

## Below are all the security Features implemented in this project.

1. All the Passwords are stored as MD5 hashes in the database, for admin and Users.

	USER_ID	First_Name	Last_Name	Email	MD5_Password
Edit Copy Delete	1	Test	User	test@gmail.com	5f4dcc3b5aa765d61d8327deb882cf99
Edit Copy Delete	2	Test	User	test2@gmail.com	5f4dcc3b5aa765d61d8327deb882cf99
Edit Copy Delete	3	Test	User	test3@gmail.com	5f4dcc3b5aa765d61d8327deb882cf99

2. All the Passwords are also sent as MD5 hashes from the Client Server, as per review of `client/login.php` code from lines 96-109 , which uses CryptoJS library to convert the passwords to Md5Hashes.

```
<script>
    document.getElementById("loginForm").addEventListener("submit", function(e) {
        e.preventDefault();
        var email = document.getElementById("email").value;
        var password = document.getElementById("password").value;

        if (!email || !password) {
            alert('Please enter both email and password.');
```

- ```
        return;
    }

    var password = document.getElementById("password").value;
    var hashedPassword = CryptoJS.MD5(password).toString();
    document.getElementById("password").value = hashedPassword;
    this.submit();
});
</script>
```
3. Client Side Form Validation for Password matching implemented in `client/login.php` .
  4. Weather Api , did not actually require a token , since an open source Api was used. Although the functionality has been coded in such a Way , that if a Token was to be used it could be added in `server/functions/weather.php` .
  5. Our `ExecutePreparedQuery()` in `server/functions/db_connection.php` made use of prepared query , to prevent against any SQL Injection attacks.
    - Also all the functions that were making the calls to the database were hidden under `server/functions/*` , and other api files in `server/*` referenced to those files.
  6. Confidentiality was implemented so that only Admin was able to access confidential information of other users, and have the ability to ban them.