

Documentation

Login Page

```
// src/pages/login.php
<?php
    include_once("../sys/logic/session.php");
    if (isset($_POST["uname"])) {
        $localResults;
        try {
            $localResults = retrieveMatches();
        }
        catch (Exception $e){
            $uname = $_POST["uname"];
            $error_uname = "Username [{ $uname}] not found on
database!";
            header("Location: ", true, 301);
        }
        if (is_null($localResults)){
            global $error_uname;
            $uname = $_POST["uname"];
            $error_uname = "Username [{ $uname}] not found on
database!";
            header("Location: ", true, 301);
        }
        else {
            if ($_POST["psw"] == $localResults["WORD"]){
```

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        $user = getUserName($localResults);
        $_SESSION["uname"] = $user;
        $_SESSION["lusr"] = $localResults["NAME"];
        $_SESSION["luid"] = $localResults["ID"];
        $_SESSION["luas"] =
boolval($localResults["ASTAT"]);
        unset($_POST["psw"]);
        header("Location: profile.php", true, 301);
    }
    else {
        global $error_pword;
        $uname = $_POST["uname"];
        $error_pword = "Username [{ $uname}] and
Password does not match";
    }
}
}
?>
<!DOCTYPE html>
<html>
    <head>
        <meta author="Silverous Black">
        <meta charset="utf-8">
        <meta summary="Log In page of Project Midnight. Project
Midnight is a part of Enthreon Cipher Projects by S. Black,
and is a predecessor of Project Eclipse. Read license notice
for information on copyrights.">
        <title>Midnight: Log In</title>
        <link rel="icon" type="images/png" sizes="256x256"
href="../resources/images/icon-256.png">
        <link rel="icon" type="images/png" sizes="128x128"
href="../resources/images/icon-128.png">
        <link rel="icon" type="images/png" sizes="64x64"
href="../resources/images/icon-64.png">
        <link rel="icon" type="images/png" sizes="32x32"
href="../resources/images/icon-32.png">
        <link rel="icon" type="images/png" sizes="16x16"
href="../resources/images/icon-16.png">
        <link rel="stylesheet" type="text/css"
href="../scripts/css/basic.css">
    </head>
    <body>
        <ul>
            

```

```

        <li><a class="active" href="">Log In</a></li>
        <li><a href="signup.php">Sign Up</a></li>
        <li><a href="../../../docs/Enthereon Cipher
Projects.pdf">About: Enthereon Cipher Projects</a></li>
        <li><a href="../../../docs/Project
Midnight.pdf">About: Project Midnight</a></li>
        <li><a href="../../../docs/LICENSE">License</a></li>
    </ul>
    <div class="general">
        <div class="content">
            <h1>Log In</h1>
            <h2>Welcome to Project Midnight </h2>
            <p>Login to continue.</p>
            <form method="post" action="">
                <label for="uname"><b>Username</b></label>
                <br>
                <input type="text" placeholder="Enter
Username" name="uname" required>
                <?php
                    echo ("<p class=error>{$error_uname}
</p>");
                ?>
                <br>
                <label for="psw"><b>Password</b></label>
                <br>
                <input type="password" placeholder="Enter
Password" name="psw" required>
                <?php
                    echo ("<p class=error>{$error_pword}
</p>");
                ?>
                <br>
                <button class="login" type="submit"
onclick>Login</button>
                <label>
                <input type="checkbox" checked="checked"
name="remember"> Remember me
                </label>
            </form>
            <p>Not yet registered? <a
href="signup.php">Sign up here.</a></p>
        </div>
    </div>

```

```
</body>
</html>
```

Sign Up Page

```
// src/pages/signup.php
<?php
    include_once("../.sys/logic/session.php");
    if (isset($_POST["uname"])){
        $pings = retrieveMatches();
        if (!(is_null($pings))){
            $uname = $_POST["uname"];
            $error_uname = "Username [{ $uname }] already exists
in database! Consider changing.";
        }
        else {
            if (!(verifyPassWord($_POST["psw"]))){
                $error_pword = "Password must be at least 8
characters and at most 20 characters.";
            }
            else {
                $ret = recordEntry($_POST["uname"],
$_POST["psw"], $_POST["secq"], $_POST["seca"]);
                $localResults = retrieveMatches();
                $user = getUser_name($localResults);
                $_SESSION["uname"] = $user;
                $_SESSION["lusr"] = $localResults["NAME"];
                $_SESSION["luid"] = $localResults["ID"];
```

