

MakePassword Design Doc

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Abstract:

This document will serve as a means to enable a user to give their password via a file and afterward, receive their passwords in a hashed format. The reason for this is so any unknown persons with access to our system will not be able to hack into what we have and steal peoples information.

This is necessary because in this day and age with so much social media, and things of that nature which store usernames, emails, and passwords, users would like to think and to know that their accounts are secure. And we solve this problem using hashed passwords, which allow passwords to be more secure than if they were to be stored plainly.

Goals:

We want to make a that would return a hash file for the given password file.

Solution:

In this the makepassword.js file will act as a black box and output the password from the given import file to the output file as a hashed version of itself. The black box works this way. The makepassword.js function has 1 function and 3 variables: hash(), const data, var passes[], var name[]. Within the hash function, the hash receives an input, that input then will be hashed according to the 'sha256' algorithm and will be updated so that when that input is referenced it is called in its hashed form in 'hex' encoding. And if the input is found with an error, that error is caught and the cause of the error will be returned. As for the rest of the function, the function will iterate through each line of the function and split it based on a semi-colon. And each email will be pushed to the array named 'name' and each password will be pushed to the array named 'passes'. And then

another iteration will occur, while the passes array has inputs they will be hashed. The `makepassword.js` file ends on this, the passes that are now in their hashed form will be sent to the export document (in this case `password.enc.txt`).

Milestones:

Beginning this project I started with my own code that made this a bit more difficult. But when in combination with my code and the skeleton given me by the professor, I was able to create the `makepassword.js` file (May 3, 2023). Soon after I made my code I made tests for it which lined up with what made sense.

User Story:

- As a user, I would like to have my password protected within the code, so I can feel that my information is safe, and not worry about hackers getting my password and access to personals.