

USABILITY / UX / XD – LAWS / GUIDELINES

- **ASIMOV'S 3 LAWS (adapted by) RASKIN**
- **1st Law of Interaction Design (XD):**
- **A computer shall not harm your work or, through inaction, allow your work to come to harm.**
- Aggravating experience you can have with a computer is **losing work**
- worse than having to redo work you have already done is **losing data that you cannot reproduce exactly**, like creative work
- **A computer shall not harm your work or, through inaction, allow your work to come to harm**

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- **1st law – (i) Apps must maintain data integrity**
- has safeguards and redundancy to prevent data loss
- robust undo functionality, and shielding destructive actions to prevent inadvertent data loss.
- GitHub's repository deletion dialog- this one forces you to type the name of the repository to continue
- forces the user's locus of attention to the repository name during the deletion process
- preservation of efforts related to the content the user is working with, as well as the content itself

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Apple's Time
Machine and
autosave, and
Dropbox's
revision history
Ideal fits!!

Create a beautiful site for your project with our [GitHub Pages generator](#).

Are you ABSOLUTELY sure?

Unexpected bad things will happen if you don't read this!

This action **CANNOT** be undone. This will delete the `uxdiogenes/path-menu` repository, wiki, issues, and comments permanently.

Please type in the name of the repository to confirm.

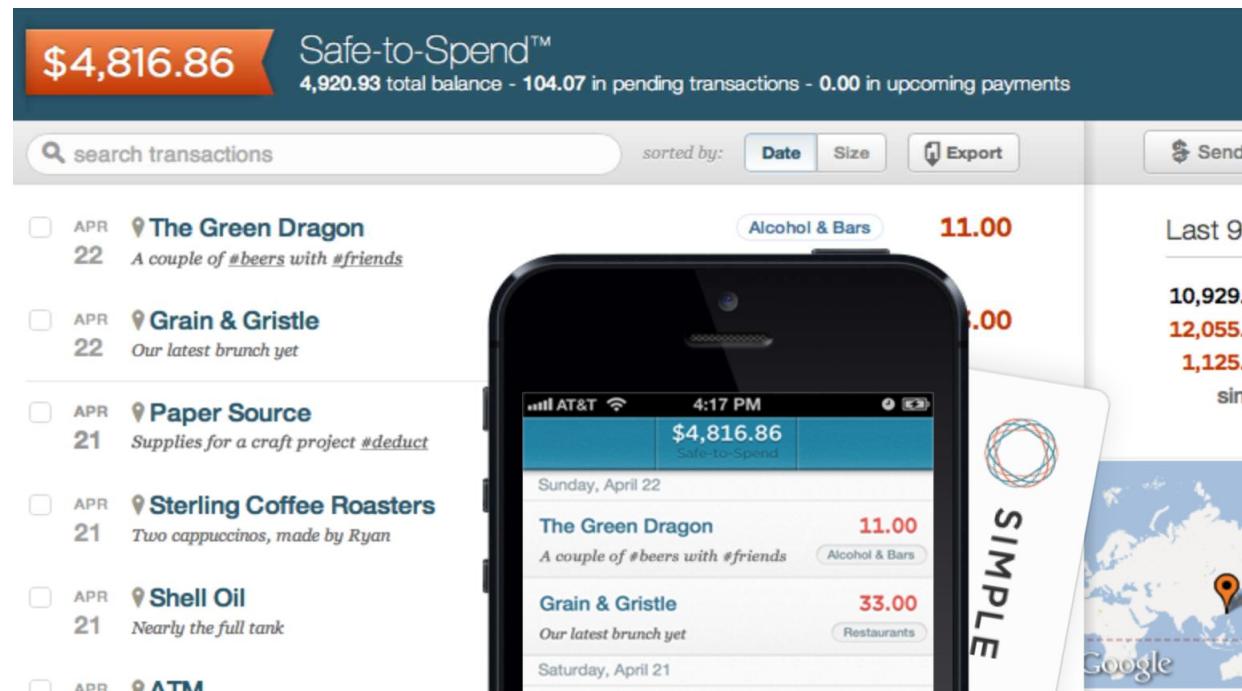
I understand the consequences, delete this repository

- preserving selections across work sessions, and including them in the list of actions that can be undone.
- interface allows a user to customize or rearrange elements, that arrangement or customization should be preserved.

