

Assessing Technical Feasibility

No screens



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COMS 4170
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Say your name



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 UI 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.In its default state, the party planning committee list contains the following names:
1: Angela
2: Dwight
3: Oscar
4: Creed
5: Pam
6: Jim
7: Stanley
8: Michael
9: Kevin
10: Kelly
2. Each list must have a div at the top of the list that serves as a drop target.
3. Using JQuery Draggable and Droppable events, implement a drag and drop interface that allows users to move items from the list of employees to the head of the PPC list, and vice versa. This must be implemented in the Model + View + Controller pattern.
4. To cue that an element is draggable, implement a class that turns the background light yellow, and the cursor changes to a hand.
5. While the item is being dragged, the background of the item should turn light blue, and the cursor should change to a hand.
6. While the item is being dragged, it should look like it is being dragged.
7. While the item is being dragged, the drop target should be highlighted.
8. When the item is dragged over the drop target, the drop target should be highlighted.
9. If an item is "dropped" anywhere other than the drop target, the item should be removed from the list.

Note:
When the user toggles between the Logging Sales UI and the Party Planning Committee UI, the current state of the PPC should be stored in a javascript variable that if the user toggles back to the PPC, it should be there. However, for this implementation, if the user toggles back to the PPC, it should be empty.

Please submit your HTML, CSS, and JS files, along with a screenshot of the interface.

Home Log Sales Party Planning Committee

People

1: Angela
2: Dwight
3: Oscar
4: Creed
5: Pam
6: Jim
7: Stanley
8: Michael
9: Kevin
10: Kelly

Party Planning Committee

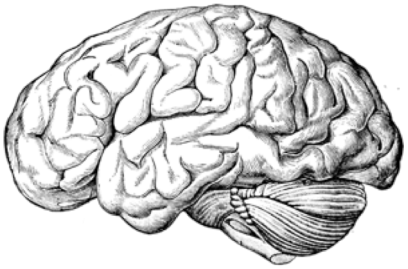
1: Phyllis

Keep a list of the
party planning committee

Clear needs, abilities, goal

Unclear needs, abilities, goal

How do get from idea to product?

