

Sentinel Data Vault – Product Backlog

Team 19

Jiho Choi, Zhaoji Jiang, Adam Petty, Dingfu Sun, Thomas Worns

Problem Statement

Today, people have countless numbers of device passwords, website logins, credit cards, PINs, licenses, and a wide variety of other hard-to-memorize personal information. Keeping and remembering all of these is an extremely difficult task, especially considering that in order to be safe, each one of these items must be lengthy and complex. Additionally, people often need to quickly share these bits of info with those you trust. A password manager will easily store and track all of these items in a clean and simple interface, requiring only a single master password to quickly access a user's stored information. This will eliminate the need to memorize a multitude of information, and allow swift, safe sharing.

Background Information

Password managers exist today, however, they come with a set of limitations. Many competitor managers have some dependence on an outside server and often require a user to buy the software. While there are free options on the market, ours is unique in that no data from the user will ever be stored on an offsite server and all passwords and login information will be backed up locally. Given this feature, users will only have to worry about keeping their computer secure, instead of worrying about security they cannot manage. Furthermore, other managers are very limited with their data options. Our project will provide a vast amount of different information types without requiring a premium account. Lastly, Sentinel Data Vault will provide the capability to quickly and safely share information with trusted users.

Requirements:

Functional:

1. As a user, I want to create an account for the password manager.
2. As a user, I want to set a master password for my account.

3. As a user, I want to access all my stored information in the manager using only my master password.
4. As a user, I want to set a master password hint.
5. As a user, I want to reset the master password.
6. As a user, I want to have a sophisticated password generator. (can specify password length, whether or not special characters are allowed, etc.)
7. As a user, I want to check the strength of passwords and be notified of weak passwords.
8. As a user, I want to store a wide variety of data items, including but not limited to:

//TODO, make this list a 2 col 1 row table

device passwords
website logins
credit/debit cards
wifi
phone #
PIN
licenses
addresses
notes/lists
names
SSN
shipment tracking
travel tickets
concert tickets
ID cards (personal ID, work ID, library, membership)
garage/door/key/entry codes
personal/health info (blood type, allergies, ailments, vitals, etc.)
account #s
dates (birthdays, anniversaries, meetings, etc.)
coupons
application passwords
serial #s
device passwords
website logins
credit/debit cards
wifi
phone #
PIN
licenses
addresses
notes/lists
names

SSN

shipment tracking

travel tickets

concert tickets

ID cards (personal ID, work ID, library, membership)

garage/door/key/entry codes

personal/health info (blood type, allergies, ailments, vitals, etc.)

account #s

dates (birthdays, anniversaries, meetings, etc.)

gift cards

receipt/confirmation #s

prescriptions

9. As a user, I want to be able to sort my stored data by type or name.
10. As a user, I want to be able to copy out logins, passwords, etc. to the clipboard.
11. As a user, I want to be able to completely delete my account and its associated data.
12. As a user, I want to be able to create multiple accounts within the manager, each with its separate data
13. As a user, I want to be able to search for an information entry.
14. As a user, I want to be able to specify a location to which backups will be saved.
15. As a user, I want the ability to export all my passwords and logins from the application to an encrypted file.
16. As a user, I would like a shared account to be available in the accounts menu.
17. As a user, I would like the ability to share a data item (we call them passcards) securely with another user. (E.g. sharing a netflix account password)
18. As a user, I want to have a reminder to change my passwords (configurable time interval between reminders).
19. As a user, I would like my data to be deleted after a certain number of failed login attempts (number would be configurable).
20. As a developer, I want to handle other content(credit/debit information, logins etc.) that is not login passwords with varying levels of security (Login emails have less encryption than credit card data).
21. As a developer, I want the password manager to have two-factor authentication.
22. As a user, I want to have an avatar or picture associated with my account. (if time allows)
23. As a user, I want to add a field to a data entry
24. As a user, I want to have a built-in virtual keyboard. (if time allows)
25. As a user, I want to have automatic internet form filling option (if time allows)
26. As a user, I want to have the ability to put images into the manager (if time allows)
27. As a user, I want to have an overall security rating (if time allows)

Nonfunctional

1. As a user, I want a visually appealing interface.
2. As a user, I want an easily navigable interface.
3. As a user, I want my passwords to be secure.
4. As a user, I want to be able to input passwords easily.
5. As a developer, I want to be able to have at least 20 accounts in the manager.
6. As a developer, I want the application to be lightweight and run smoothly.
7. As a developer, I do not want to have limits on the number of passwords for one user.
8. As a developer, I want the application to be available on Windows, Linux, and Mac.
9. As a developer, I want user data and backup files to be very strongly encrypted.
10. As a developer, I want to clear the clipboard after a copy and paste operation.
11. As a developer, I do not want to store sensitive information as plain text on disk.
12. As a developer, I want the ability to change encryption in the future and scale security per passcard /data item.
13. As a user, I want to have a help and tips section (if time allows)