

# BAIS3110 Authentication Assignment Part II

## Reference Links:

- Lecture Notes
- Encryption Assignment
- <https://www.devtrends.co.uk/blog/hashing-encryption-and-random-in-asp.net-core>

1. Using your previous Authentication Assignment 1, add the following new functionality.
2. Add a register page to the Pages/Admin folder with the ability to Create a new user.

### Admin - Create User

|           |   |
|-----------|---|
| User Name | <input type="text" value="Enter Users Name"/>     |
| Email     | <input type="text" value="Enter Users Email"/>    |
| Password  | <input type="password" value="Enter a Password"/> |
| Role      | <input type="text" value="Enter a Role"/>         |

3. Create a database to hold the User info called BAIS3110Authentication.
4. Add Salted Password Hashing to your previously created Forms Authentication Application. Choose whatever hashing algorithm you think is best. You are not limited to lecture notes/labs, use any Hashing algorithm you like. I have supplied a pretty good example in the reference links.
5. Store the Hash and Salts along with the User info. Don't store the clear text password.
6. Modify your Login function to properly authenticate your users with the Hashed Password and Salt values that were stored by the Register page
7. Create a few users with the same password, look at the passwords in the SQL Users table and see that they are different.
8. Refactor the system using a Controller class as an entry point to the system and a SecurityManager class to contain the Business Logic.

|   | UserID | UserName   | Email                          | Password                                     | Role  | Created                 |
|---|--------|------------|--------------------------------|--|-------|-------------------------|
| 1 | 1      | [REDACTED] | [REDACTED]@nait.ca             | AcXumfuGdprvjP6I4aJ.UvChvg0mIk4NvMUimEQzQ==  | Admin | 2020-06-03 14:54:41.627 |
| 2 | 2      | [REDACTED] | [REDACTED]@studentmail.nait.ca | uV8ou3w66EgSMaILBgn.V7+nN8VaD4/UW+5NMpFH4Q== | Admin | 2020-06-03 14:55:41.273 |

This example combines the Password and Salt, notice the : in the Password field.  
(Using the reference link hash/salting examples)

9. Submit a screen shot of the login and another screen shot of the Sql User Table with a few users added.