Assessing Technical Feasibility

No screens

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Goal 2
When the needs and abilities of users are unclear, design systems by learning from iteration and experimentation.

Part 3: Editing the Party Planning Committee
The interface to edit the party planning committee (PPC) is a drag and drop direct manipulation interface as described below.

1. The PPC list needs to display two lists:
   1) a list of all the employees seen here, and
   2) a list of people on the party planning committee.

2. Each list must have a div at the top of the list serve as a drop target.
3. Using, 1Query Dragable and Droppable event list to the head of the list of PPC list, and who must also be true names from the PPC list of.
   This must be implemented in the Model + View.
4. To cue that an element is draggable, implements background turns light yellow, and the cursor.
5. While the item is being dragged, the background.
6. While the item is being dragged, it should list.
7. While the item is being dragged, the drop target.
8. When the item is dropped over the drop target.
9. If an item is “dropped” anywhere other than where the user started dragging it.

Note:
When the user drags between the Logging Sales UI.

Keep a list of the party planning committee

Clear needs, abilities, goal

Unclear needs, abilities, goal
How do get from idea to product?

Idea

Product
Iterative Design

Idea

Product
Iterative Design is good because it minimizes risk
To minimize risk on novel designs, use iteration on each risky aspect of the design.

Idea

- Touch screen
- Soft keyboard
- One button

Product
Brainstorming: The idea itself is risky. So we have many ideas before picking one.
The first iteration should be as low-fidelity as possible

1. Determine objectives

2. Identify and resolve risks

3. Development and Test

4. Plan the next iteration
Low-Fi Prototypes mitigate risk by getting feedback on the most fundamental aspects of the design first.

Given a task or goal, can the user navigate the interaction coherently?
What’s the next biggest risk?

Is the idea technically feasible?
Idea: Teleportation
What are your biggest technical risks?

We will next assess technical feasibility to mitigate these risks.
Design technique:

Flare and Focus
You started with many ideas. You made and tested paper prototypes. Why?

To pick an idea, explore and test many ideas. This is how we learn from experimentation.

It’s called Flare and Focus
Learning from Experimentation

Sequential Flare and Focus

Brainstorm  
- Paper Prototype,  
- User test

Explore technical options
- Run them locally  
- Fit to your problem

Medium-Fidelity Interfaces  
- User Testing

Ideas  
Technical Elements  
User Interface
What were the two biggest technical risks of DroneIO?
How to assess technical feasibility:

Can the drone lift the weights?
How to assess technical feasibility:
Can the depth sensor detect gestures?

Technical Elements
Technical Feasibility: Zumba Playlist

Trimming the beginnings and ends of songs (to cut out the boring parts)

Embedded YouTube Videos?
HTML 5 video player

Technical Elements
Technical Feasibility: Teach the Pick and Roll

Stop the video and highlight certain players

Detect players in video automatically
Draw boxes in an HTML Canvas

Technical Elements
Assessing technical feasibility for your idea

We are assessing technical feasibility. If it doesn’t run locally on your machine it isn’t technically feasible.
How good should a technical feasibility prototype be?

Can the drone carry the stuff?

Can the camera detect hands?

jQueryUI Autocomplete demo
Type a few characters of a word
Potato
Pole
Pine
Petal
Potential
Pouch
Pound
Power

Should it be pretty?
Should it be usable?
Should it work in IE6?

No
No
No

Just good enough to test technical feasibility

What *should* it be?
Why do I need to run examples locally?
Why does Gordon Ramsey do this?
What other domains use a staging area?
Why is it important to have drones and projectors ready to use?
UI Design Philosophy:

Ready-to-hand (Heidegger)

Once you have all the tools easy and ready to use,

You can stop focusing on the tools.

And start focusing on your task.
If you have example code (and your media) ready to use, you can test it more efficiently.
Not everything will work.
Is that okay?
“I tried silk chiffon, but it didn’t work.”
“I tried the Google Object Detection, but it didn’t work.”
MAKE.

IT.

WORK.
Homework 11
Technical Prototype

• Technical Exploration (Flare)
  • Find similar applications and see how they implement them
  • Find the media assets you will need.
  • What are the biggest technical risks?

• Testing (Focus)
  • Make a technical prototype
Right now: With a partner or small group.

Google it: Find similar applications.
Wednesday:
Bring your media assets and technical prototype to class

- Find assets for at least one idea
- Explore at least one technical solution
- Share it with your group
- Get feedback and ideas.

Come only to your section. Same groups, same places.