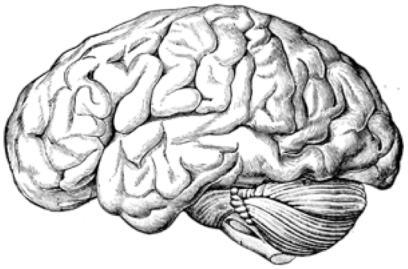


Idea

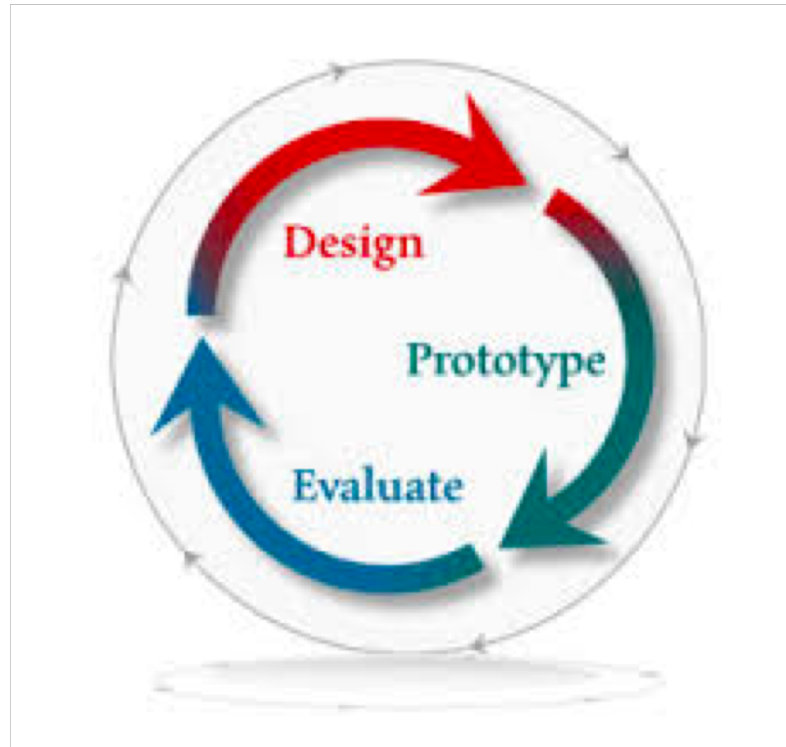


Product

Iterative Design

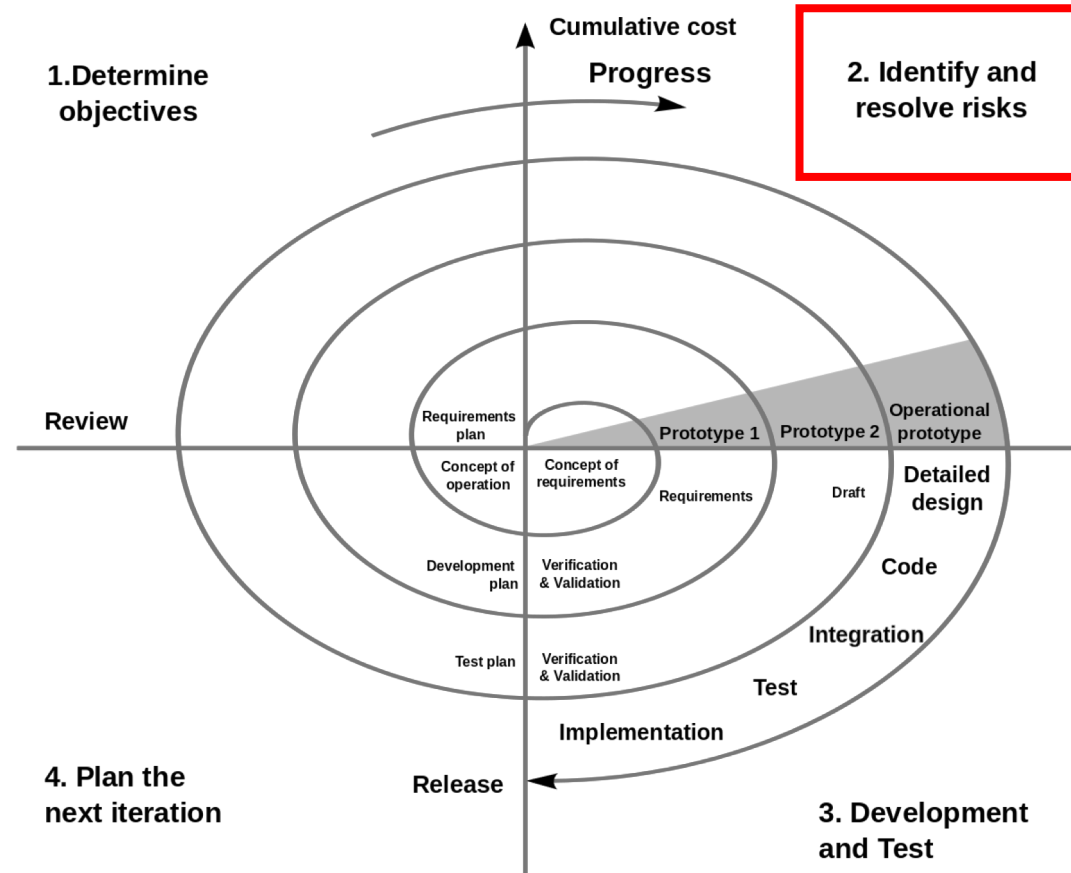


Idea

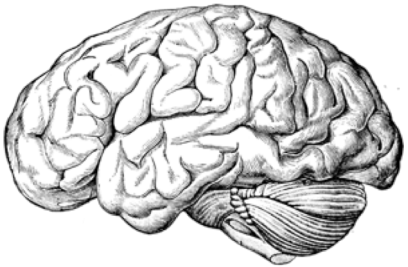


Product

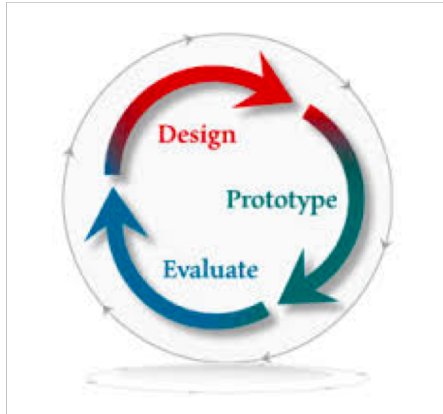
Iterative Design is good because it minimizes risk



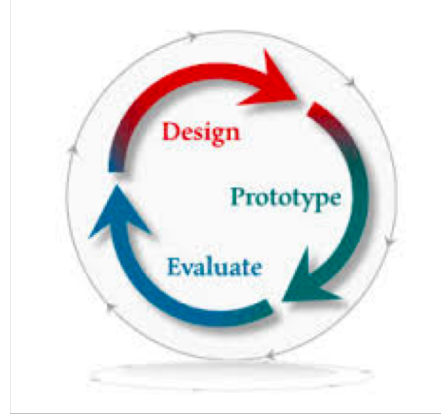
To minimize risk on novel designs, Use iteration on each risky aspect of the design



