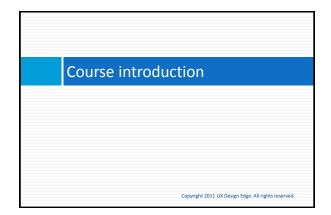
USER EXPERIENCE DESIGN BASICS UX Design Edge www.uxdesignedge.com Presenter: Everett McKay A non-designer's guide to getting started in UX design





Course concept

- ☐ You are a non-designer who wants to improve your UX design skills quickly
- □ You asked me for help, but limited me to 10 topics and about 3 hours
- □ What material would I cover that would help you the most?

Copyright 2011 UX Design Edge. All rights reserved.

Course content

This course focuses on four areas:

- Using a scenario-based design process
- Making a design "intuitive"
- Making a design simple
- □ Evaluating designs, giving and receiving feedback

Copyright 2011 UX Design Edge. All rights reserved.

Course outline

- Using a scenario-based design process
 - Use a good design process
 - Scenario-based design
- Making a design "intuitive" UI is communication
 - Make it "intuitive"

 - Use the right controls Write good UI text
- Making a design simple
- Make it simple
- Make it look great
- Evaluating designs, giving and receiving feedback
 - How to evaluate a UI
 - 10. How to give and receive design feedback

Course philosophy

- Experiences, not features or technology
- □ The best is the enemy of the good
- □ UX design is a practice, it's not an art!
- □ Keep things simple—do less better
- Do the best you can, but be modest and defer to experts

Copyright 2011 UX Design Edge. All rights reserved.

How to do the exercises

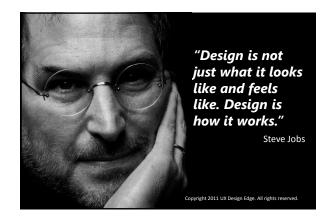
- Each part of the course has an exercise
- □ Each exercise should take at least 10 minutes to do well
- You can stop the video and do them on the spot
- Or you can do them later (and take your time)
- When done, compare to my answers
- Remember: you can only get out what you put in!

Copyright 2011 UX Design Edge. All rights reserved.

You can do this!

- □ These are all critical UX design skills
- You can definitely get a strong understanding of these skills
- I want to make UX design easy!

Copyright 2011 UX Design Edge. All rights reserved.



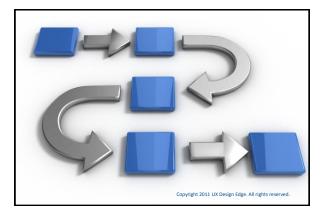
Why UX design is important

- □ Great UX is an enduring competitive advantage
 - There's a surplus of technology, but a shortage of great experiences
 - In a competitive market, the best UX wins
 - You can't beat love with power or price
- □ Lower training costs, reduce time and effort

Copyright 2011 UX Design Edge. All rights reserved.

Ease of use equals use!





What is the basic design process?

 A general, minimal iterative procedure that can be used to solve any design problem

Copyright 2011 UX Design Edge. All rights reserved.

Why do you care?

- □ It is the foundation of the design process
- Goal is to make good decisions confidently
- □ It's very flexible
- □ It can be used to solve any design problem
- More advanced design techniques integrate into this process

Copyright 2011 UX Design Edge. All rights reserved.

"The goal of UX design is to fully engage your entire team to create products that your customers will love. A good design process gets you there quickly and confidently."

Copyright 2011 UX Design Edge. All rights reserved.

What is design?

- □ Some dictionary definitions:
 - To invent
 - □ To plan in systematic form
 - To create for a particular purpose
 - To specify in a way that meets requirements (such as a blueprint)
- Our definition:
 - Design is making *creative choices* on behalf of *target users* to *create a product* that *satisfies their goals*

Rational decision making process

- If design is making choices, the design process is a way to make good choices
 - Determine goals, requirements, resources, priorities (need a basis to choose)
 - Determine options (need to know what you can choose from)
 - 3. Make a choice (apply criteria to options)
 - 4. Evaluate the choice (make sure it's the right choice)
 - 5. Iterate as needed until satisfied goals are achieved
- This is known as the rational decision making process

Copyright 2011 UX Design Edge. All rights reserved.

Basic design process steps

- Plan
 - Determine target users, their tasks and goals
 - Determine problems to solve
- Set themes, priorities, resources (budgets, schedules)
- Design
 - Generate ideas, filter
- Propose alternative designs
- Make choices
- □ Refine
 - Evaluate
 - Iterate until done
- Communicate results (throughout)

Copyright 2011 UX Design Edge. All rights reserved.

Keys to success

- Avoid the classic mistakes!
- While there's potential for mistakes at every step, here are the classics:
 - Designing for yourself, everyone, (or boss or mom)
 - Falling in love with one (usually first) solution
 - Worrying about feasibility during brainstorming
 - Trying to do everything, not setting clear goals and
 - Not scheduling time for iteration, polish

Copyright 2011 UX Design Edge. All rights reserved.

Design for target users, not yourself

- You have to know who you are designing for
 - What is good depends upon the target user
- Different users have different characteristics:
 - General computer knowledge (expert vs. novice)
 - Domain knowledge (expert vs. novice)
 - Goals, tasks (what they are going to do)
 - Frequency of using apps, doing tasks (heavy vs. light UI)
 - Vocabulary (to speak the user's language)
 - Motivation (willing to make effort, endure misery)
 - Environment (data, scale, formality)
 - Age, physical abilities, access preferences (use of mouse)
- Make sure your decisions are consistent and look for inconsistencies

Copyright 2011 UX Design Edge. All rights reserved.

Is this a good design?

The Ferrari F1 steering wheel



"When the use of something as intuitive as a steering wheel takes a nine-minute video for just a brief overview, you've got a problem."

Copyright 2011 UX Design Edge. All rights reserved.

Making a choice requires options

- Q: Can you make a choice if you only have one option?
- □ A. NOI
- Q: Can you make a choice confidently if you don't consider the alternatives?
- □ A: No!
- ☐ The more options you consider, the more confidence you can have in your decision
- □ True even if that one design alternative is the best

Don't worry about feasibility too early

- Feasibility concerns harm the creative process
- ☐ Yes, our designs need to be feasible, but an infeasible idea:
 - May actually be feasible (upon further research or with new technology, ex: Ajax, HTML 5)
 - May be changed to something feasible
 - May be repurposed to something feasible
 - May inspire completely different ideas that are feasible
- None of this can happen if infeasible ideas are immediately dismissed

Copyright 2011 UX Design Edge. All rights reserved.

Set clear goals and priorities

- You can't succeed by trying to do everything for everybody
- □ It is literally impossible to focus on everything
- My favorite advice: Do less better!
- Key: make your priorities match your target user's priorities
- Use goals, themes to make choices

Copyright 2011 UX Design Edge. All rights reserved.



