

## Copilot

To restrict access to your Quiz App in PHP so that only logged-in users can access it, you can follow these steps:

### 1. Set Up User Authentication

First, ensure you have a login system in place. If you don't already have one, you can follow a tutorial like [this one](#).

### 2. Start a Session

At the beginning of each PHP file that requires user authentication, start a session.

```
session_start();
```

### 3. Check User Authentication

Create a function to check if the user is logged in. This function will verify if the session variable for the user is set.

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

### 4. Restrict Access to Pages

Call the `check_login()` function at the top of any page you want to restrict access to.

```
<?php
session_start();
check_login();
?>
<!DOCTYPE html>
<html>
<head>
    <title>Quiz App</title>
</head>
<body>
    <!-- Your Quiz App content here -->
</body>
</html>
```

### 5. Login Script

Ensure your login script sets the session variables correctly upon successful login.

```
<?php
session_start();
include 'config.php'; // Database connection

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

    // Prepared statement to prevent SQL injection
    $stmt = $conn->prepare("SELECT id, password FROM users WHERE username = ?");
```

```

$stmt->bind_param("s", $username);
$stmt->execute();
$stmt->store_result();
$stmt->bind_result($id, $hashed_password);
$stmt->fetch();

if ($stmt->num_rows > 0 && password_verify($password, $hashed_password)) {
    $_SESSION['user_id'] = $id;
    header("Location: index.php");
} else {
    echo "Invalid username or password.";
}
$stmt->close();
}
?>

```

## 6. Logout Script

Provide a way for users to log out, which will destroy the session.

```

<?php
session_start();
session_unset();
session_destroy();
header("Location: login.php");
exit();
?>

```

## 7. Secure Sensitive Pages

Ensure that all sensitive pages include the session check to prevent unauthorized access.

```

<?php
session_start();
check_login();
?>
<!DOCTYPE html>
<html>
<head>
    <title>Restricted Page</title>
</head>
<body>
    <h1>Welcome to the restricted page!</h1>
</body>
</html>

```

By following these steps, you can ensure that only authenticated users can access your Quiz App. If you need more detailed guidance, you might find this [comprehensive tutorial](#) helpful.

Would you like more details on any specific part of this process?