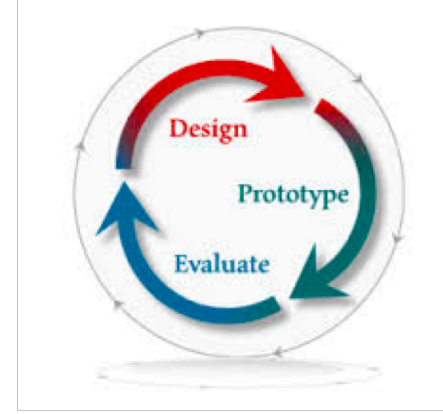
Idea



Touch screen



Soft keyboard

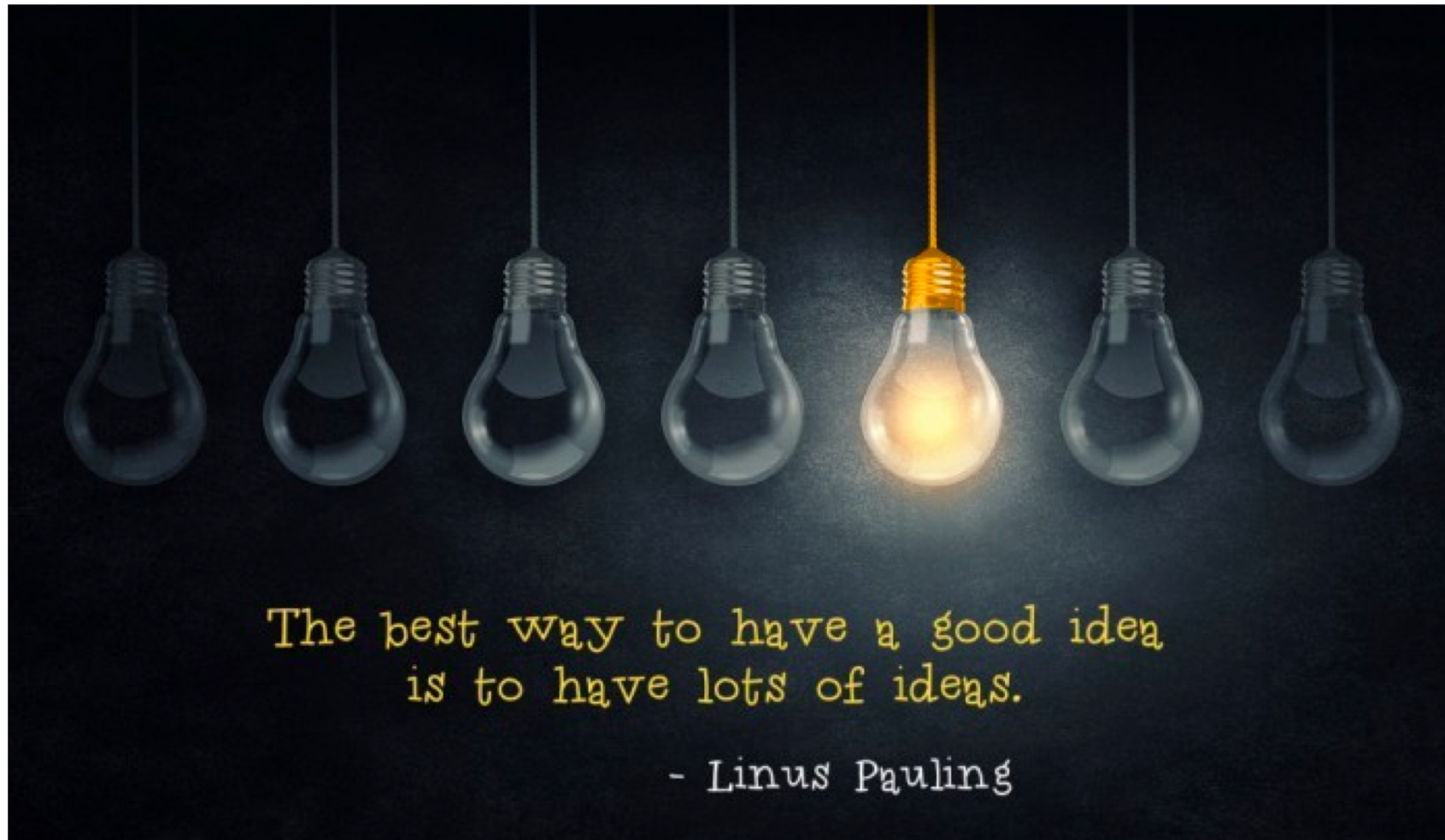


One button



Product

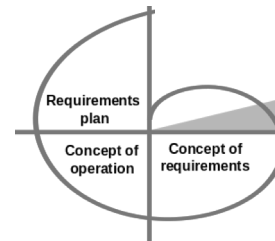
Brainstorming: The idea itself is risky.
So we have many ideas before picking one.