Budget for testing, iteration, polish

- Quality work takes time!
- Design is an iterative process—you won't get it right the first time
- Details matter and strongly affect the user's perception of quality
- Yet most schedules give no time for UI testing, assume the first design and all details are right
- ☐ The design process is undermined if you can't perform these crucial steps

Copyright 2011 UX Design Edge. All rights reserved

Classic mistakes...have classic excuses

- We're a small company...we don't have time...
- Example: exploring multiple design ideas
- People fall in love with their first idea...can't do much better
- Rationalization: It's OK to skip alternatives this time
- □ You can sketch most ideas on paper in < 15 minutes
- Can you afford one hour to make your UX significantly better?
- If you don't have time, you're doing it wrong

Copyright 2011 UX Design Edge. All rights reserved.

Bad design CSI

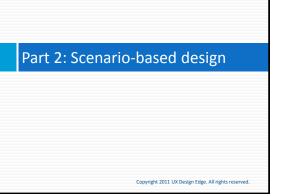
Exercise 1

At least 15
minutes

Challenge: Understand why smart, capable, well motivated people create bad designs Task:

- ☐ Find 3 examples of bad design—for each:
- Determine the root cause in the process
- Imagine that you were on the team—what could you do to prevent or correct it?

Bottom line: Design traps are everywhere, so you have to know how to avoid them





What are scenarios?

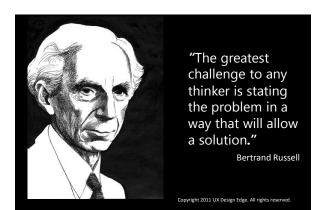
- A scenario describes a specific target user trying to achieve a specific goal or task in a specific environment
 - Concisely: Scenario = user + task + environment
- Top scenarios: Scenarios users care about the most the reason they buy or use a product and what delights them when done especially well
- End-to-end scenarios: Scenarios that are complete, seamless solutions, not just features that give partial solutions

Copyright 2011 UX Design Edge. All rights reserved.

Why do you care?

- Scenario-based design forces us to design for our users, not for ourselves
- Scenario-based design recognizes that people use software to perform tasks to achieve their goals
- Scenarios give us clear criteria to determine of our design decisions are good
- In short, scenario-based design is the best tool we have for designing great products that our customers will love

Copyright 2011 UX Design Edge. All rights reserved.



Scenarios vs. features, tasks

- Scenarios are an improvement over feature- and taskbased design
- □ Feature-based design:
 - Programs consist of features
 - Feature-based design focuses on feature lists
 - But are those features useful in doing real user tasks?
- Task-based design:
 - People don't do features, they do tasks
 - Task-based design focuses on enabling tasks
 - But do users really want to do them? Can they use them? Do they like them?

Effective scenarios

- Focus on user goals, problems, and environment (what, why, where, but not how)
 - Are solution independent—doesn't specify, favor, or even mention specific solutions—so that more than one solution is possible
 - Details that would delight users are given
- Might have details about what users don't care about
- Are used to validate proposed product or feature
 Is the proposed solution the right solution?
 - Is it realistic?
- Does it satisfy the user's goals?
- How do users feel it emotionally?
- Can you make the proposed solution better?
- You can't ask these questions if the scenario specifies a solution

Copyright 2011 UX Design Edge. All rights reserved.

What's wrong with this scenario?

Joe works at a Fortune 500 company. On occasion, he needs to access Snarfbladt info for his customers. He discovered that the BladtBlaster 2000 allows him to request access to Snarfbladts from the BladtBlaster website. Joe is thrilled.

Copyright 2011 UX Design Edge. All rights reserved.

Let's try again

Joe works in the shipping department of a large company, where he is responsible for the pickup and delivery of about 200 packages a day across 10 buildings. To maintain his aggressive schedule, he is always on the move, either with a cart or carrying a few packages underarm.

Between deliveries, Joe occasionally needs to access Snarfbladt info for his customers. The BladtBlaster 2000 allows him to access the Snarfbladts info instantly. Best of all, he can do it while walking, using a single hand with only three thumb strokes or less.

Copyright 2011 UX Design Edge. All rights reserved.

How to do scenarios right

- Provide details about users, goals, tasks, environment, and what it will take to thrill the user
- Your team knows all the top scenarios (from memory by name!)
- Your team actively uses scenarios when making decisions
- Alternative solutions are indentified and seriously considered
- Scenarios address the entire task
- Ultimately, users are delighted by the results!

Copyright 2011 UX Design Edge. All rights reserved.

A decision making framework

- □ How do you make decisions now?
 - ■Wing it; design by personal opinion, by copy, by committee, by the boss; whatever is easiest
 - Results in a lot of wrangling to make poor decisions
- A better approach
 - Get consensus on scenarios (as well as project goals, target users, problems to solve)
 - Use them as a decision-making framework
 - You're done! (and can move on)

Copyright 2011 UX Design Edge. All rights reserved.

Designing and using scenarios

Exercise 2

At least 15 minutes

Define top three scenarios for your product:

- What are your customers most likely going to do with your product? What are their goals, tasks, and environment?
- Write the scenarios
- Evaluate the scenarios—do they specify solutions? Will users be delighted?
- Evaluate the design—is the design consistent with the target user, goals, and environment?

Part 3: UI is Communication

Copyright 2011 UX Design Edge. All rights reserved.



A thought experiment

- Suppose we are all working on a project whose UI is critical to its success
- □ Suppose none of us have a design background
- Not to worry: Bob and Alice, our best developers, are on the project
- They are presenting their first draft of the design to us now
- Q: What do you expect to happen?

Copyright 2011 UX Design Edge. All rights reserved.

My expectations

- Their initial UI design won't be very good
 - Bob and Alice will make the classic rookie mistakes
 - They will design for themselves
 - They considered only one solution
 - They'll focus on technology and features instead of user goals and tasks
 - The screens will be confusing, complicated, and often nonstandard
- Their explanation of the design will be excellent
 - Bob and Alice are very intelligent, and that will show through in their explanation
 - The design makes total sense when they explain it in person

Copyright 2011 UX Design Edge. All rights reserved.

Analysis: what's not surprising

- □ It's not surprising that the design isn't very good
 - Bob and Alice don't have any UI design training
 - They don't have any UI design experience either
- It's not surprising that their explanation makes total sense
 - Bob and Alice are smart and articulate
 - As humans, we communicate to other humans all our lives so we have lots of practice

Copyright 2011 UX Design Edge. All rights reserved.

