

//Check if user is logged in
session_start();
if (!isset($_SESSION['user_id'])) {
    header('Location: index.php');
    exit();
}

$message = "";

// Fetchlogged user details
$user_id = $_SESSION['user_id'] ?? null;
$user_details = [
    'full_name' => 'Guest User',
    'id_number' => 'N/A',
    'course' => 'test course'
];

if ($user_id) {
    $stmt = $pdo->prepare("SELECT full_name, id_number FROM users WHERE id =
?");
    $stmt->execute([$user_id]);
    $user_details = $stmt->fetch(PDO::FETCH_ASSOC) ?: $user_details;
}

//fetch the cert_id from previous page (search)
$cert_id = $_GET['cert_id'] ?? null;
$certificate = null;

if ($cert_id) {
    $stmt = $pdo->prepare("SELECT * FROM certificates WHERE id = ?");
    $stmt->execute([$cert_id]);
    $certificate = $stmt->fetch(PDO::FETCH_ASSOC);

    if (!$certificate) {
        die("Certificate not found.");
    }
} else {
    die("No certificate ID provided.");
}
```

```php
if ($_SERVER['REQUEST_METHOD'] === 'POST' && isset($_POST['copy_hash'])) {
    $message = "Hash copied to clipboard!";
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;700&display=swap" rel="stylesheet">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>AdNU CEVAS - View Certificate</title>
    <style>
        * { font-family: Poppins; }
        body, html { margin: 0; padding: 0; width: 100%; height: 100%;
background-color: #f9f9f9; }
        .headcontainer { display: flex; flex-direction: column; height: 100%;
width: 100%; }
        .header { background-color: #003366; color: white; display: flex;
align-items: center; padding: 10px 20px; gap: 15px; flex-shrink: 0; }
        .header .logo { width: 55px; height: 55px; }
        .header h1 { font-size: 20px; margin: 0; }
        .main-content { display: flex; flex: 1; overflow: hidden; }
        .sidebar { background-color: #333; color: white; width: 250px; padding:
20px; display: flex; flex-direction: column; align-items: center; overflow-y:
auto; }
        .user-profile { text-align: center; margin-bottom: 30px; }
        .avatar img { width: 150px; height: 150px; border-radius: 50%; }
        .user-name { font-size: 20px; margin: 10px 0 5px; }
        .user-details, .user-id { font-size: 13px; margin: 0; }
        .menu { width: 100%; }
        .menu-item { display: block; width: 100%; background: none; border:
none; color: white; text-align: left; padding: 10px 20px; margin: 5px 0;
font-size: 14px; cursor: pointer; border-radius: 4px; transition:
background-color 0.3s; }
        .menu-item:hover, .menu-item.active { background-color: #b38f4d; }
        .content { flex: 1; padding: 40px; overflow-y: auto; height: 100%;
background-color: #ffffff; display: flex; flex-direction: column; align-items:
center; justify-content: center; }
```

```
        .certificate-details { max-width: 600px; width: 100%; text-align:
center; }
        .certificate-card { padding: 20px; border: 1px solid #ccc;
border-radius: 10px; background-color: #f3f3f3; margin-bottom: 20px;
box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1); max-width: 100%; word-wrap:
break-word; text-align: center; }
        .certificate-card h3 { font-size: 20px; margin: 0 0 10px; color: #333;
}
        .certificate-card p { margin: 5px 0; font-size: 16px; color: #555; }
        .action-buttons { display: flex; justify-content: center; gap: 20px; }
        .btn { padding: 10px 20px; font-size: 14px; color: white; border: none;
border-radius: 5px; cursor: pointer; transition: background-color 0.3s; }
        .back-btn { background-color: #003366; }
        .copy-btn { background-color: #b38f4d; }
        .btn:hover { opacity: 0.9; }
        .message { margin-top: 15px; padding: 10px; border-radius: 5px;
background-color: #d4edda; color: #155724; text-align: center; font-size: 14px;
}
    </style>
    <script>
        function copyToClipboard(hash) {
            navigator.clipboard.writeText(hash).then(() => {
                const messageDiv = document.getElementById('message');
                messageDiv.innerText = "Hash copied to clipboard!";
                messageDiv.style.display = "block";
            }).catch(err => {
                console.error('Failed to copy hash: ', err);
            });
        }
    </script>
</head>
<body>
    <div class="headcontainer">
        <header class="header">
            <a>
                <img src="/images/adnulogo.png" alt="AdNU Logo" class="logo">
            </a>
            <h1>Ateneo Certificate Validation System</h1>
        </header>
        <div class="main-content">
            <aside class="sidebar">
                <div class="user-profile">
                    <div class="avatar">
                        <img src="/images/user.png" alt="User Avatar">
```

```html
                    </div>
                    <h2 class="user-name"><?=
htmlspecialchars($user_details['full_name']); ?></h2>
                    <p class="user-details">Test Course</p>
                    <p class="user-id"><?=
htmlspecialchars($user_details['id_number']); ?></p>
                </div>
                <nav class="menu">
                    <button class="menu-item"
onclick="location.href='ValidatePHP.php'">Validate Hash</button>
                    <button class="menu-item"
onclick="location.href='GeneratePHP.php'">Generate Hash</button>
                    <button class="menu-item active"
onclick="location.href='SearchPHP.php'">Search Certificates</button>
                    <button class="menu-item"
onclick="location.href='LogoutPHP.php'">Log Out</button>
                </nav>
            </aside>
            <main class="content">
                <div class="certificate-details">
                    <div class="certificate-card">
                        <h3><?=
htmlspecialchars($certificate['certificate_name']); ?></h3>
                        <p><strong>Date Issued:</strong> <?=
htmlspecialchars($certificate['date_issued']); ?></p>
                        <p><strong>Certified Hash:</strong> <?=
htmlspecialchars($certificate['hash']); ?></p>
                    </div>
                    <div class="action-buttons">
                        <button class="btn back-btn"
onclick="location.href='SearchPHP.php'">Back</button>
                        <button class="btn copy-btn"
onclick="copyToClipboard('<?= htmlspecialchars($certificate['hash']);
?>')">Copy Hash</button>
                    </div>
                    <div id="message" class="message" style="display:
none;"></div>
                </div>
            </main>
        </div>
    </div>
</body>
</html>
```

LogoutPHP.php

JavaScript

```php
<?php
session_start();
session_unset();
session_destroy();
header('Location: index.php');
exit();
?>
```