The first iteration should be as **low-fidelity** as possible

1. Determine objectives

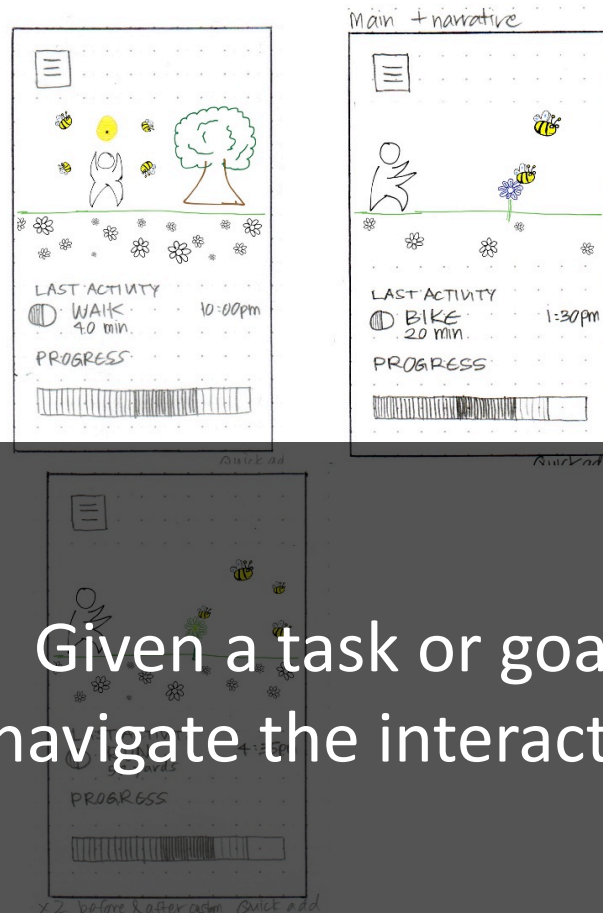
2. Identify and resolve risks



4. Plan the next iteration

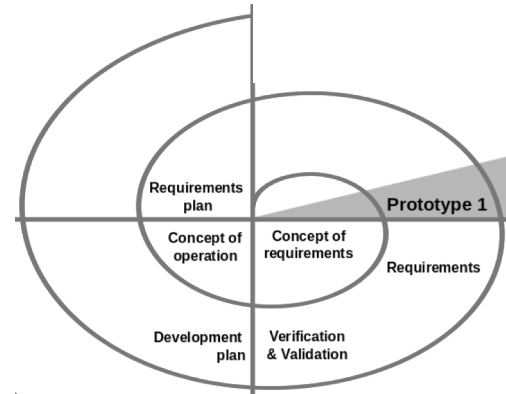
3. Development and Test

Low-Fi Prototypes mitigate risk by getting feedback on the most fundamental aspects of the design first



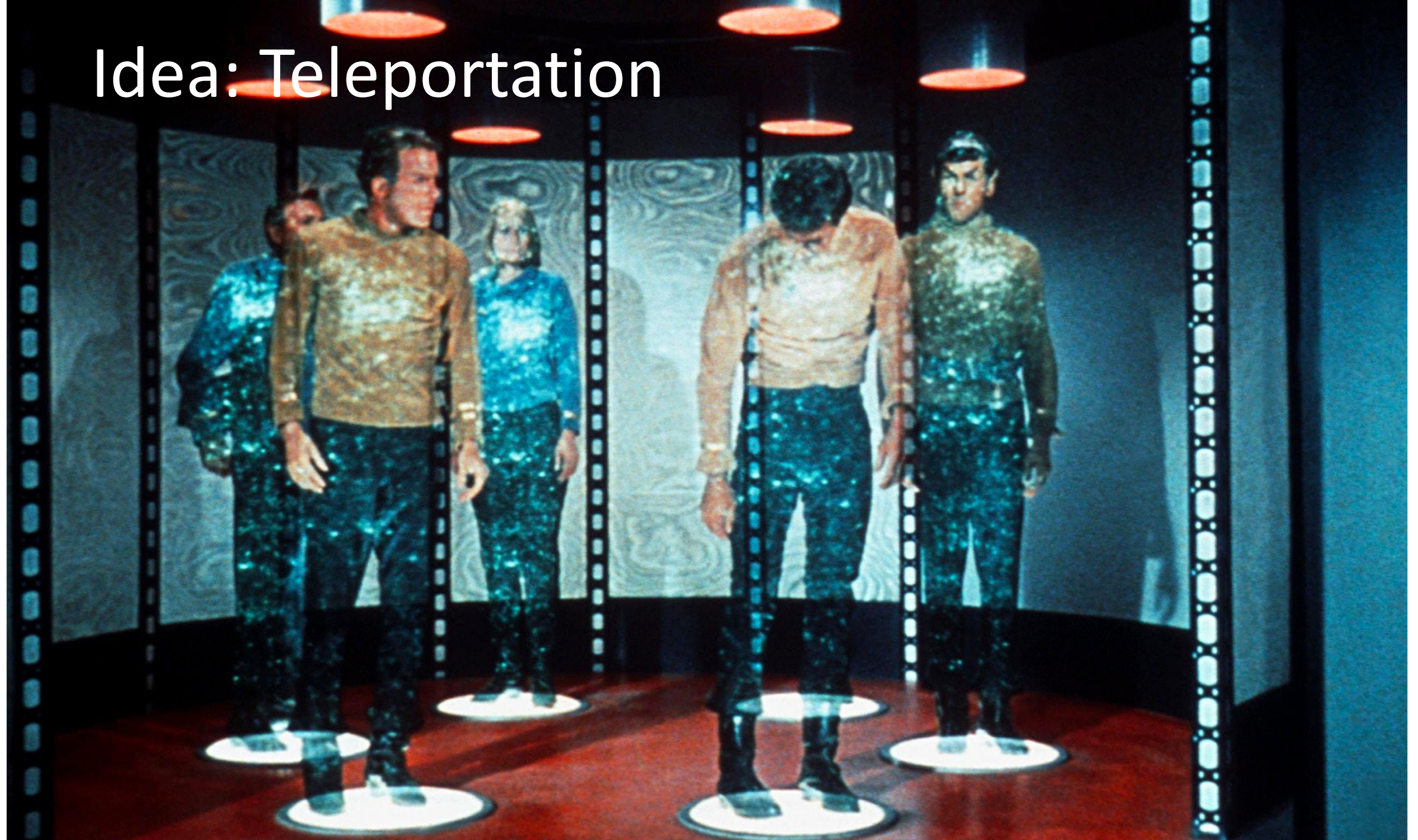
Given a task or goal,
can the user navigate the interaction coherently?

