Penny Pincher Heuristic Evaluation

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Home.html page

http://web.mit.edu/engiarta/Public/PennyPincher_PROTO/Home.html

1. (Good) Clear organization of transactions, prioritized by importance (Efficiency, Simplicity).

I like that the home page is kept simple, only showing total amounts owed and the amount that is owed to each person. No other details or features are displayed.

2. (Good) Good use of colors (blue, yellow) to differentiate amount owed *to* user and amount owed *by* user (Information Scent).

AddTransaction.html page

http://web.mit.edu/engiarta/Public/PennyPincher_PROTO/AddTransaction.html

- **3.** (Major) Meaning of "Total Amount" label unclear (Learnability). It is not clear whether the "Total Amount" label refers to the amount owed *by* the user or *to* the user.
- 4. (Major) Problem deleting name from the "Selected Names" list (Efficiency). I was not able to delete the "Example: DELETE ME" name by swiping right.
- 5. (Minor) Purpose of "include me in transaction" button unclear (Learnability). Since the term "transaction" is not used anywhere else in the interface, it is not obvious where the details of this transaction will appear (e.g. Summary page, Home page?), so the user cannot learn about the functionality immediately through feedback.
 Tip: Perhaps a "Transaction" text label can be printed below the appropriate icon in the menu bar.

AddTransaction2.html page

http://web.mit.edu/engiarta/Public/PennyPincher_PROTO/AddTransaction2.html

- 6. (Major) No error feedback for the "Custom Split" feature (Error Feedback). Since a user is allowed to manually edit the amount fields, it is possible that the sum of the dollar amounts would not equal the "Total" amount printed at the bottom of the page.
- 7. (Minor) "Even Split" feature not enforced (Safety, Misleading Affordance). When the "Even Split" feature is selected, the dollar amounts are still editable text fields. This allows users to change the amounts so that they are no longer even splits, which is inconsistent with the label.
- 8. (Cosmetic) Feedback screen for "Submit" button seems redundant (Efficiency). After the "Submit" button is clicked, a feedback screen is presented, notifying the user that the transaction has been saved and presenting a button that links to the homepage. This extra step doesn't seem to be necessary because it doesn't give much additional information and slows down the activity.

Tip: It may be better to automatically link back to the homepage and highlight the added transaction in a different color. Additionally, a message could be displayed at the top of the screen indicating that the transaction was a success.

Summary.html page http://web.mit.edu/engiarta/Public/PennyPincher_PROTO/Summary.html

9. (Minor) Ordering of names in the summary list is not useful (Efficiency, Learnability). The names in the summary list seem to be sorted so that debt transactions appear above others, with transactions sorted by ascending amount. If user studies showed that the target population values paying off debts more than collecting debts, then shouldn't the transactions be displayed in descending amount order, so that the largest debts are paid off first? Without a useful ordering of the transactions, a user may take some time to find a transaction of interest.

Karen Doe	\$12.50
John Jobs	\$68.13
Dodd Frank	\$100.12
Joseph Demarco	\$10 🔊
Jennifer Dinst	\$40.50
Jessica Dante	\$50.50

Tip: It may take too It may also be useful to allow the user to specify a sort order, since different users have different needs for PennyPincher (e.g. some may care about paying off debts whereas some may care about collecting payment).

10. (Good) The red color is a good way of signaling whether an amount is owed *by* the person or *to* the person (Information Scent).

Karen.html page (individual page)

http://web.mit.edu/engiarta/Public/PennyPincher_PROTO/Karen.html

11. (Major) Choice of red color confuses functionality (Information Scent, Safety). Although the use of color is useful in differentiating between the amount owed *to* the user and the amount owed *by* the user, the choice of colors gets confusing on this page. For example, does the user owe Karen the amount in red, or does Karen owe the user the amount in red?

Tip: Additional labels of textual feedback could clarify any sources of confusion or misconception.

12. (Major) It is unclear what the "Unsettled" and "Disputed" toggle fields each mean and how/if they are different from each other. (Learnability, Consistency)

Paid for lunch at Napoli's and dinner at Anna's Undisputed

Paid for Skittles, Twizzlers, and Chex Mix
Unsettled

- 13. (Major) There are no affordances for creating the category labels (e.g. Lunch, Dinner, Movie, etc.) that appear in the hierarchy (User Control) Would this be done on the AddTransaction.html page?
- 14. (Minor) There are no affordances for editing an amount that is disputed (User Control).
- **15.** (Cosmetic) There are many levels in the hierarchy, increasing the chance a user will overlook an important feature (Learnability, Visibility, Efficiency).
- For example, I did not notice there was a "Unsettled"/"Disputed" toggling feature.16. (Cosmetic) The category levels (e.g. Lunch, Dinner, Movies) in the hierarchy do not seem necessary (Minimalist Design).They add an additional layer of complexity to tree. They are not necessarily extensible

since not all expenses can be placed into those categories.

17. (Cosmetic) Layout inconsistencies when multiple lists are expanded (Consistency). When one list is expanded in the tree and another is clicked to be expanded, the first list is collapsed so that the second list jumps to the position of the first list. This disrupts the flow and consistency of the layout, causing the user to lose track of what happened.

• 1/27/2012	\$30.00	• ^{1/27/2012}	\$30.00
• 2/01/2012	\$50.00	C Lunch and Dinner	\$100.00
C Dinner	\$100.00	G Snacks	\$50.00
Drinks	\$30.00	G Movies	\$20.00
Movies	\$120.00	C 2/01/2012	\$50.00

General

18. (Minor) Inconsistent representation of dollar amounts (Internal Consistency). The dollar amounts displayed on the right-hand side of each button are not consistently represented. They appear as circled labels on the Summary page and regular text labels on every other screen.

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Karen Doe	\$12.50	O 1/27/2012	\$30.00
John Jobs	\$68.13	2/01/2012	
Dodd Frank	\$100.12	0	\$50.00

- **19.** (Minor) No affordances for deleting transactions (User Control, Visibility) It is not clear how transactions can be removed. Is this done on the Summary page?
- **20.** (Minor) There is no help menu and no error feedback provided in the interface (Help and Documentation).
- 21. (Cosmetic) Misleading information scent for wrench icon (Information Scent). The wrench icon takes you to a page to download the source code, which seems inconsistent with the functionality it signals. I usually associate wrenches with settings.