Analysis: what is surprising

- □ That the two are so different!
- If Bob and Alice can communicate to us effectively using English, why can't they communicate equally well using the language of UI?
- During the design review, you might have thought "If they just put what they said in the meeting on the screen, it would all make sense!"

Why does this happen?

- Communication between people tends to
 - Be natural, friendly, using plain language (vs. robotic, technical tone)
 - Be goal, results oriented, purposeful (vs. technology or mechanically oriented, not explaining why)
 - Follow mental models and natural workflows (vs. the way the code works)
 - Be simple, getting right to the point (vs. overly complicated, laboring over unimportant details)
- When we communicate directly, we're totally focused on the user's goals: What does the user care about now?
- When we communicate through UI, we are focused on the technology and details: What does the program need now?

Copyright 2011 UX Design Edge. All rights reserved.

Can't we use the same approach?

- Q: If the way we communicate in person is so much better, can't we just design UI to be like that?
- ☐ A: Yes! We can and we should!
- The differences is artificial and historical
 - We design UI this way because we've always designed UI this way
 - But there's no technical reason to do this (anymore)
- Great UI design boils down to eliminating these differences, making the experience simple and natural

Copyright 2011 UX Design Edge. All rights reserved.

The *UI is Communication* concept

- UI design is ultimately about communicating to users, both in terms of what you say and how you say it
- If you can explain how to perform a task to someone in person in a way that's clear and concise, you can apply those same communication techniques in a UI
- We should have the same standards for HCI as we do for human interaction
- ☐ Focusing on effective communication is the simplest way to develop design thinking and focus on users and their goals
- ☐ If a UI feels like a natural, professional, friendly conversation, it's probably a good design

Copyright 2011 UX Design Edge. All rights reserved.





Imagine a conversation between friends

- ☐ Suppose you are looking over a user's shoulder and he or she asks, "What do I do here?" Think about the explanation you would give—the steps, their order, the language you'd use, and the way you explain things. Also think about what you wouldn't say
- This is a high-level guide to design and evaluate task flows
- Look for discrepancies—they reveal problems

Communications applies to all UI

- All UI elements communicate something:
 - □ Control
 - □ Icons, graphics, colors
 - Animations, transitions
 - □ Page layout
 - Feedback
- UI elements aren't arbitrary choices
 - They work together harmoniously to communicate different aspects of the same consistent story

Copyright 2011 UX Design Edge. All rights reserved.

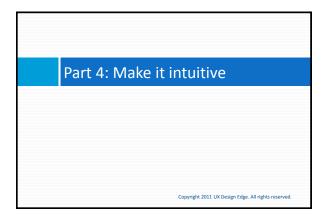
We need the same standards for HCI

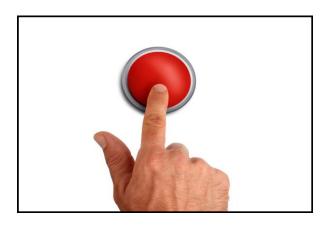
- ...as we do for human interaction:
 - Tone attitude a UI conveys to the user
- Respect users are emotional, care for users feelings
- □ Politeness good manners, social behavior
- Forgiveness Preventing and recovering from mistakes
- Personality characteristics that connect *emotionally* with
- If a behavior would be inappropriate between people, it should be inappropriate for software
- A interesting test: if your product were a person, who would it be?

Copyright 2011 UX Design Edge. All rights reserved.

Exercise 3a At least 5 minutes How well does this UI communicate? Can we make it communicate more effectively? More natural and friendly? Copyright 2011 UX Design Edge. All rights reserved.

Communication design review, part 2 Choose a complex task from your product Without looking at the current UI, document how you would explain the task in person Think about the steps and their order Think about the language and the tone Think about what you would emphasize Think about what you wouldn't say Now, compare this to your product and look for discrepancies Are there any? Find ways to improve your product by removing them





"A design is intuitive when people just know what to do and they don't have to go through any training to get there... When a design is not intuitive, our attention moves away from what we're trying to accomplish to how we can get the interface to accomplish what we want."

Jared Spool

Everybody wants an intuitive UI

- □ Having an "intuitive" UI is a top goal for any UX project
- ☐ To users, describing a UI as intuitive is the highest praise they can bestow

Copyright 2011 UX Design Edge. All rights reserved.

So, what's an intuitive UI?

- □ Funny thing: nobody really knows what an "intuitive III" is
- □ A "dictionary definition":
 - A UI is *intuitive* when users understand its behavior and effect without use of reason, memorization, experimentation, assistance, or special training
- ☐ This is a good definition, but it describes the outcome but not the specific attributes

Copyright 2011 UX Design Edge. All rights reserved.

Donald Norman's *The Design of Everyday Things*

- Visibility Ability to figure out how to use something just by looking at it
- Affordance Properties of an object that suggests how it is used (vs. labels) Example: what is clickable?
- Natural mapping A clear relationship between what the user wants to do and how to do it
- Constraints Reduce the number of way and the amount of knowledge (in head vs. world)
- Conceptual models Vs. design, implementation, user models
- □ Feedback Indication that a task is being done, done correctly or has failed

Copyright 2011 UX Design Edge. All rights reserved.

Let's design the Barco clicker





After applying the principles, is there any doubt which design is more intuitive?

Copyright 2011 UX Design Edge. All rights reserved.

So, what's an intuitive UI really?

- A UI is intuitive when it has an appropriate combination of:
- Affordance Visually, the UI has clues that indicate what it is going to do. Users don't have to experiment or deduce the interaction
- Expectation Functionally, the UI delivers the expected results, with no surprises. Users don't have to experiment or deduce the effect
- Efficiency The UI enables users to perform an action with a minimum amount of effort
- Responsiveness The UI gives clear, immediate feedback to indicate that the action is happening, and was either successful or unsuccessful
- Forgiveness If users make a mistake, either the right thing happens anyway or they can fix or undo the action with ease
- Explorability Users can explore without fear of penalty or getting lost

Consistency

- Consistency is crucial to being intuitive
- □ Jakob Nielsen's Law of UX (rephrased):
 - Users spend most of their time using software other than yours
- Benefits of small improvements achieved through inconsistency are easily outweighed by the lack of familiarity
- Common controls with standard interaction are best
- Custom controls are acceptable when really needed

Copyright 2011 UX Design Edge. All rights reserved.

Inductive UI

- An inductive UI is designed to be self-explanatory to lead users through a task
- □ Goal: To eliminate the need to think and experiment
- Key concepts:
 - Explainable UI is understandable UI
 - Usually these explanations should be explicit
- □ Implication: Not a good idea to avoid writing UI text because the text indicates if a UI is explainable

Copyright 2011 UX Design Edge. All rights reserved.

A "deductive" UI example



Copyright 2011 UX Design Edge. All rights reserved.