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?

Make a web app



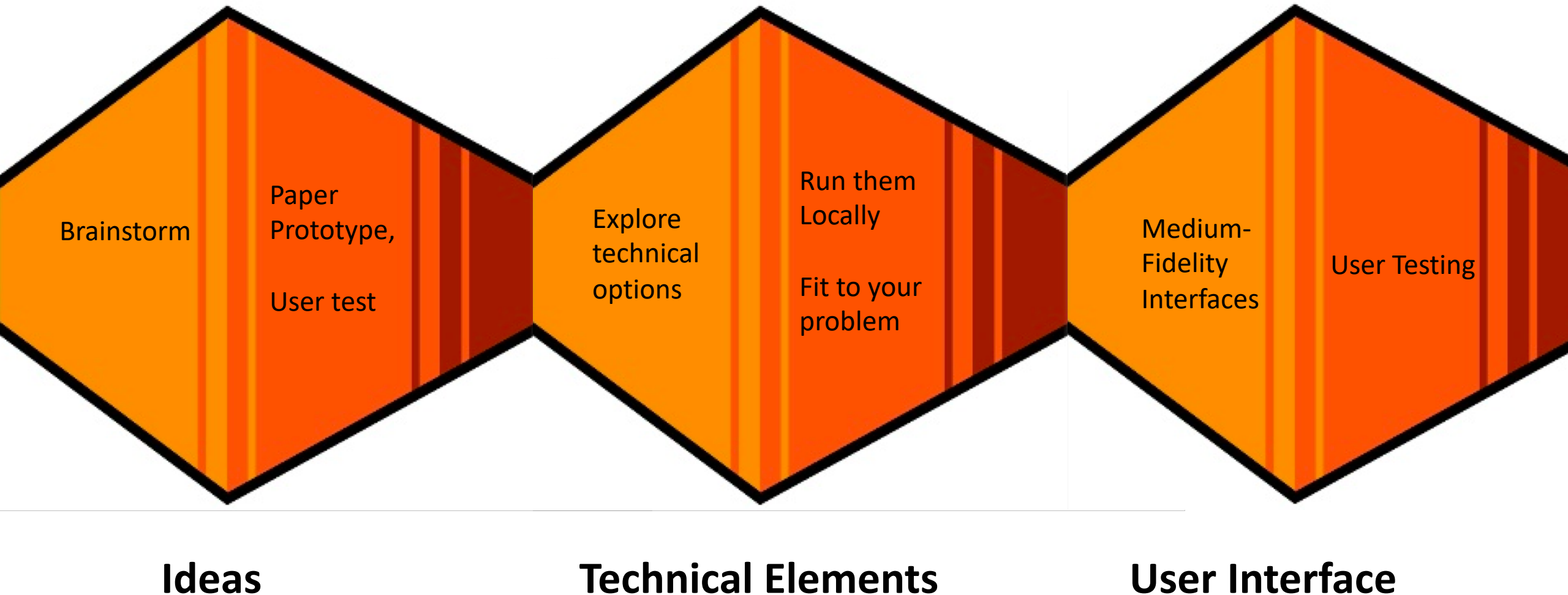
Learn Chinese tones
Learn Pick-and-Roll
Make a Zumba playlist
Track & increase walking fitness
Track & decrease Splenda you intake
Track Columbia Outreach progress
Learn different kinds of Jazz