```

        $_SESSION["luas"] =
boolval($localResults["ASTAT"]);
        unset($_POST["secq"]);
        unset($_POST["seca"]);
        unset($_POST["psw"]);
        header("Location: profile.php", true, 301);
    }
}
}
?>
<!DOCTYPE html>
<html>
    <head>
        <meta author="Silverous Black">
        <meta charset="utf-8">
        <meta summary="Sign Up page of Project Midnight.
Project Midnight is a part of Enthereon Cipher Projects by S.
Black, and is a predecessor of Project Eclipse. Read license
notice for information on copyrights.">
        <title>Midnight: Sign Up</title>
        <link rel="icon" type="images/png" sizes="256x256"
href="../resources/images/icon-256.png">
        <link rel="icon" type="images/png" sizes="128x128"
href="../resources/images/icon-128.png">
        <link rel="icon" type="images/png" sizes="64x64"
href="../resources/images/icon-64.png">
        <link rel="icon" type="images/png" sizes="32x32"
href="../resources/images/icon-32.png">
        <link rel="icon" type="images/png" sizes="16x16"
href="../resources/images/icon-16.png">
        <link rel="stylesheet" type="text/css"
href="../scripts/css/basic.css">
    </head>
    <body>
        <ul>
            
            <li><a href="login.php">Log In</a></li>
            <li><a class="active" href="">Sign Up</a></li>
            <li><a href="../../docs/Enthereon Cipher
Projects.pdf">About: Enthereon Cipher Projects</a></li>
            <li><a href="../../docs/Project
Midnight.pdf">About: Project Midnight</a></li>
            <li><a href="../../docs/LICENSE">License</a></li>
        </ul>

```

```

        <div class="general">
            <div class="content">
                <h1>Sign Up</h1>
                <h2>Welcome to Project Midnight </h2>
                <p>Welcome! We're glad to have you here!
</p>
                <p>Complete the form to register and sign up.
</p>
                <form method="post" action="">
                    <label for="uname">Username</label>
                    <br>
                    <input type="text" placeholder="Enter
Username" name="uname" required>
                    <br>
                    <?php
                        echo ("<p class=error>{$error_uname}
</p>");
                    ?>
                    <br>
                    <label for="psw">Password</label>
                    <br>
                    <input type="password" placeholder="Enter
Password" name="psw" required>
                    <br>
                    <?php
                        echo ("<p class=error>{$error_pword}
</p>");
                    ?>
                    <br>
                    <label for="secq">Security Question</label>
                    <br>
                    <input type="text" placeholder="Security
Question" name="secq" style="width = 100%">
                    <br>
                    <p class="notice">The security question
[optional] would be used later to retrieve your log in
credentials in case they are lost.</p>
                    <br>
                    <label for="seca">Security Question
Answer</label>
                    <br>
                    <input type="text" placeholder="Security
Answer" name="seca" style="width = 100%">
                    <br>

```

```

        <p class="notice">Take note of your
security question and answer! Both must match to retrieve an
account.</p>

        <br>
        <button class="login" type="submit"
onclick>Sign Up</button>
        <label>
            <input type="checkbox"
checked="checked" name="remember"> Remember me
        </label>
        <p>By registering, you agree to our privacy
statement</p>
    </form>
    <p>Already registered? <a href="login.php">Log
In here.</a></p>
</div>
</div>
</body>
</html>

```

Others

session.php

```

// src/.sys/logic/session.php
<?php
    session_start();
    include_once("db_config.php");
    include_once("requiries.php");
    $error_uname = "";
    $error_pword = "";
?>

```

db_config.php

```

// src/.sys/logic/db_config.php
<?php
    $dbserver = "localhost";
    $dbuser = "user";
    $dbpword = "";

```

```

$dbname = "MIDNIGHT";
$dbconfig = mysqli_connect($dbserver, $dbuser, $dbpwd,
$dbname);
if ($dbconfig === false) {
    $error = mysqli_connect_error();
    die("Database Connection Error: {$error}\nAlter
`src/.sys/logic/db_config.php` to fix errors.");
}
?>

```

requiries.php