An "inductive" UI example



Copyright 2011 UX Design Edge. All rights reserved.

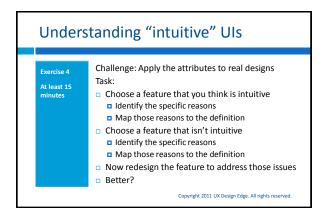
Elements of inductivity (for pages)

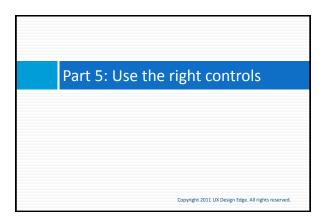
- □ A clear main instruction that explains the purpose of a
- Page content that is related to the main instruction
- Use of clear, specific language on all controls
- Clear navigation elements
- □ To clarify: the goal is to eliminate thought and experimentation, not to have a lot of text
 - Might be obvious from non-verbal communication

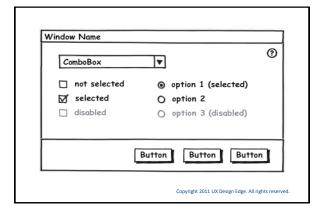
Copyright 2011 UX Design Edge. All rights reserved.

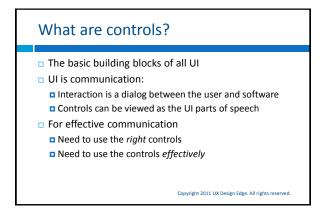
Keys to success

- Don't use the term "intuitive" without defining it
- Instead, design for the specific intuitive attributes
 - Affordance, expectation, efficiency, responsiveness, forgiveness, explorability
- Intuitive UIs are self explanatory
 - If a task requires a lot of thinking, memorization, experimentation, assistance, or special training, it's not intuitive by definition
- Consistency is key to making a UI intuitive
- □ Effective communication is essential to an intuitive UI





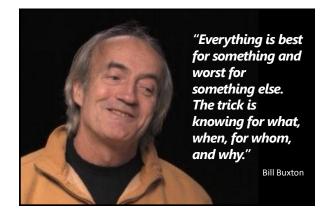


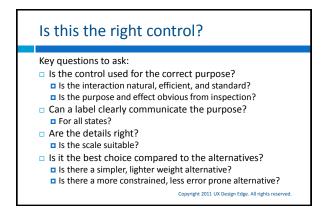


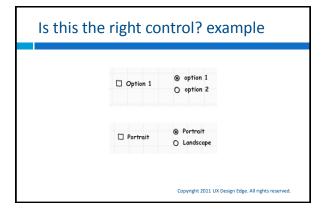
Why do you care?

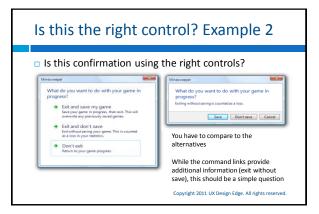
The effective use of controls is essential to an intuitive UI
Using the wrong control or misusing controls a top cause of UX design problems

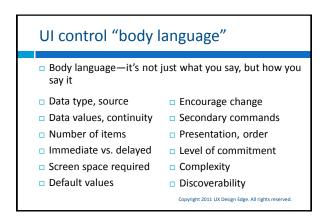
Copyright 2011 UX Design Edge. All rights reserved.

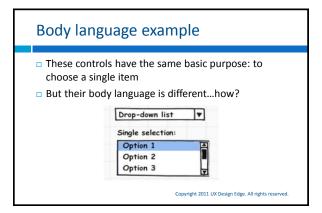




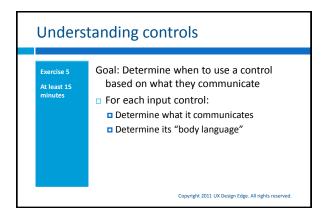


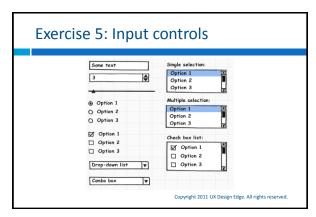


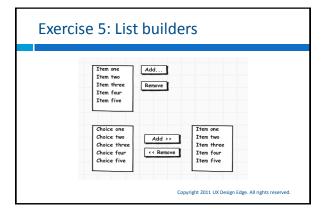


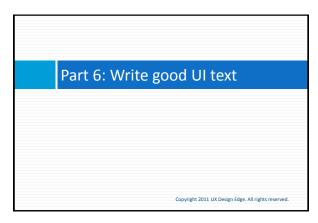


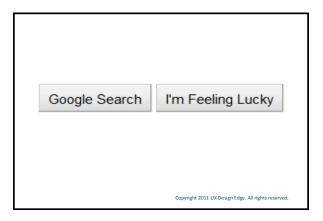


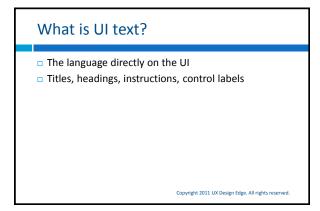












Why do you care?

- □ UI text is key to effective communication, intuitive UI
- Most UI text is poor, so there's a lot of room for improvement
- □ Non-designers often don't write good UI text
- Amazing what just improving text can do

Copyright 2011 UX Design Edge. All rights reserved

But writing UI text isn't my job

- If you are doing UI design, writing UI text is part of your job!
- Goal is to have rough text to evaluation designs.
 Evasions:
 - Your inability to write perfect text
 - Using placeholder text (ex: Option 1) and Lorem Ipsum
- ☐ Get a good writer/editor, sooner is better
- Don't avoid or delay this!

Copyright 2011 UX Design Edge. All rights reserved

Attributes of effective communication

- Useful, relevant Provides the right information, purposeful
- □ Clear, natural Speaks the user's language
- Be careful with jargon, abbreviations, acronyms
- □ **Easy to understand** Doesn't require thought, experimentation
- □ Explicit, specific Doesn't under communicate
- Concise, efficient Doesn't over communicate
- □ Good tone Friendly, good personality

Copyright 2011 UX Design Edge. All rights reserved.

Concise vs. self explanatory

- There's a tradeoff between concise and clear, self explanatory
- In classic UI, tradeoff was made in favor of concise reason: low res screens
- In modern UI, tradeoff is made in favor of being clear and self explanatory
- Often, this boils down to adding a word or two for extra clarify
- ☐ The results of my typical UI makeover is to have less, but better text—often much less text

Copyright 2011 UX Design Edge. All rights reserved.