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

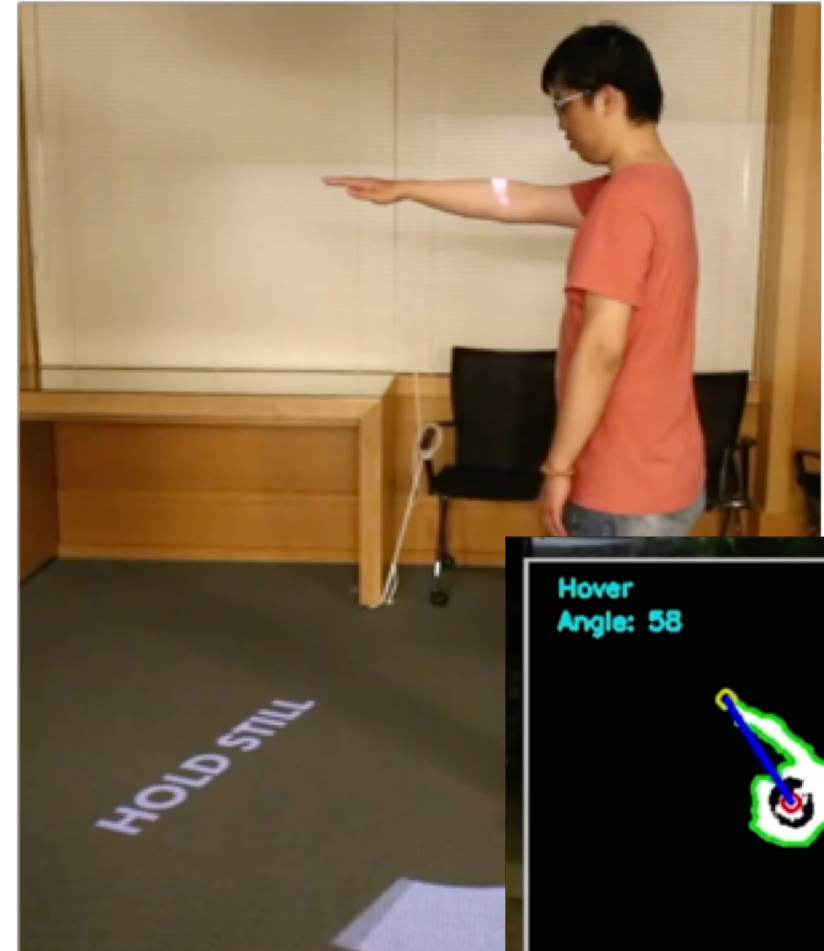


What were the two biggest technical risks of DroneIO?

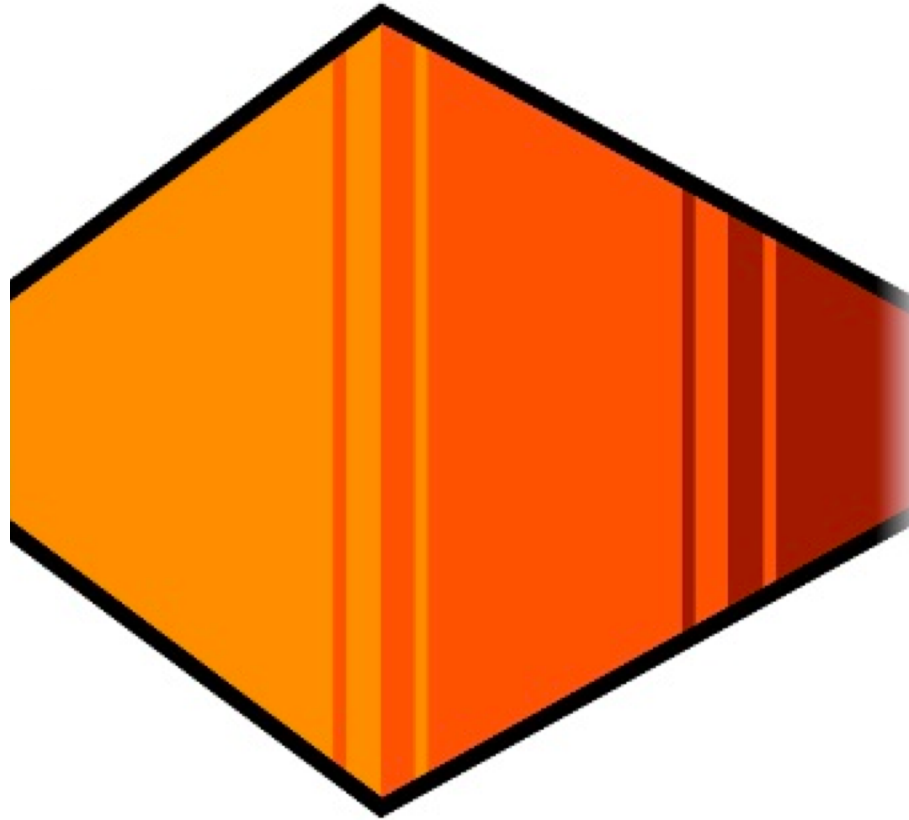
Can the drone carry the stuff?



Can the camera detect h



How to assess technical feasibility: Can the drone lift the weights?

