# USABILITY / UX / XD – LAWS / GUIDELINES

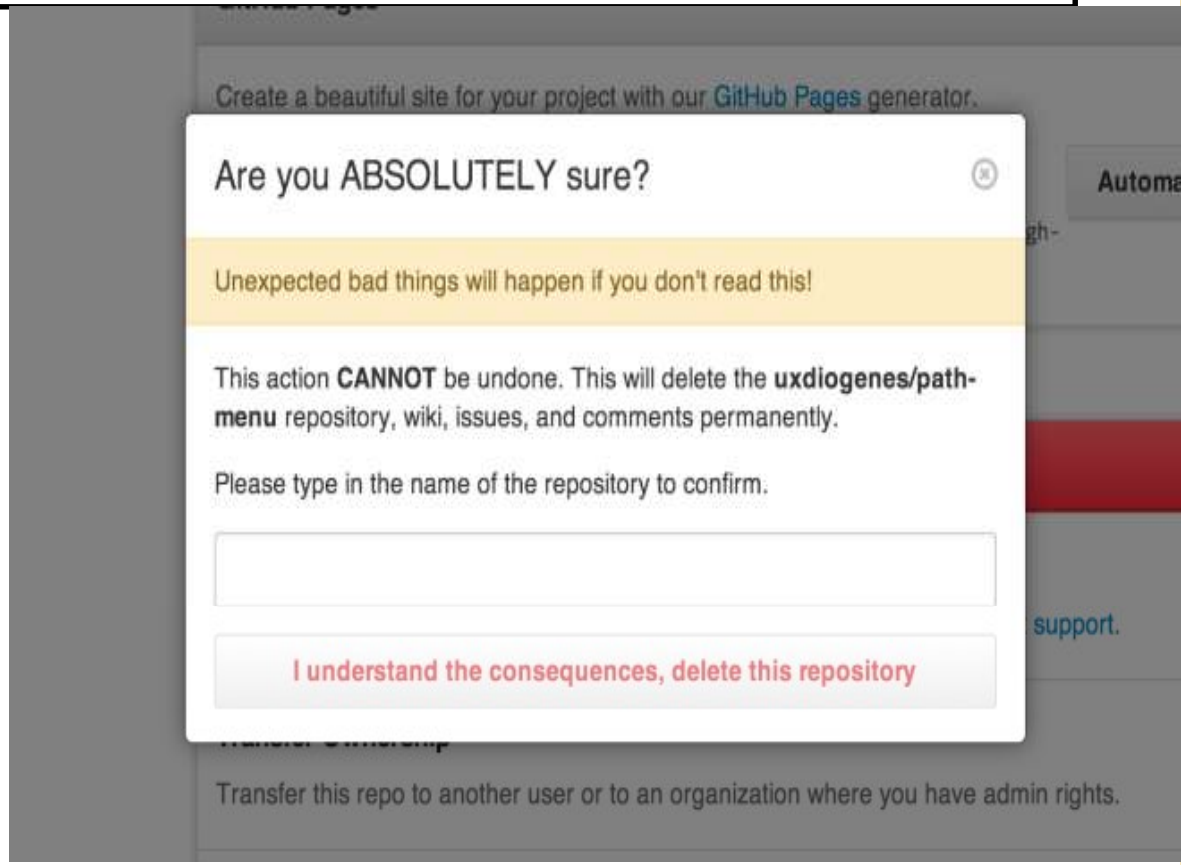
- **ASIMOV'S 3 LAWS (adapted by) RASKIN**
- **1st Law of Interaction Design (XD):**
- ***A computer shall not harm your work or, through inaction, allow your work to come to harm*.**
- Aggravating experience you can have with a computer is losing work
- worse than having to redo work you have already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

