Final Project: Proposal

Dakota Robbins

10.23.2013

**Extension**: “CardVault” – Saves credit card information in your browser for use on e-commerce sites.

**Extension** **Abilities** - There are two main abilities that this extension will possess:

1. *The ability to add credit cards and store their information*:

Credit card information will be stored including this information:

* Full Name (as it appears on card)
* Credit card number (16 digits)
* Expiration date (format: 01/15)
* Security Code (3 or 4 digits, depending on card)
* Card Type (Visa, MasterCard, etc)

To view the full credit card information, a user set password will need to be entered. Until the password is submitted, saved credit card numbers will be displayed as “XXXX-XXXX-XXXX-1234”.

As an added level of security, the user can opt out of supplying the security code, forcing them to enter it manually each time they make a purchase.

Stored credit cards will display the corresponding card image, based upon card type:

 (“Visa”, “MasterCard”, “American Express”, “Discover”)

These are the only four cards that will be supported in the initial version of the project.

The user can add as many cards as they want and remove a card at any time. All credit card information will be encrypted and stored on the user’s Chrome Local Storage. Future functionality would include being able to edit a card that has already been added to the system.

1. *The ability to fill form data from a saved credit card:*

As a user goes through the checkout of an e-commerce site, they will eventually be greeted by a section in which to fill out their payment/credit card information. Users will have the option of auto-filling the form inputs with data from the extension. Auto-filling of form data will only occur when the user invokes the action via a button-click. Forms will never be filled without the user’s consent. Upon clicking the button to fill form data, the user will be prompted to enter their password. After entering their password into the extension, the form will be automatically filled with what credit card data is available.

**Target Market:**

CardVault will cater to a wide market, ranging from young adults up to the elderly.

Young Adults: The younger generations spend a substantial amount of time and money online. Young adults have grown up with the internet, along with e-commerce, and are more likely to trust online financial transactions. This includes tools used to facilitate the e-commerce process.

Mature Adults: Middle-aged individuals will take a liking to this app because it is convenient. In my observations and personal experience, it is very irritating to have to pull out your card from wherever it is that you keep it in order to make a simple transaction online. My extension turns this whole process into a series of clicks and keystrokes.

Elderly: Similarly, the elderly will take a liking to this extension because of the ease of use it facilitates. Only in the case of older individuals, they may be limited by both their eyesight and motor skills. If an elderly individual has trouble with their vision, it could prove very difficult to have to read all the information on a credit card that is necessary to make a transaction. Additionally, limited motor skills would make the action of typing information from the card into a web form quite difficult.

**Task List:**

Priority 1:

* Add Card
  + Ability to save card information in extension popup
  + Contains all fields necessary for credit card data.
  + Ability to remove cards
* Security
  + Set password on first use
  + Prompt user for password when appropriate

Priority 2:

* Fill Form Data
  + Button to fill form data
  + User is prompted to enter password before form data is filled
  + Fill appropriate form inputs with credit card data

Priority 3:

* Add Card
  + Saved cards use proper card image next to information.
* Security
  + Allow users the option to input security code or not