# Encryption x2 Design Inspection, Code Inspection, Unit Testing

# **Design Inspection**

Product	Encryption x2
Author	Development Team
Date	2/7/18

Defect #	Description	Severity	How Corrected
1	Email and password are being passed through the body between pages which is a security issue	5	They will be encrypted rather than being in plain text
2	There is no protection from the user accidently deleting one of their files	3	Implement a warning message that appears on screen asking if they are sure
3	Emails need to be verified before allowing them to create an account with it	2	Use an email verification api to check whether the email is valid
4	The inputs for creating an account such as the email, password, passcode, etc are not enforced	5	We will need to require the user to fill in all the required information before submitting
5	The inputs for uploading a file such as title, when to delete, and timeout option are not enforced	3	Users will be required to fill out all necessary information before being allowed to able to upload it
6	Access keys and URLs are not encrypted, so anyone with access to the database could gain access to the files.	5	Not yet corrected. We will need to encrypt the access keys and URLs.

# **Code Inspection**

Product	Encryption x2
Date	2/8/18

Defect #	Description	Severity	How Corrected
1	Possible to enter characters instead of numbers when inputting passcode after creating an account	3	Integer check added upon creating passcode
2	Some functions and lines of code were not closed off properly or missing parentheses or braces.	3	Syntax was corrected when running the server. It failed to run and showed what line the problem occurred on

## **Unit Testing**

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

### **Creating an Account**

Creating an account allows the user to enter in their email and other credentials in order to have access and use our website. The method conducts the following unit tests.

Product	Encryption x2
Module	Creating an Account
Date	2/9/11

Defect #	Description	Severity	How Corrected
1	The creating an account method was allowing users to create multiple accounts with the same email	5	It was corrected by first checking our database with the given email and returning the correct response
2	The method was accepting emails that are invalid or do not exist.	2	Not yet corrected. Before adding the user to the database, we use an email

			validation api to verify and return the correct response
3	User was able to create an account using a password with insufficient length	3	Not yet corrected. Fixed by requiring them to input a minimum password length before submitting
4	User was able to create an account when the confirmed password did not match the first password field	5	It was corrected by ensuring that the password and confirm password fields matched before calling the API.

#### **Logging into Account**

The logging in method should allow users to be able to login to an account that exists within our database. The method conducts the following tests.

Product	Encryption x2
Module	Logging into Account
Date	2/10/18

Defect #	Description	Severity	How Corrected
1	We were not notifying the user that the password was incorrect. Originally it would remain on the same page.	1	It was corrected by displaying an alert message notifying them that the login was unsuccessful

#### **Uploading Files**

The uploading files method will upload the specified file to our cloud and database. The method conducts

Product	Encryption x2
Module	Uploading Files

Date	2/10/18
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Defect #	Description	Severity	How Corrected
1	We were not verifying that the file uploaded is one of the supported file types.	3	Not yet corrected. We can check the file extension before accepting and uploading it to our database
2	User was able to upload two different files with the same name	2	Not yet corrected. We will check to make sure that the title is not taken by another file that belongs to that user.
3	We are not checking to make sure that our file does not exceed our max file size limit of 50 MB.	2	Not yet corrected. We need to get the file size and ensure that it is less than or equal to 50 MB before the file is added.