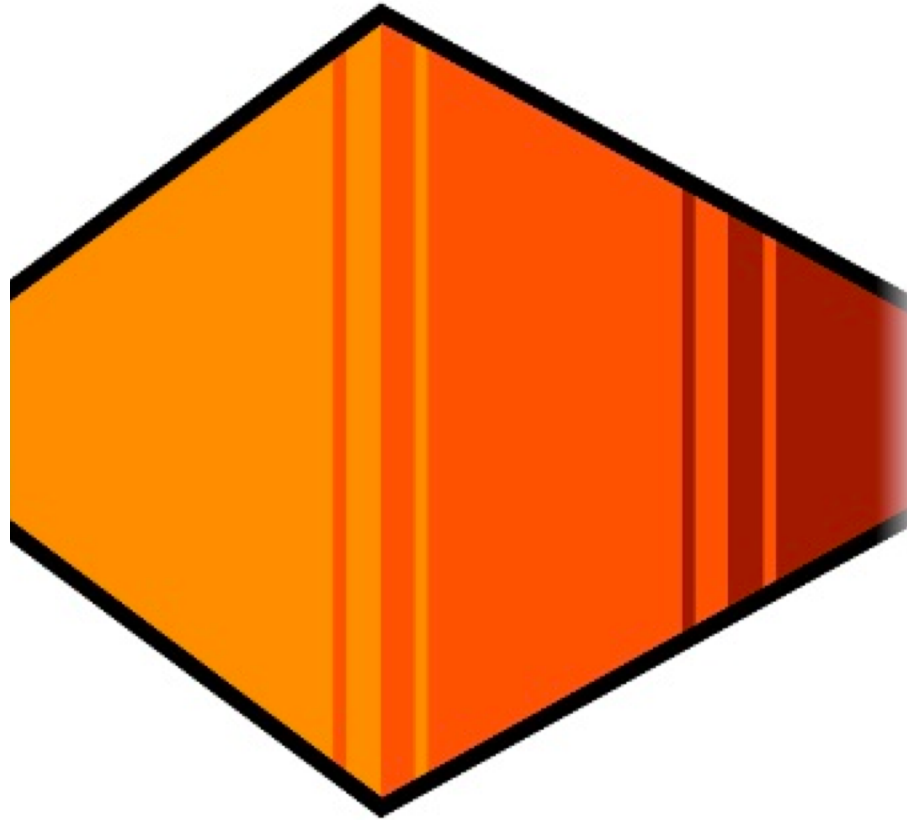


Can the drone carry the stuff?

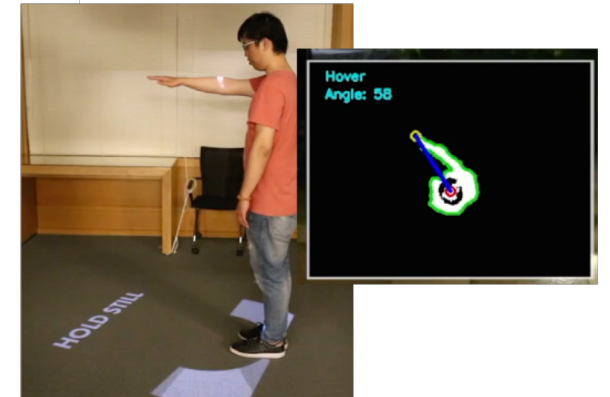


Technical Elements

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



Can the camera detect hands?



Technical Elements



Technical Feasibility: Zumba Playlist

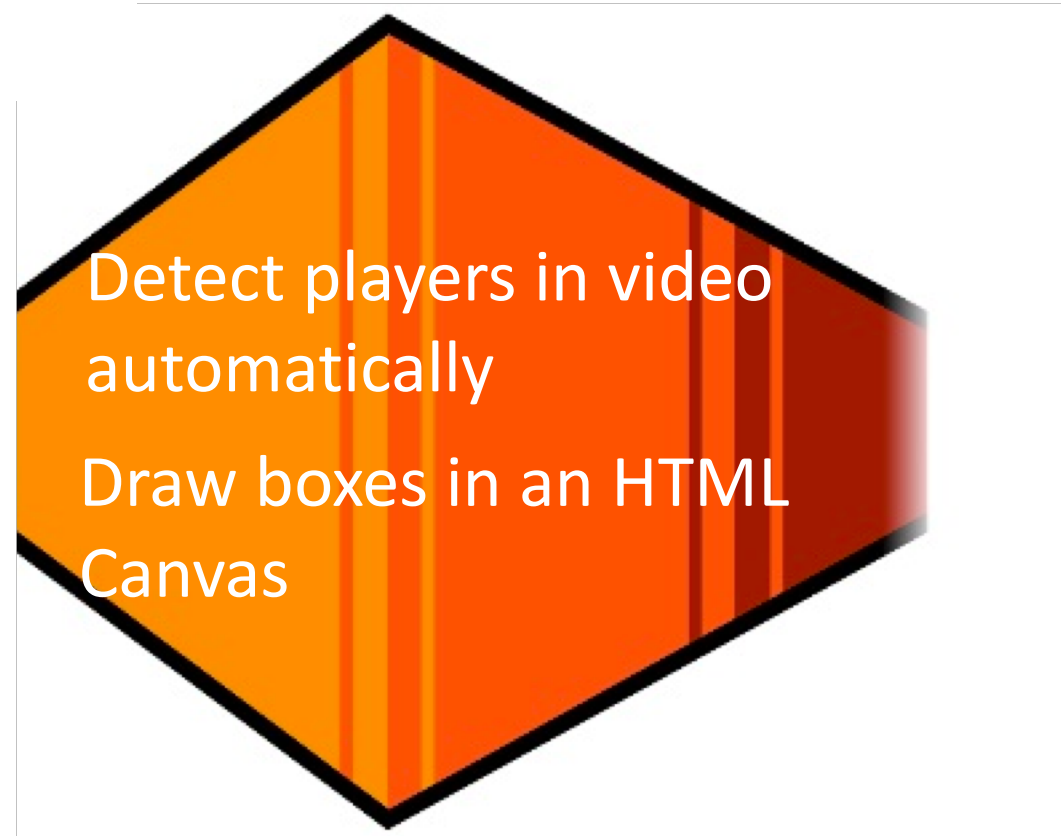
Trimming the
beginnings and ends of
songs (to cut out the
boring parts)