# USABILITY / UX / XD – LAWS / GUIDELINES

- **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

# USABILITY / UX / XD – LAWS / GUIDELINES

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



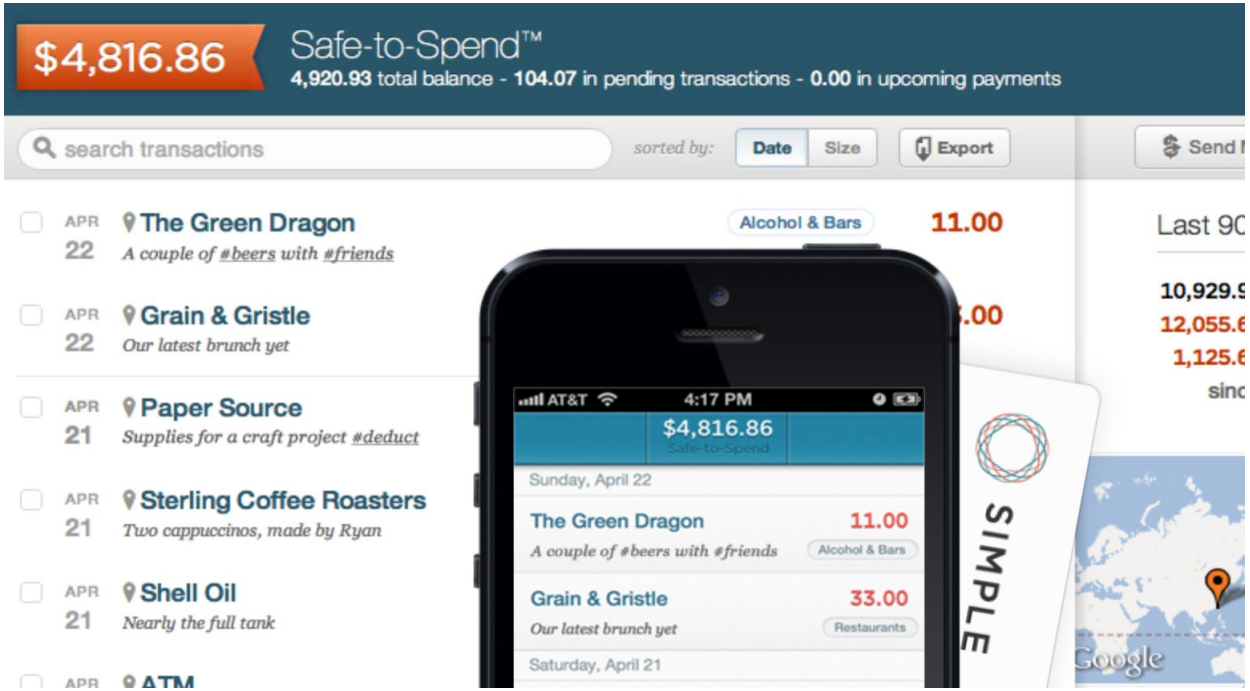

•preserving selections across work sessions, and including them in the list of actions that can be undone.

•interface allows a user to customize or rearrange elements, that arrangement or customization should be preserved.

# USABILITY / UX / XD – LAWS / GUIDELINES

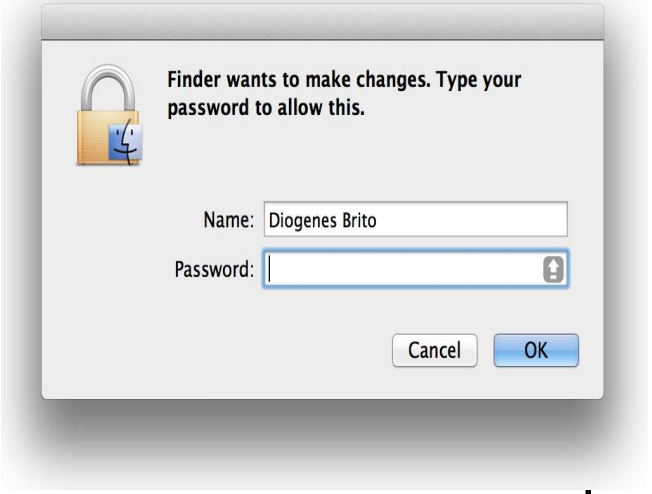
- **2nd law – *A computer shall not waste your time or require you to do more work than is strictly necessary***
- users are burdened with tasks because it was simpler to let a person perform the action manually than to code a system to do it automatically.
- forcing a user to select a credit card type, 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!!)