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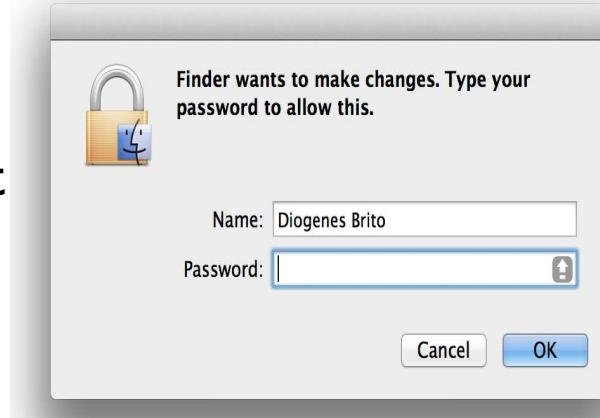
- **2nd law – A computer shall not waste your time or require you to do more work than is strictly necessary**
- users are burdened with tasks because it was simpler to let a person perform the action manually than to code a system to do it automatically.
- forcing a user to select a credit card type, when that information can be inferred from the number.
- Great interfaces bring information in the system to the user in the way(s) they are most likely to want and/or understand it
- .

- Simple -- set money aside for any number of “goals,” and that amount, along with pending transactions is subtracted from your “Safe-to-Spend” balance.



- Simple’s “Safe to Spend” recognizes the way people actually want to use their money

- 3rd Law: An interface should be **humane**; be *responsive to human needs and considerate of human frailties*
- **Focus on user centred design**
- Good interaction design is always about
- respecting the limitations of the human mind and body
- sensitive to both our visceral, physiological responses, and our cultural values. have single **locus of attention**
- **CAPS LOCK Light Design.** not a good solution for avoiding slipping into caps lock - user's attention locus not on the key when they press it. **Mac solution for this ideal** visual indicator that caps lock is active within the input field itself, - in sync with user locus of attention.



Jakob's Law of Usability (Internet UX)

- Users spend most of their time on other sites
- Leverage existing mental models, V can create superior user experiences - **user can focus on their task** rather than learning new models.
- **Users will transfer expectations** they have built **around one familiar product** to another that appears similar.
- Minimize discordance by empowering users to **continue using a familiar version for a limited time**.
- users prefer your site to work the same way as all the other sites they already know.
- Design for patterns for which users are accustomed.

Jakob's Law of Usability (Internet UX)

- Users spend most of their time on other sites (than your website!!!)
- More like a **Law of Nature!**.. (listen to his video ; it was even debated in UK parliament both Houses!!)
- User will know how to use your website and will start focusing on your product, services,
- In cases of violation people will not know how to use and will be confused - **BACK button is always there on the Browser!!**
- Design Conventions /other practices as adopted with most websites. Do not violate just for the sake IT; it would only kill the product!!

Tesler's Law on Product Complexity!

- **Tesler's Law / Law of Conservation of Complexity**
- **- for any system there is a certain amount of complexity which cannot be reduced.**
- *Every application must have an inherent amount of irreducible complexity. The only question is who will have to deal with it.* -

Larry Tesler - XEROX PARC

- way users interact with applications was just as important as the application itself
- removing user complexity - > complexity will not be removed from the system but will move from users to the development team

Tesler's Law

- Unless you have a sustainable monopoly position, the **customer's time** has to be more important to you than **your own**
- Interface clutter results in users hunting for what they need -- reduces their efficiency while increasing the perceived difficulty level of the software!!
- No matter how you do it!!! ,
- removing complexity can improve the value of your software to users, but keep in mind the law of conservation of complexity when making product decisions.
- Nielsen's Mantra – LESS IS MORE (less features more user empowerment!!)