How people read

- People read in a left-to-right, top-to-bottom order (in Western cultures)
- There are two modes of reading: immersive reading and scanning
 - The goal of immersive reading is comprehension
- The goal of scanning is to find things
- Generally, users usually don't read—they scan
 - $\hfill\Box$ They aren't immersed in the UI itself but in their work
 - They first scan the whole page
 - They read bits of text comprehensively only when they believe they need to
 - They tend to skip over large blocks of unformatted text entirely
 - They tend to read interactive control labels

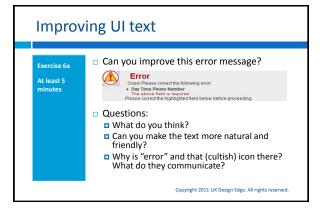
Copyright 2011 UX Design Edge. All rights reserved.

Primary Optical Area Strong Fallow Area Pressing gravity puls the eyes from top-sir to the lotton-eight of the leyest Weak Fallow Area Copyright 2011 UX Design Edge. All rights reserved.

Keys to success

- □ Do it early—UI text problems reveal design problems
- Communicate as you would in person
 - Good UI text is purposeful: it focuses on goals and results, not technology or mechanics
- Use standard labeling whenever appropriate
- Almost everything needs a text label
- Define a vocabulary—minimize it, then use it consistently

Copyright 2011 UX Design Edge. All rights reserved.



Improving UI text, part 2

Exercise 6b
At least 15
minutes

Goal: Look for common UI text problems

Task: Choose a feature that is text "challenged"

- Useful, relevant—does the text match what users are looking for?
- Over-communication—large blocks of text, repetition, unnecessary details, wordy
- Under-communication—UI elements that aren't fully explained
- □ Clear, natural—use of jargon, abbrevs, acronyms
- Make a vocabulary list—do your users understand it? Are there plain language alternatives?

Copyright 2011 UX Design Edge. All rights reserved.

Part 7: Make it simple Copyright 2011 UX Design Edge. All rights reserved.



What is simplicity?

 Simplicity is the reduction or elimination of design elements that target users are aware of and consider unessential

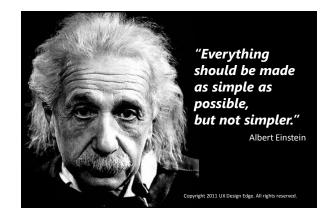
Isn't that definition ironic?

Simplicity is the reduction or elimination of a design element that target users are aware of and consider unessential

Simplicity requires

- □ Reduction or elimination
 - Perfection is achieved, not when there is nothing more to add, but when there is nothing left to take away. —Antoine de Saint-Exupery
- Managing awareness and perception
 - Essential for having power and simplicity
- Removing the essential isn't simplicity, it's bad design

Copyright 2011 UX Design Edge. All rights reserved.





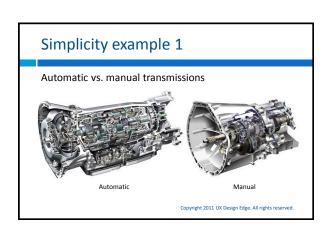
Why do you care?

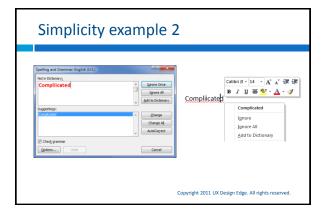
- □ Overly complex UI is a top mistake for non-designers
 - Just too much stuff: commands, options, text, visuals
- □ In competitive markets, simplest solutions win
- □ Simplicity makeovers are remarkably effective
 - Strip away the unessential and what remains is good
- □ But things happen for a reason
 - Complexity is there because the designer believes that it must be there

Copyright 2011 UX Design Edge. All rights reserved.

Simplicity design principles

- ☐ Goal: Strive for the simplest design that does the job well
- The key: what users will do is far more relevant to design than what they might do
- To obtain simplicity, focus on what is likely; reduce, hide, or remove what is unlikely; and eliminate what is impossible
- Optimize for the probable not the possible
 - The probable: Focus design on goal- and task-based solutions. Have top scenarios drive design decisions and require minimal effort to perform
 - The possible: Assume all actions are equally possible and as a result require equal effort. Because anything is possible, user goals aren't considered in design decisions





Simplification techniques

- To obtain simplicity, focus on what is likely; reduce, hide, or remove what is unlikely; and eliminate what is impossible
- Reduce: Remove unnecessary features, options, UI elements, redundancy, use a simpler alternative
- Goal based: Present in terms of high-level goals and results, not low-level technology-based settings
- Organization: Combine what should be combined, separate what should be separated, make easy to find in context
- Detail on demand: Start with essentials, let users ask for details
- Knowledge: Speak the user's language, put domain knowledge into the program
- Effort: Make it "just work" automatically; use constraints; safe, secure, probable defaults; use controls with natural mapping

Copyright 2011 UX Design Edge. All rights reserved.

So why is simplicity so hard?

- □ The simplicity techniques are straightforward
- Getting people to apply them is not
- □ Several challenges work against simplicity:
 - Good intentions
 - Design and development effort required
 - A cultural bias towards complexity

Copyright 2011 UX Design Edge. All rights reserved.

Complexity is well intended

- Complexity is often motivated by enabling users
 - Complexity says "Yes!"
 - Simplicity says "No!"
 - We want to say "Yes!"
- Myth: Simple products can't be powerful
 - Power is about enabling people
 - Simplicity is presentation and eliminating the unnecessary
- Myth: Advanced users like complexity
 - All users, no matter how sophisticated, want to get their work done with a minimum amount of unnecessary effort

Copyright 2011 UX Design Edge. All rights reserved.

Simplicity requires effort—lots of it

- ☐ To optimize for the probable—the top scenarios—you must understand what users do and want
 - Top excuse: we don't know
- □ For developers, the easiest approach is to ask all the questions and expose all the knobs directly
 - Simplicity requires abstractions and risk
- Making it simple requires more effort for you!



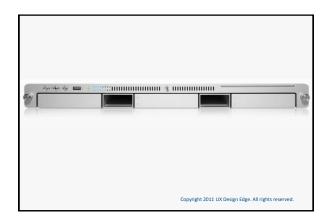
A cultural bias towards complexity

- □ Root problem: more is better, right?
 - Which do you prefer: the standard or elite edition?
 - Product names are biased:
 - Standard vs. top of line, ultra, deluxe, elite, supreme, plus
 - Why not pay a bit more and get "the good one"?
- ☐ The enhanced products tend to be more popular (and more profitable!)
 - Incorrect conclusion: People want more features, complexity
 - Correct conclusion: People want capability, convenience
 - Another conclusion: People want to play it safe, will buy the "good one" even if they don't need it and won't use it

Copyright 2011 UX Design Edge. All rights reserved.

