

Planning Document: Sprint 1

Team 19

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

September 28, 2015

SPRINT OVERVIEW

Sprint 1 will lay the groundwork for future sprints to build upon. Our main goals for this sprint are:

1. Write all class skeletons for the entire system, so that these can be filled in as we build the system.
2. Complete a fully functional GUI, writing all the classes that support it.
3. Complete the GUI-related functionality of the controller.
4. Write User class and the DataEntry abstract class, along with the DataEntry subclasses.
5. Research and setup SQL database.
6. Implement functionality to create a user account, login to the data vault, and create a data entry.

Scrum Master: Adam Petty

Scrum meeting time: MWF 12:30pm

Risks/Challenges: We will need to familiarize ourselves with git version control to make sure everyone can effectively use it. We will be learning GUI related functionality in Java as well as implementing an SQL database.

CURRENT SPRINT DETAIL

User Stories (UI):

- As a user, I want a visually appealing interface, largely free of the clutter seen in existing managers.
- As a user, I want an intuitive and easily navigable interface.
- As a user, I want to have a context-based help section with tips/explanations.

Task Description	Owner	Estimated Time
Implement UI Manager class to control all UI related classes	Dingfu Sun	15
Implement LoginView class to display the login screen that handles user logins.	Dingfu Sun	8
Implement ShareView class to display section to share data entries nonlocally.	Dingfu Sun	7
Implement MainView class to display the main file browser interface that the user will spend most time interacting with.	Jiho Choi	16
Implement SettingsView class to display the settings that the user can edit.	Thomas Worns	14
Implement SecurityView class to display the password generator and password checker.	Thomas Worns	12
Implement HelpView class so that it displays general security tips and help on how to use the data vault.	Jiho Choi	8

Acceptance Criteria:

- Given the user wants to login to the data vault, when they open the application, then they will see a login window that they can enter their account login information.

- Given the user has typed their valid login information, when they click “login”, then they will see the main data vault file browser interface to display their stored information.
- Given the user is at the main screen, when they click on the Share, Security, or Settings icon, then they will be presented with a separate window to share a data entry, create/check passwords, and change data vault / account settings, respectively.
- Given the user needs help performing a task within the data vault, when they click on the “Help” icon, then they will see a context-based help pop-up window.

User Stories (Data Entries / Database):

- As a user, I want to store a wide variety of data items (passwords, licenses, PINs, etc...).
- As a user, I want to be able to create multiple accounts within the data vault, each with its separate data.
- As a user, I want to be able to completely delete my account and its associated data.

Task Description	Owner	Estimated Time
Implement the abstract DataEntry and its subclasses that will represent a user data entry and its required information.	Zhaoji Jiang	10
Implement the DatabaseManager class to communicate with the database by handling information requests from the controller.	Adam Petty	6-8
Research and setup an SQL database to store all user and data entry information	Adam Petty	16-18

Acceptance Criteria:

- Given a user wants to store a data entry, when they create an entry in the vault, then they will be given a list of all possible data entry types to store information relevant to that type.

- Given that a data entry needs to be represented in the system, when the user enters data entry information, then a DataEntry subclass object is created to encapsulate the data for its specific type.
- Given that a data entries need to be stored, when the DatabaseManager receives a DataEntry from the VaultController, then it will store it in the database.
- Given that a DataEntry needs to be retrieved, when the DatabaseManager receives a request from the VaultController, then the DatabaseManager will retrieve the requested information for that entry from the database.
- Given the user wants to delete an account, when they click “Delete Account” on the main data vault window, then the system will delete the associated User’s stored information from the database.

User Stories (Users / Account Creation):

- As a user, I want to create an account for the data vault.
- As a user, I want to set a password for my data vault account.
- As a user, I want to be able to completely delete my account and its associated data.
- As a user, I want to set a account password hint.
- As a user, I want to reset my account password.

Task Description	Owner	Estimated Time
Implement the User class that will represent a data vault user.	Zhaoji Jiang	5
Account creation functionality: setting user email, password, and security question/answer.	Zhaoji Jiang	7
Account deletion functionality.	Zhaoji Jiang	3

Acceptance Criteria:

- Given the user wants to create an account, when they click “Create New Account” on the login window, then they will enter their new account information.
- Given a user needs to be represented within the system, when the user enters their new account information, then a User object will be created to encapsulate the user and their account information.
- Given the user wants to delete an account, when they click “Delete Account” on the main data vault window, then the system will delete the associated User object.

REMAINING BACKLOG

Functional:

1. As a user, I want to access all my stored information in the manager using only my account password.
2. As a user, I want to have a sophisticated password generator. (can specify password length, whether or not special characters are allowed, etc.)
3. As a user, I want to check the strength of passwords and be notified of weak passwords.
4. As a user, I want to be able to sort my stored data by type or name.
5. As a user, I want to be able to copy out logins, passwords, etc. to the clipboard.
6. As a user, I want to be able to hide/show passwords in text fields.
7. As a user, I want to be able to search for an information entry.
8. As a user, I want to be able to backup my account data.
9. As a user, I want to be able to specify a location for backups to be stored.
10. As a user, I want to be able to export all my passwords and logins from the application to an encrypted file for porting to a new machine.
11. As a user, I want to have a shared folder that will be available across multiple accounts.
12. As a user, I want to be able to share a data item securely with another user. (e.g. sharing a WiFi password)
13. As a user, I want to have a reminder to change my passwords (configurable time interval between reminders).
14. As a user, I want my data to be securely deleted after a certain number of failed login attempts (number would be configurable).
15. As a user, I want to have two-factor authentication for account access.
16. As a user, I want to have a built-in virtual keyboard.
17. As a user, I want to have the ability to attach images to a data item.
18. As a user, I want to have an overall security rating based off total password strength.
19. As a user, I want to have automatic internet form filling option. (*if time allows*)
20. As a user, I want to have an avatar or picture associated with my account (*if time allows*).

21. As a developer, I want to more strongly encrypt data deemed highly sensitive (e.g payment info, SSN, etc.).

Non-functional:

1. As a user, I want the application to run smoothly and be highly responsive.
2. As a user, I want my information to always be secure.
3. As a user, I want to be able to input passwords and information easily.
4. As a developer, I want to have a high upper limit to the number accounts in the
5. manager.
6. As a developer, I do not want to have limits on the number of passwords for one user.
7. As a developer, I want the application to be available on Windows, Linux, and Mac.
8. As a developer, I want user data and backup files to be very strongly encrypted.
9. As a developer, I want to clear the clipboard after a copy and paste operation to increase security.
10. As a developer, I do not want to store sensitive information as plain text on disk.
11. As a developer, I want the ability to change encryption in the future and upscale security.