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- ✓ **Goals of HCI** – Produce **Usable, Safe and Functional Systems**
 - ✓ Put **people first is the mantra of HCI**
 - ✓ **HCI** – understands factors that determine how people use technology
 - ✓ **Large Focus** – create efficient, effective and safe interaction
 - ✓ Users **needs, capabilities and preferences** for various tasks – should drive the System Designers
 - ✓ **People should not be forced to change the way** that they use a system in order to fit in with it! As opposed to
 - ✓ **System should be designed to match their requirements**

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- ✓ Usability – one of the key concepts in HCI – focus in on creating systems that are easy to learn and use.
 - ✓ **Usability is Characterized by 5 E's;**
 - ✓ Easy to Learn
 - ✓ Easy to remember how to use.
 - ✓ Effective to Use
 - ✓ Efficient to Use
 - ✓ Enjoyable to Use
 - ✓ **Why is USABILITY so Important**
 - ✓ **Modern system have least regard for this measure!**

- ✓ How many times have **V** come across glass doors with a **handle** that does not indicate the opening mode ! (design term is **AFFORDANCE**....what operations does a feature allow!)
- ✓ Push AND Pull Stickers **are** not SIGNS of a GOOD Design!
- ✓ Design of the Handle should indicate the affordance!
- ✓ Photocopiers – XEROX machines – two buttons with ! And C.
- ✓ C is treated by modern day users as COPY ! But in the Photocopier the ! Is the copier operation and C is for Cancel
- ✓ Not to entirely blame given the C for Cancel model from Calculators usage!!

Our Famous Punching Bag – Usability Issues

Jacob Nielsen – Father of Usability Engineering

Nielsen Norman Group (nng) – their famous organization

Norman – famous author of Design of Everyday Things

Nielsen's Summary of Windows 8

- ❖ Hidden features, - Shutdown was a real treasure hunt!
- ❖ reduced discoverability,
- ❖ cognitive overhead from dual environments,
- ❖ reduced power from a single-window UI
- ❖ low information density. Too bad.

Our Famous Punching Bag – Usability Issues

- ✓ smothers usability with big colorful tiles while hiding needed features.
- ✓ new design optimized for touchscreen
- ✓ **Double Desktop = Cognitive Overhead**
- ✓ product's very name has become a misnomer.
- ✓ **no longer supports multiple windows** on the screen
- ✓ **can't view several windows simultaneously**, they must keep information from one window in short-term memory while they activate another window
- ✓ **short-term memory is notoriously weak**