Challenge: Remove or simplify a complex feature Task: Choose a complex feature Find the elements that result in complexity Characterize them: Do you use them? Frequently? Do you want them (desirability)? Why? What would happen if they were removed? Improve by applying the principles and techniques Better?





What is visual design?

- □ So far we have focused on interaction design
- ☐ Here we will focus on how the design appears visually

Copyright 2011 UX Design Edge. All rights reserved.

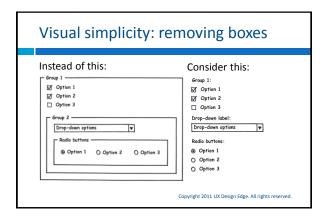
Why do you care?

- People are emotional and react emotionally to a product's visual appearance
- Look the part—your product's look should reflect what it's great at
 - Don't assume that users will see any beauty within
- My claim: any UI can be made beautiful
 - Even tax forms!

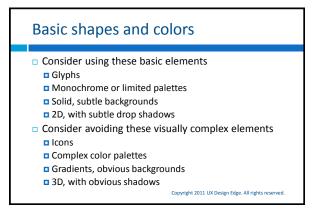
If you want a beautiful product... Hire a visual designer Seriously, hire a visual designer They aren't as expensive as you think Tips for working with a designer: Hire the best visual designer you can and trust them to do their job—early in the process A designer's nightmare: non-designers telling them how to do their job—don't do this! Communicate what you want—but focus on goals Provide constructive feedback, but defer to the designer











Elements of elegant typography

- □ Use TrueType or OpenType fonts
 - For web, Arial, Trebuchet, Verdana are browser safe
 - For Windows, use Segoe UI; for Mac, use Lucida Grande
- Use different sized text for a visual hierarchy
 - Make most important text on the page really stand out
- Most of the time use black on a white background
 - For contrast, use white on a high contrast, solid colored background
- Don't use normal-sized colored text except for links

Copyright 2011 UX Design Edge. All rights reserved

Elements of elegant layout

Effective layout helps users quickly find what they are looking and makes the appearance visually appealing:

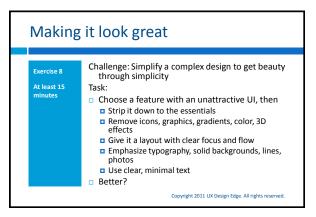
- Focus Indicates where to look first
- Flow A clear path for the eye to follow smoothly and naturally
- Grouping Giving related UI elements have a clear visual relationship related items grouped together; unrelated items separate
- □ Emphasis UI elements are emphasized based on their importance
- Alignment UI elements have coordinated placement, making them easy to scan and appear orderly
- Easy to scan Users can find what they are looking for at a glance
- Balance Content appears evenly distributed across the surface

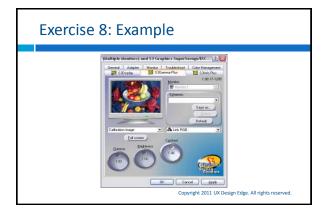
Copyright 2011 UX Design Edge. All rights reserved.

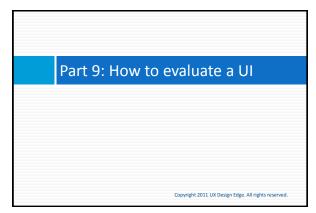
Focus and flow Start here! Copyright 2011 UX Design Edge. All rights reserved.











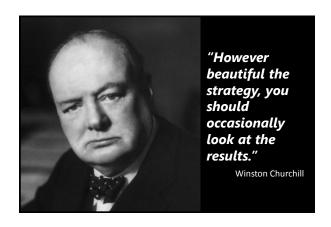


What are evaluation techniques? Evaluation techniques help you determine where you are in the design process Which alternative is better? Is the current design good? If so, are you done? If not, what should you do next? You evaluate throughout the entire process So many goals, so many evaluation techniques User-based evaluation "Expert"-based evaluation

Copyright 2011 UX Design Edge. All rights reserved.

■ The best technique depends upon your goals

Why do you care? UI designs are never right the first time Effective evaluation is crucial to doing your best work ...and your best teamwork The techniques non-designers tend to use aren't effective Caution: Evaluation is undermined if you haven't scheduled enough time for iteration and refinement



Keeping it simple

- □ There are many excellent evaluation techniques
- Let's focus on the ones you already know
- □ All "design inputs" can be used to evaluate design output
 - Scenario review
 - Communication review
 - "Intuitive" review
 - Simplicity review
 - Right control and UI text review
 - Visual design review
- Don't have to apply all—choose the most useful

Copyright 2011 UX Design Edge. All rights reserved.

Scenario reviews

- A scenario review evaluates a design to determine how well it enables its top scenarios
- Things to check:
 - Are they real scenarios? Realistic scenarios?
 - Key: Are the user's goals being achieved?
 - Are the task flows simple and natural?
 - Do the task flows take the user's environment into account?

Copyright 2011 UX Design Edge. All rights reserved

Communication reviews

- □ A communication review evaluates how well a design communicates
- Things to check:
 - Key: Is it something you would say in person?
 - Does the language feel natural, friendly, and concise?
 - Is the language focused on purpose and goals?
 - Do the UI elements work together harmoniously to communicate different aspects of the same consistent story?

Copyright 2011 UX Design Edge. All rights reserved.

"Intuitive" reviews

- An intuitive review evaluates how intuitive a design is
- Things to check:
 - Does the UI not require memorization, experimentation, assistance, or special training?
 - Are the interactions visible? Are the results predictable?
 - Is there clear, immediate feedback? Is it clear when an action is performed? When it's successful or has failed?
 - Is the task flow clear? Do users know where they are? Is the next step clear?
 - Do users rarely make mistakes? If so, is it easy for them to recover?
 - Are there appropriate defaults?

Copyright 2011 UX Design Edge. All rights reserved

Simplicity reviews

- □ A simplicity review evaluates a design for simplicity
- □ Things to check:
 - □ Can any elements be removed? Not sure...what bad things would happen if they were removed?
 - What are users most likely to do or want? Is the presentation optimized for the probable?
 - What do users need to know? Can that be eliminated?
 - What steps do users have to perform? Can any be eliminated or performed automatically?

Copyright 2011 UX Design Edge. All rights reserved

Control usage reviews

- □ A "right control" review evaluates the control usage
- Things to check:
 - Is the control used for the correct purpose?
 - Is the interaction natural, efficient, and standard?
 - Is the purpose and effect obvious from inspection?
 - Does the label clearly communicate its purpose?
 - Are the details right?
 - Is it the best choice compared to the alternatives?
 - Is there no simpler, lighter weight alternative?
 - Is there no more constrained, less error prone alternative?