Technical Elements

Technical Feasibility: Teach the Pick and Roll

Stop the video and
highlight certain players



Technical Elements

Assessing technical feasibility for your idea

Stop the video and
highlight certain players

Google it

**Find example
code**

RUN IT LOCALLY

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?

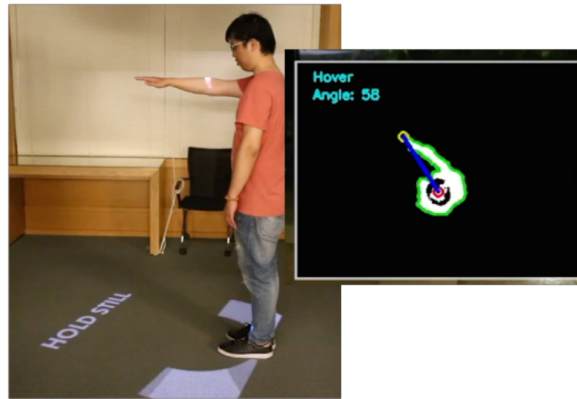
Can the drone carry the stuff?



Should it be pretty?

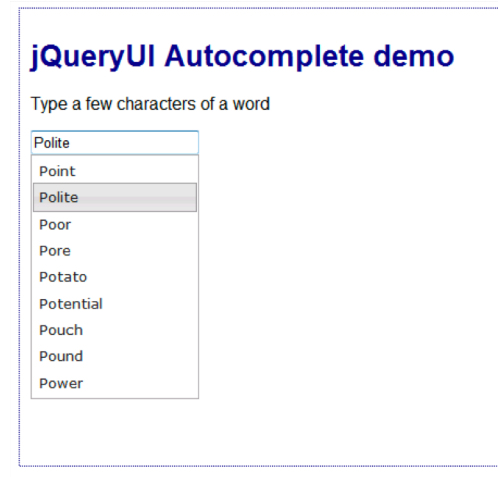
No

Can the camera detect hands?



Should it be usable?

No



Should it work in IE6?

No

What *should* it be?

**Just good enough
to test technical
feasibility**

Why do I need to
run examples locally?

Why does Gordon Ramsey do this?



What other domains use a staging area?



Java™ Platform, Standard Edition 7 API Specification

This document is the API specification for the Java™ Platform, Standard Edition.

See: [Description](#)

Packages	
Package	Description
java.applet	Provides the classes necessary to create an applet and to run an applet.
java.awt	Contains all of the classes for creating user interfaces and for displaying them.
java.awt.color	Provides classes for color spaces.
java.awt.datatransfer	Provides interfaces and classes for transferring data between applications.
java.awt.dnd	Drag and Drop is a direct manipulation gesture found in many graphical user interfaces. It involves moving an object from one location to another between two entities logically associated with presentation.
java.awt.event	Provides interfaces and classes for dealing with different types of events.
java.awt.font	Provides classes and interface relating to fonts.
java.awt.geom	Provides the Java 2D classes for defining and performing geometric operations.
java.awt.im	Provides classes and interfaces for the input method framework.

Why is it important to have drones and projectors ready to use?



Can the drone carry the stuff?



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.

HTML Canvas
with boxes drawn

Image detection
code



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.”

A man with grey hair and glasses, wearing a dark suit, a light pink shirt, and a pink and blue striped tie, is looking down and to his left. He is in a room with a red wall. In the background, there is a whiteboard with the text "THE IET SCHOOL" in red. To the left of the whiteboard is a mannequin wearing a necklace. To the right of the whiteboard is another mannequin wearing a blue top and a blue skirt. The text "MAKE. IT. WORK." is overlaid on the right side of the image in large, white, serif font.

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.