

Interaction Design Principles For Web Apps

Design Paradigm:
Technology-Based Applications

Recap: Metaphoric Design

Metaphoric Design:

Making the design resemble something else you hope the user is familiar with.

Hopes their familiarity the the other domain will help them in navigating your site.

e.g. Shopping Cart Metaphor

Recap: Idiomatic Design

Idiomatic Design:

- Use controls that cannot necessarily be deduced but are easy to learn and easy to remember
- e.g. Margin Swipe, Two-finger drag.

Technology-Based Design

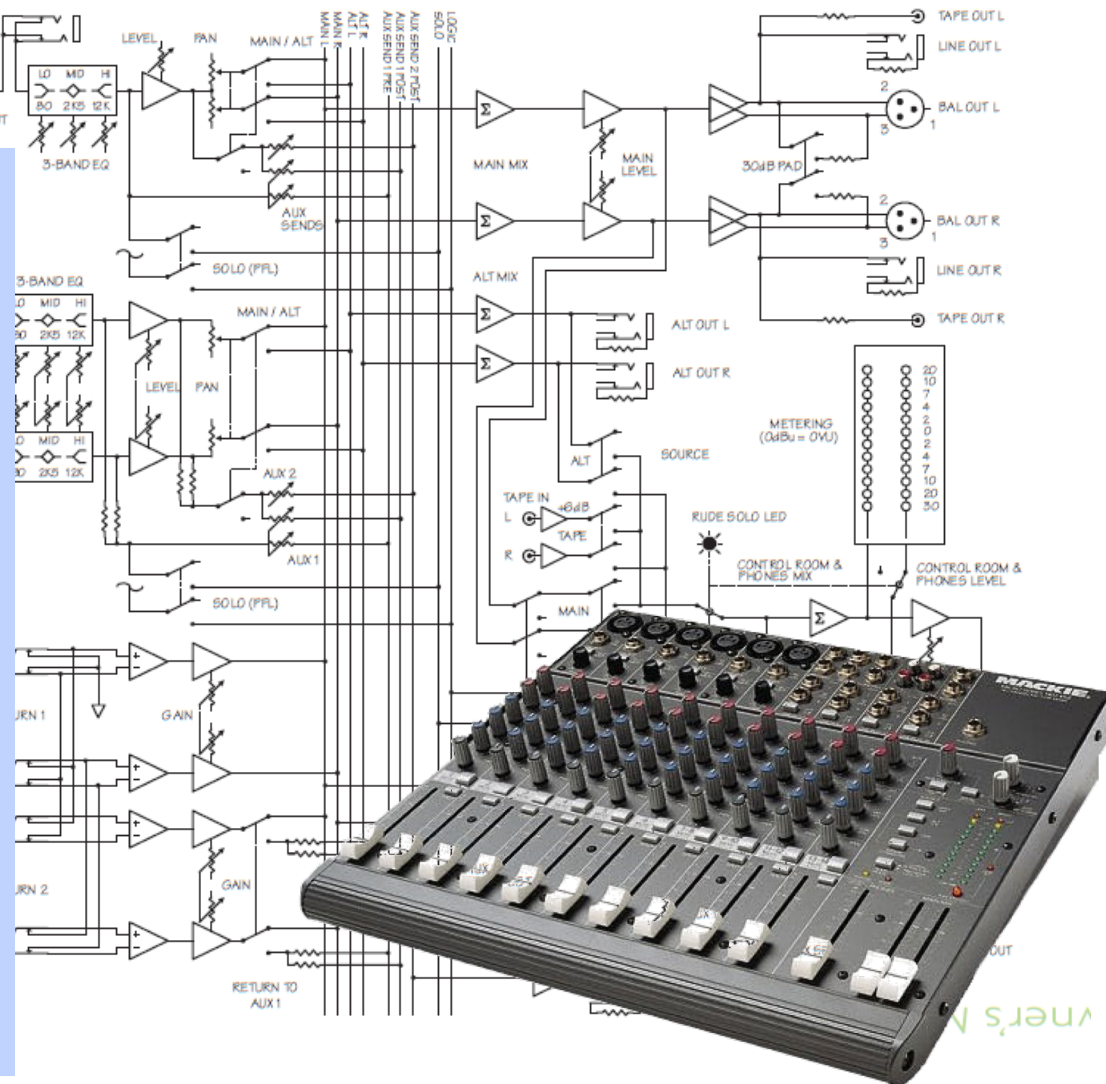
Technology-Based Design:

- Based on the idea that the user should know what the UI, or website, is controlling.
- The user has detailed understanding of what is "underneath" the website UI.
- Because they know what is being controlled the hope is that they will know how to control it. (They will know what kind of controls to expect.)
- This is common of "after thought" UI's or UI module per functional module thinking.
- Common of corporate web sites –which should have been done better.

Example

Experienced Audio Engineers typically look at the schematic, or block diagram, of a mixer they are unfamiliar with.