UI text reviews

- A UI text review evaluates the effectiveness of the headings, instructions, and labels
- □ Things to check:
 - Useful, relevant Provides the right information, purposeful
 - □ Clear, natural Speaks the user's language
 - Easy to understand Doesn't require thought, experimentation
 - Explicit, specific Doesn't under communicate
 - □ Concise, efficient Doesn't over communicate
 - Good tone Friendly, good personality

Copyright 2011 UX Design Edge. All rights reserved.

Visual design review

- A visual design review evaluates a design's visual appearance
- Things to check:
 - Are there no unnecessary visual elements?
 - □ Justify icons, graphics, gradients, color, custom controls, 3D
 - Does it have a simple, strong layout with clear focus and flow?
 - Is there a clear visual hierarchy? Is next step obvious?
 - Is the visual design optimized for scanning?
 - Can users find what they are looking for at a glance?

Copyright 2011 UX Design Edge. All rights reserved.

A sample design review script

- What feature are we reviewing today?
- Remind me...who is the target user for this feature?
 - How does that person differ from the typical user?
 - And why are they going to want this feature?
- Great! What are they doing? What are the top scenarios?
- Let's walk through how target users will do those tasks
- ☐ Great! That does the job, but.. (give specific feedback)
 - It feels cumbersome...did you look at any simpler alternatives?
 - How are users going to know to get from step 2 to step 3?

Copyright 2011 UX Design Edge. All rights reserved.

The highlighter test

- □ Take a printout of a page
- Choose a task
- Highlight everything that is potentially useful for that task
- □ Calculate the percentage of the screen space that is useful to the task

Copyright 2011 UX Design Edge. All rights reserved

A highlighter test example Copyright 2011 UX Design Edge. All rights reserved.

Informal usability studies

- A usability study evaluates a design by testing it with realistic scenarios with real users
- Usability studies are the "gold standard" for design evaluation
 - Testing always trumps theory or personal opinion
 - Hard to insist that users will get something when testing shows otherwise
- You can perform an informal study without hiring a professional—it doesn't have to be expensive

Usability study process

- Determine goals for the study
- Identify scenarios that will achieve the goals
- Prepare the task instructions
- □ Recruit participants
- □ Do a trial run, make refinements
- Run test on each participant
- Analyze results
- Recommend changes

Copyright 2011 UX Design Edge. All rights reserved.

Keys to success

- Evaluate from the target user's point of view
- Evaluate at the right level of detail
- Early: Fundamentals, not minor details
- Late: Details, not fundamentals
- Details that affects "intuitiveness" aren't minor
- □ Self evaluation requires brutal objectivity

Copyright 2011 UX Design Edge. All rights reserved.

Applying evaluation techniques

Exercise 9
At least 15
minutes

Challenge: Evaluate a poor UI design

Task:

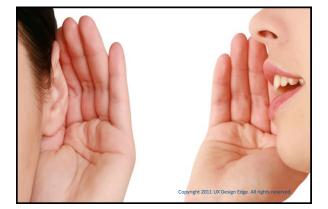
- Choose a UI that needs improvement
- Assume you are early in the process
- Choose three evaluation techniques to find fundamental problems
- Apply them...what did you find?
- Now assume you are late in the process
- Choose three evaluation techniques to find details that need work
- Apply them...what did you find?
- □ Better?

Copyright 2011 UX Design Edge. All rights reserved.

Part 10: Feedback

How to give and receive feedback

Copyright 2011 UX Design Edge. All rights reserved.



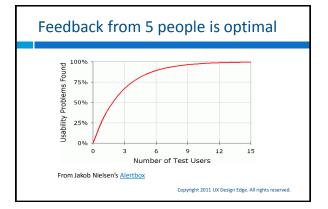
Why is feedback important?

- □ Feedback is the lifeblood of an effective design team—it's crucial to doing your best work
- ☐ The ability to give and receive constructive, actionable feedback is an advanced skill

Feedback facts of life

- □ UI design is extremely visible
- Everybody has an opinion on design
- Your UI designs will be criticized
- Receiving feedback can be painful—people are naturally sensitive to criticism
- Not all feedback is delivered constructively or diplomatically
- □ It's difficult to not react emotionally
- Doing UX design requires a thick skin

Copyright 2011 UX Design Edge. All rights reserved.



How to give feedback

- Give feedback at the right level
- Avoid feedback based on personal opinion
- Be specific and actionable
- □ Be constructive and respectful
- Be supportive and encouraging
- Be balanced

Copyright 2011 UX Design Edge. All rights reserved.

How to receive feedback

- □ Welcome criticism—smile and say "thank you"
- □ Handle feedback well emotionally
- Don't be or even appear defensive or critique the feedback
- Take it seriously
- Encourage more

Copyright 2011 UX Design Edge. All rights reserved

Handling vague, confusing feedback

- ☐ If feedback is in the form of a solution, ask for the problem that needs to be solved
- Ask for clarifications, specifics, details
- Ask for specific examples of the problem
- ☐ Ask for a possible solution or examples of the solution
- Get an independent confirmation

Copyright 2011 UX Design Edge. All rights reserved.

The tragedy of great design

- Good design is appreciated, but great design often isn't noticed
- □ The ultimate design compliment: "Of course! How could you do it any other way?"

Giving and receiving feedback

At least 15 minutes

Challenge: Practice giving and receiving helpful, constructive feedback diplomatically

Task:

- Choose a feature with a poor UI and assume it was designed by somebody on your team
 - Identify all the problems that you can find
 - □ Chose which problems to give feedback on
 - Decide how to present the feedback so that it is specific, actionable, constructive, respectful, etc.
- Now turn the tables: assume that it was your design and you just received that feedback
- Do you think you would receive it well? Emotionally?
- How motivated would you be to address it?
- How would you change the feedback so that you would feel better about receiving it?

Copyright 2011 UX Design Edge. All rights reserved.

Course wrap up and follow up Copyright 2011 UX Design Edge. All rights reserved.



Summary of what you have learned

You now know how to:

- Use a scenario-based design process
- Make a design intuitive
- Make a design simple
- □ Evaluate, give and receive feedback

Copyright 2011 UX Design Edge. All rights reserved

Part 1: Use a good basic design process

- Design is making creative choices on behalf of target users to create a product that satisfies their goals
- Since design is about making good choices, the design process mirrors the rational decision making process
- Key is to avoiding the classic mistakes
 - Designing for yourself, everyone
 - Falling in love with one (usually first) solution
 - Worrying about feasibility during brainstorming
 - Trying to do everything, not setting clear goals and priorities
 - Not scheduling time for iteration, polish

Copyright 2011 UX Design Edge. All rights reserved.

