

## Encryption x2

### Sprint 2 Design Inspection, Code Inspection, Unit Testing

#### Design Inspection

Product	Encryption x2
Author	Development Team
Date	3/1/18

Defect #	Description	Severity	How Corrected
1	The files stored in AWS have to be unique file names otherwise they get overwritten. So originally if we had two users with the same file name, they would just overwrite the other in our cloud.	5	We generated a random string for each unique file on the backend and stored to cloud but the file names were still the same for the user on the front end
2	The inputs for changing the password is not enforced. The user is able to input a blank password for their new password	4	Users are forced to input something for their new password now before changing it.

#### Code Inspection

Product	Encryption x2
Date	3/1/18

Defect #	Description	Severity	How Corrected
1	Possible to upload mp3/mp4 files when the user should not be allowed to.	3	Will be corrected by checking the extension of the file before accepting it and storing it to the cloud
2	Forgot to encrypt the user's password again when they change it in the settings page	4	Corrected by calling our encrypting string function again when they give their new password.

3	Some functions were not closed off properly or were missing braces/parentheses	3	Syntax was corrected when running the server since it failed to start. Showed which lines had errors to correct
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## Unit Testing

For this software testing phase, we did not use automated test.

### Encrypting/Decrypting files

When the user uploads a file, it is first encrypted and then uploaded to the cloud

Product	Encryption x2
Module	Encrypting/Decrypting files
Date	3/2/18

Defect #	Description	Severity	How Corrected
1	Decrypting the file from our cloud would never produce the original file. The encryption and decryption were using a different algorithm/scheme. Encryption was using AES256 and decryption was using AES128	5	Corrected by making encryption and decryption use AES256.

### Changing Password

The user is allowed to go to their settings page and change their account password which will be updated in our database. Upon changing the password, the user has to input their old password and give their new password in order for it to change.

Product	Encryption x2
Module	Changing Password
Date	3/2/18

Defect #	Description	Severity	How Corrected
1	We were not notifying the user that the password failed to change since the old password they gave was incorrect.	1	An alert will pop up telling the user that the password change was unsuccessful.

2	The password change would always fail for the user. We were comparing their old password with the encrypted password in our database. Due to this, the password check would always fail.	3	Fixed by encrypting the old password and then checking it with the encrypted password in our database
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#### Uploading and Encrypting Images

Product	Encryption x2
Module	Uploading and Encrypting Images
Date	3/2/18

Defect #	Description	Severity	How Corrected
1	Failed to upload an image because the image was not a JPEG.	3	Corrected by accepting JPEG and PNG image extensions only.