(Rather than looking at the user manual, or controls, to figure out how to operate it)

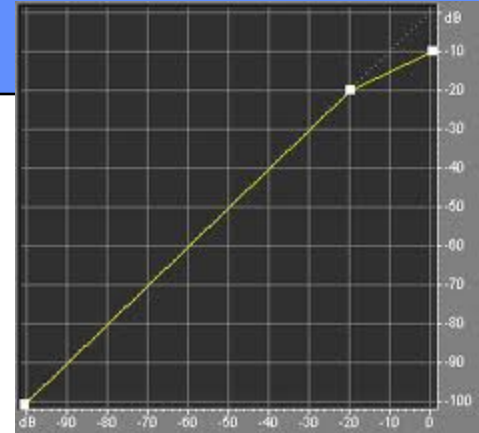


Example

Cycling coaches teach racers how to shift better by teaching them how the gears actually work –not how to operate the controls



example (Compressor)



Technology-based

manipulating the input-output transfer function to create a compressor –works great if you know what a compressor transfer function is!

Metaphor-based

modeling a well known device and it's controls.



Idiom-based

A one-knob “more effect” control



Technology Based

Example:

A technology-based shopping site might have you put check marks in a catalog and later, on another page, have you search for your checked items.

The organization reflects the structure of the database tables, and not a process that is familiar to the shoppers.

It is easy for the programmers because the steps in the UI match steps in the operation of the database

Technology Based

A technology-based interfaces are very common in industrial, or corporate, websites.

We are sometimes fooled by the style of interfaces that are popular and very public –and well designed.

Chances are good if you are working on interaction programming you will be building a private, corporate, site –often without the resources that, well loved, public interfaces benefitted from.

Technology Based

We use several different isolated tools to manage course grades etc.

WebCT Culearn for grade book and content

Course web pages

Egrades for grade submission

TA management system

Carleton WebCT

Build Teach Student View

Crosslist COMP2005B:COMP2405B [13940:11192] Internet Appl

Your location: Grade Book

Grade Book

Create Column ▾ Enroll Members Import from Spreadsheet Reorder Columns Grade Book Options ▾

Grades Members View All Custom View SCORM Grades

	Last Name Alphanumeric ▾	First Name Alphanumeric	User ID Alphanumeric	Role Alphanumeric	Cross-Listin Alphanumeric	Student ID Alphanumeric	Assg1 Numeric (out of 40)
<input type="checkbox"/>	Abadeer	Macarious	mabadeer	Student	COMP2405B [11:	100333155	39
<input type="checkbox"/>	Abdirahman	Mohamud	mabdirah	Student	COMP2405B [11:	100783752	40
<input type="checkbox"/>	Adegbembo	Adebimpe	aadegbem	Student	COMP2405B [11:	100769039	39
<input type="checkbox"/>	Ahmed	Shahan	sahmed11	Student	COMP2405B [11:	100796374	37

Grant Access Deny Access Unenroll

Page: ▾

All are isolated and reflect what particular departments traditionally did.

Technology Based

The tools are isolated and don't reflect a process, only specific deliverables.

They depend on the users knowing the underlying process.

For me to know there is a TA duties form, I have to know it is part of the course startup process and that I should therefore go look for it somewhere.



Carleton Central

Personal Information

Student Services

Faculty Services

Employee Services

Assignment of Duties



Please complete the TA Assignment of Duties Form below. Follow the instructions for each section carefully. Once completed, copies of the form will be made available to the following:

- the Department Chair
- the Employee
- the Supervisor
- CUPE 4600 - Unit 1

If in doubt about how to complete any part of the form, contact your department administrator or chair. 14.03 must be taken. This article includes a time limit so prompt action to avoid violation of the contract discussion stage.

NOTE - items marked with an asterisk(*) are mandatory and must be completed.

Section A - General Employee Information

- Complete all items in this section. Make corrections where available. Note - corrections will be reflected in Banner.

Student Last Name		Student First Name	
Cohen		Adam	
Phone Number	Email	Faculty	
613-594-2222		Faculty: Science	
Supervisor Name*		Supervisor Email	
Louis Nel			

Technology Based

The isolated tools reflect the different departments who "own" the data

The tools reflect both a technology and organization viewpoint

Important Point: You have to know how the information must flow then you will know which tools to look for and what you expect each tool's likely use is.

Carleton Central

Personal Information Student Services **Faculty Services** Employee Services

Deferred Final Grade Submission

This is your deferred final grades roster. When you are ready to submit a deferred final grade, enter letter grades only.

Deferred grades submission deadlines depend on the Deferred Component and therefore students whose Deferred Component is "Final Exam" or "Final Exam + Assignment", the deferred final grade is due on the 10th of the month.

Please note that if you have potential grades in your class they will be highlighted in a darker gray.

Due to technical difficulties the deadline for deferred grades with the "Final Exam" or "Final Exam + Assignment" component has been extended to the 10th of the month for the submission of deferred final grades for students who had been granted a deferred final grade.

CRN: 30627
Course: COMP 3005 A
Title: Database Management Systems

Reset Class

<u>Id</u>	<u>Last Name</u>	<u>First Name</u>	<u>Grade</u>	<u>Comments</u>
1001	[REDACTED]	n		
1002	[REDACTED]	sh		

Technology Paradigm

Interface, and operating controls,
is based on knowing how thing
being controlled actually
works.

- One button per function.
- One function per code module.
- Commands echo structures and algorithms.

Metabolist Construction of 1960's:

- Expose all elements of a building, or thing.
- There is beauty, not modesty, in exposing how things work.



Metabolist Construction

There is beauty in how things work -we should expose it.