Part 2: Use scenario-based design

- A scenario describes a specific target user trying to achieve a specific goal or task in a specific environment
- □ Scenario-based design is the best way to make sure the design process is truly user centered
- ☐ There are several traps, but the key is:
 - Have enough detail for scenarios to be a decision making framework
 - Don't favor or imply specific solutions—any solution that satisfies the user's goals should be on the table

Part 3: UI is Communication

- □ Focusing on effective communication is the simplest way to develop design thinking and focus on user goals
- The way we communicate in person is much better than how we communicate through UI, so we can and should use the same approach
- We should have the same standards for HCl as we do for human interaction
- □ A good UI should feel like a conversation between friends
- □ This applies to all UI, not just text

Copyright 2011 UX Design Edge. All rights reserved.

Part 4: Make it intuitive

- A UI is intuitive when users understand its behavior and effect without use of reason, memorization, experimentation, assistance, or special training
- An intuitive UI has an appropriate combination of Affordance, meeting expectations, efficiency, responsiveness, forgiveness, and explorability
- Consistency helps set expectations
- Inductive UIs are designed to be self-explanatory to lead users through a task without the need to think and experiment

Copyright 2011 UX Design Edge. All rights reserved

Part 5: Use the right controls

- For effective communication, you need to use the right controls and use them effectively
- To choose the right control:
 - Make sure to choose the right control for it purpose
 - Make sure it's the best choice compared to the alternatives
- Controls have a "body language" which is often an important factor in choosing the right control
- The right control is usually, the simplest, lightest weight, most constrained control that does the job well
- For consistency, use custom controls only when really needed

Copyright 2011 UX Design Edge. All rights reserved.

Part 6: Write good UI text

- □ UI text is key to effective communication, intuitive UI
- Good UI text is useful, relevant, natural, easy to understand, explicit, specific, concise, efficient, and has a good tone
- You have a model for how people read
 - People tend to skip over large blocks of text without reading
 - People read the labels of controls that they interact with
- Work on UI text early because text problems reveal design problems—don't try to weasel out of this!

Copyright 2011 UX Design Edge. All rights reserved.

Part 7: Keep it simple

- Simplicity is the reduction or elimination of design elements that target users are aware of and consider unessential
- The perception of simplicity is more important than reality
 This means a UI can be both powerful and simple
- □ To obtain simplicity, optimize for the probable not the possible
- □ Focus on what is likely; reduce, hide, or remove what is unlikely; and eliminate what is impossible
- Simplicity is hard because people are reluctant to say "no" and we have a cultural bias towards complexity

Copyright 2011 UX Design Edge. All rights reserved.

Part 8: Make it look great

- Visual appearance is important because people react emotionally to a product's appearance
- It's easy to fall in love with beautiful things
- ☐ For non-designers, the best approach is to strip the visual design down to the essentials
- ☐ Have a simple, strong layout with clear focus and flow
- Emphasize typography, solid backgrounds, lines,
- □ Underemphasize icons, graphics, gradients,3D

Part 9: Evaluation techniques

- You learned several evaluation techniques
- □ To keep things simple, the various "design inputs" can be used to evaluate the design output
- ☐ The key is to evaluate that UX from the target user's point of view and use brutal objectivity
- □ It's also important to perform the evaluation at the right level of detail
 - Focus on the big issues early in the process, don't worry about the details until they really matter

Copyright 2011 UX Design Edge. All rights reserved.

Part 10: Giving and receiving feedback

- ☐ Feedback is the lifeblood of an effective design team—it's crucial to doing your best work
- UI is extremely visible and everybody has an opinion, but the feedback might not be delivered constructively or diplomatically
- When giving feedback: Make sure it's specific and actionable, and avoid feedback based purely on personal opinion
- When receiving feedback: welcome the feedback and encourage more—say "thank you" and take it seriously

Copyright 2011 UX Design Edge. All rights reserved.

Your design compass

When in doubt, ask how the decision:

- Affects the scenarios?
- Affects the "intuitiveness"?
- Affects the effectiveness of the communication?
- Affects simplicity?

Reality check:

- Are you deciding for target users and their goals?
- ...or for yourself or the code?

Copyright 2011 UX Design Edge. All rights reserved.

What about what we didn't cover?

- ☐ There are many principles, tools, and techniques that we didn't cover
- My advice: don't worry about them too much
- Keep it simple, don't get overwhelmed
- Learn new skills as you need them
- You can do this!
- But be humble: Know what you don't know

Copyright 2011 UX Design Edge. All rights reserved.

Getting to the next level

- Thinking
- □ Reading
- Training
- Practicing

Copyright 2011 UX Design Edge. All rights reserved.

Thinking: Universal homework

Think about the design of everyday things

- Look around you for examples of design
- Think about how you react—understand why
- □ Is the design good or bad—understand why
- ☐ Think about how you could improve the design

Reading: UX Design Books

My top selections:

- Don Norman's The Design of Everyday Things
- □ Steve Krug's Don't Make Me Think
- Alan Cooper's About Face 3: The Essentials of Interaction Design
- Kim Goodwin's Designing for the Digital Age
- □ Windows UX Interaction Guidelines
 http://msdn.microsoft.com/en-us/library/aa511258.aspx

Copyright 2011 UX Design Edge. All rights reserved.

Reading: Top UX Design Edge blog posts

From http://www.uxdesignedge.com/blog:

- Getting started in interaction design
- □ Why "everybody is a designer": The UX Design Skills Ladder
- □ Intuitive UI: What the heck is it?
- □ Don't design like a programmer
- □ Icon design for non-designers
- Design scenarios—and how thrilled users ruin them
- □ Are you sure? How to write effective confirmations
- □ Interaction design interview question #1

Converget 2011 LIV Dorigo Edgo. All rights recognic

Training: UX Design Basics Workshop

- ☐ A free monthly hour-long virtual workshop for UX Design Basics students
- Ask questions about the course
- Ask questions about applying the course to your projects
- □ Check http://uxdesignedge.com/training for details

Copyright 2011 UX Design Edge. All rights reserved.

UX Design Essentials Workshop

- Want to learn more?
- Consider hosting a two-day UX Design Essentials
 Workshop at your company
- A fun, fast paced, hands-on workshop gives you the practical essentials to improve your entire team's UX design skills—including management
- □ Check http://uxdesignedge.com/training for details

Copyright 2011 UX Design Edge. All rights reserved

I'm here to help

- I focus my consulting services on helping teams learn how to help themselves
- □ Short term, cost effective, high impact
- If you help with applying this course and UX design in general, please contact me at consulting@uxdesignedge.com

Copyright 2011 UX Design Edge. All rights reserved.

Final inspiration

The next time you pick up an unfamiliar object and use it smoothly and effortlessly on the first try, stop and examine it: the ease of use did not come about by accident. Someone designed the object carefully and well.

Donald Norman

