# **User Documentation**

# **Login**

Follow the steps below to log in easily and securely:

- 1. Enter URL: passman.harry.red/login.php
- 2. Fill in the correct details
- 3. Press submit

## Log out

Follow the steps below to log out of the system

- 1. Click on your profile photo located at the top right of the screen
- 2. Click log out

# Register

If you are not yet registered you can do so easily by following these simple steps:

- 1. Enter URL: passman.harry.red/login.php
- 2. Click "Create account" link
- 3. Fill in relevant fields
- 4. Press submit

Ensure your password meets the following requirements:

- 1. Size of 8 characters or more
- 2. At least one number
- 3. At least one special character
- 4. UMust not be in the 100,000 most common passwords

#### Delete username + password

You're able to delete any user login for any given website, if you wish to do so this can be achieved by following these simple steps:

- 1. Login to passman
- 2. Select the website of choice
- 3. Select the account you wish to delete
- 4. Press the delete button

# Import password as CSV file

If you have previously used a password management system, you can easily upload all of your passwords into our system as a CSV file.

- 1. Download your passwords as a CSV File
- 2. Login or signup to our system
- 3. In the footer press the "Upload CSV"
- 4. You will be directed to another page where you can press the "Upload File" button

# **Developer Documentation**

# **Encryption**

Encryption is done on the server side to accommodate low powered devices. User passwords are encrypted in order to ensure they cannot be understood if breached. The encryption algorithm used is aes-256-cbc with the users master key and a random initiation vector that is stored in plain text with encrypted passwords.

## Hasing

Bcrypt is our password hashing algorithm, we use the built in function password\_hash to hash the password with algorithm PASSWORD\_DEFAULT that currently uses the Bcrypt algorithm for hashing, this ensures that when the standard updates our password hashing also updates while maintaining ability to access the previous passwords.

#### Password validator

Due to the sensitivity of information stored on our system, we use a password validator when a user attempts to create an account, as well as on password change.

#### 2 Factor Authentication

For security reasons, 2 factor authentication has been set up. Every time a user attempts to log in they receive a one time password to their email address which they have to input into the appropriate field. This otp only lasts for 20 minutes and is required every time a user logs in.

#### Server

This system was developed and should be maintained on the Harrysy.red(185.132.36.154) server, unless a reasonable reason for a change arises.

## Legal Compliance

As our customers will be storing confidential information on our system, we have ensured to comply with GDPR, in which we guarantee their data is stored safely. This cannot be removed in the future, however further legal regulations can be added.

#### Copyright

We are currently using the psb clause 2 to ensure our work cannot be used without credit being given, this can be changed in the future if necessary.

## **Backup**

Currently passman is a new password managing software, with limited users using our services; therefore we do not have a preferred method of backup. Our current backup method is a google drive backup as it is stored off site, meaning it cannot be affected by natural disasters as well as ensuring we are only paying for the amount of storage that is required. Once we reach 10,000, we are planning to perform all our backups ourselves using our own hardware without any third parties involved for security reasons.

### **Environment of development**

Based on all relevant factors, including the requirements, experience, maintainability and complexity of the system, these are the final decisions made and approved on the development environment.

- Structure has been achieved using HTML.
- o Styling has been achieved using CSS, with no frameworks.
- System has been created using PHP.

- Major part of functionality has been achieved using JavaScript using the JQUERY library
- o Secure data storage has been achieved using a SQL database.