```

// src/.sys/logic/requiries.php
<?php
include_once("db_config.php");
function retrieveMatches(){
    global $dbconfig;
    $name = "" . $_POST["uname"] . "";
    $query = "SELECT * FROM USER WHERE NAME={$name}";
    $result = mysqli_query($dbconfig, $query)
    or die("Database Error [Cannot Add Entry]: " .
mysqli_error($dbconfig));
    return mysqli_fetch_assoc($result);
}
function generateUserNumber($number){
    $result = "";
    if ($number < 10) $result .= "00";
    elseif ($number < 100) $result .= "0";
    elseif ($number < 1000) $result .= "";
    return $result . "{$number}";
}
function getUserName($array){
    return $array["NAME"] . "#" .
generateUserNumber($array["ID"]) . boolval($array["ASTAT"]);
}
function verifyPassWord(string $target){
    $size = strlen($target);
    if ($size >= 8 && $size <= 20) return true;
    else return false;
}
function recordEntry($name, $word, $secq, $seca){
    global $dbconfig;
    $uven = "" . $name . "" . ", " . $word . "";

```



```

        $uent = mysqli_query($dbconfig,
        "INSERT INTO USER(NAME, WORD)
        VALUE ({ $uven});")
        or die("Database Error [Cannot Add Entry]: " .
mysqli_error($dbconfig));
        $retr = mysqli_query($dbconfig,
        "SELECT ID FROM USER
        WHERE NAME='{ $name}';")
        or die("Database Error [Cannot Add Entry]: " .
mysqli_error($dbconfig));
        $ruid = mysqli_fetch_row($retr);
        $suid = $ruid[0];
        $sven = "'{$secq}', '{$seca}', {$suid}" ;
        $sent = mysqli_query($dbconfig,
        "INSERT INTO SECURITY(QUE, ANS, UID)
        VALUES ({ $sven});")
        or die("Database Error [Cannot Add Entry]: " .
mysqli_error($dbconfig));
        $ret = array($uent, $sent);
        return $ret;
    }
    function logoutProtocol(){
        global $dbconfig;
        mysqli_close($dbconfig);
        unset($_POST);
        unset($_SESSION);
    }
?>

```

Database

MariaDB [MIDNIGHT]> SHOW TABLES;

Tables_in_midnight
cipher
logs
security
symbol
user

5 rows in set (0.033 sec)

MariaDB [MIDNIGHT]> DESCRIBE USER;

Field	Type	Null	Key	Default	Extra
ID	int(3)	NO	PRI	NULL	auto_increment
WORD	varchar(20)	NO		00000000	
ASTAT	bit(1)	YES		b'0'	
NAME	varchar(20)	YES		NULL	

4 rows in set (0.077 sec)

MariaDB [MIDNIGHT]> DESCRIBE CIPHER;

Field	Type	Null	Key	Default	Extra
ID	int(6)	NO	PRI	NULL	
NAME	varchar(20)	NO		NULL	
UID	int(3)	YES	MUL	NULL	

3 rows in set (0.020 sec)

MariaDB [MIDNIGHT]> DESCRIBE SYMBOL;

Field	Type	Null	Key	Default	Extra
ID	int(13)	NO	PRI	NULL	
SYM	varchar(1)	NO		NULL	
CID	int(6)	YES	MUL	NULL	
UID	int(3)	YES	MUL	NULL	

4 rows in set (0.019 sec)

MariaDB [MIDNIGHT]> DESCRIBE SECURITY;

Field	Type	Null	Key	Default	Extra
ID	int(15)	NO	PRI	NULL	auto_increment
QUE	varchar(50)	NO		NULL	
ANS	varchar(50)	NO		NULL	
UID	int(3)	YES	MUL	NULL	

4 rows in set (0.023 sec)

MariaDB [MIDNIGHT]> DESCRIBE LOGS;

Field	Type	Null	Key	Default	Extra
ID	int(15)	NO	PRI	NULL	auto_increment
REC	datetime	NO		current_timestamp()	
CID	int(6)	YES	MUL	NULL	
UID	int(3)	YES	MUL	NULL	

4 rows in set (0.242 sec)