Product Backlog: Sentinel Data Vault

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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 a main screen to view stored data entries and access all areas and functionality of the application.
2. As a user, I want to be able to login to the data vault by entering user email and password.
3. As a user, I want a signup window to enter new account information for a new data vault account.
4. As a user, I want a separate section of the application to generate passwords and check password strength.
5. As a user, I want to have a sophisticated password generator.
6. As a user, I want to check the strength of passwords and be notified of weak passwords.
7. As a user, I want to be able to view a settings window with the options to set High Security, max lockout period, backup frequency, and file size limit.
8. As a user, I want a help section in the application to provide more detailed FAQs and explanations of functionality.

9. As a user, I want context-based help with tips/clarifications separate from the help section.
10. As a developer, I want to have a database for storing user and data entry information.
11. As a user, I want to create an account for the data vault.
12. As a user, I want to set a password for my data vault account.
13. As a user, I want to set an account password security question/answer to help remember the forgotten password.
14. As a user, I want to create multiple data vault accounts each with its separate data.
15. As a user, I want to change my account password.
16. As a user, I want to change my account security question and answer.
17. As a user, I want to be able to completely delete my account and its associated data.
18. As a user, I want my account and data to be securely wiped after a configurable number of failed login attempts, given that this feature is turned on.
19. As a user, I want to be able to delete a selected data entry that is stored in the database.
20. As a user, I want to create a data entry that will store sensitive information.
21. As a user, I want to create data entries of a wide variety of types, each to store specialized information.
22. As a user, I want to edit information in existing data entries and have the changes be saved.
23. As a user, I want to see all existing Data Entries upon login via a file browser-type interface.
24. As a user, I want to easily and clearly view a data entry's information.
25. As a user, I want to copy out data entry fields (logins, passwords, etc.) to the clipboard.
26. As a user, I want to check the strength of passwords and be notified of a password's security level.
27. As a user, I want a sophisticated password generator with length, case, special characters, and character redundancy as parameters.
28. As a user, I want to be able to sign out of my data vault account.
29. As a user, I want my data entries to be encrypted.
30. As a user, I want a help section in the application to provide more detailed FAQs and explanations of functionality.
31. As a user, I want to store a wide variety of data items, including but not limited to: Device passwords, Website logins, Credit/Debit cards, Wifi networks, Phone numbers, PINs, Shipment tracking numbers, Plane tickets, ID cards, Entry codes, Account numbers, Coupons, Application passwords, Serial numbers, Receipts/Confirmation numbers, Prescriptions.
32. As a user, I want to be able to sort my data entries by name or last modified date (in addition to the standard sorting by type).
33. As a user, I want searching functionality to easily find data entries.
34. As a user I want to be able to regain access to my account if I forget my password.
35. As a user, I want to toggle between hiding and showing passwords within text fields.
36. As a user, I want to manually backup my account and all its associated data to a database file.
37. As a user, I want to specify the storage location for backup files.
38. As a user, I want the option for backups to occur automatically on a user-configured interval.

39. As a user, I want to have a permissions-based shared folder that will contain data entries made available to me by different users across multiple accounts.
40. As a user, I want to be able to share a data item securely with another non-local user over email. (e.g. sharing a WiFi password)
41. As a user, I want to be reminded to change my data vault password after a set period of time.
42. As a user, I want to have an avatar picture associated with my account.
43. As a user, I want to have a built-in virtual keyboard for text input.
44. As a user, I want to have two-factor authentication for account access. (*If time allows*)
45. As a user, I want to have the ability to attach images to a data item. (*If time allows*)
46. As a user, I want to have an overall security rating based off total password strength. (*If time allows*)
47. As a user, I want to have automatic internet form filling option. (*if time allows*)

Nonfunctional:

1. As a user, I want a visually appealing interface, largely free of the clutter seen in existing managers.
2. As a user, I want an intuitive and easily navigable interface.
3. As a user, I want the application to run smoothly and be highly responsive.
4. As a developer, I do not want to have limits on the number of passwords for one user.
5. As a developer, I want the ability to choose between two levels of data entry encryption (normal and strong).
6. As a developer, I want the ability to change encryption in the future and upscale security.