### Running Low-Fi Prototypes

No screens



Prof. Lydia Chilton COMS 4170 8 April 2020

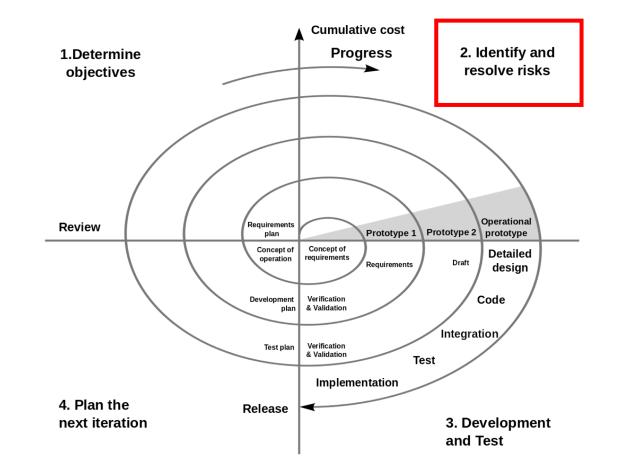


DESIGN PRINCIPLE

COLUMBIA UNIVERSITY

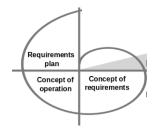
### Low-Fidelity Prototypes

#### Iterative Design is good because it minimizes risk



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

1.Determine objectives 2. Identify and resolve risks

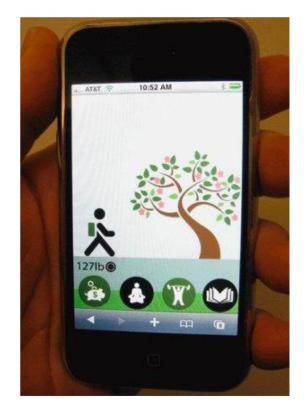


4. Plan the next iteration

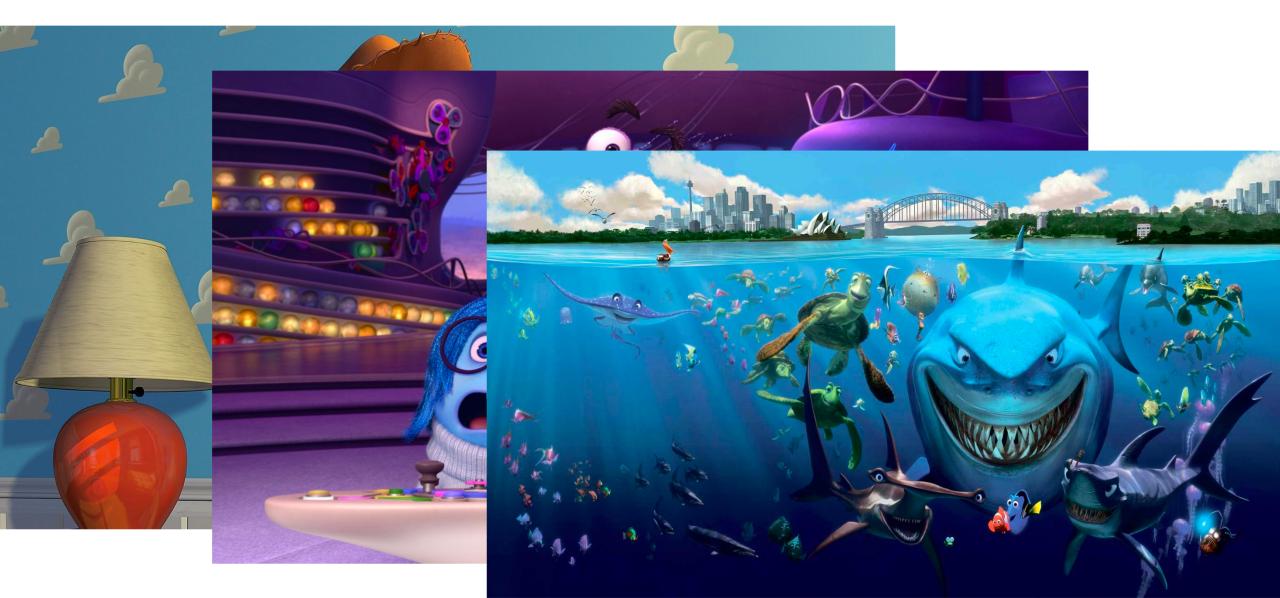
3. Development and Test

#### Start with a paper prototype. Why?

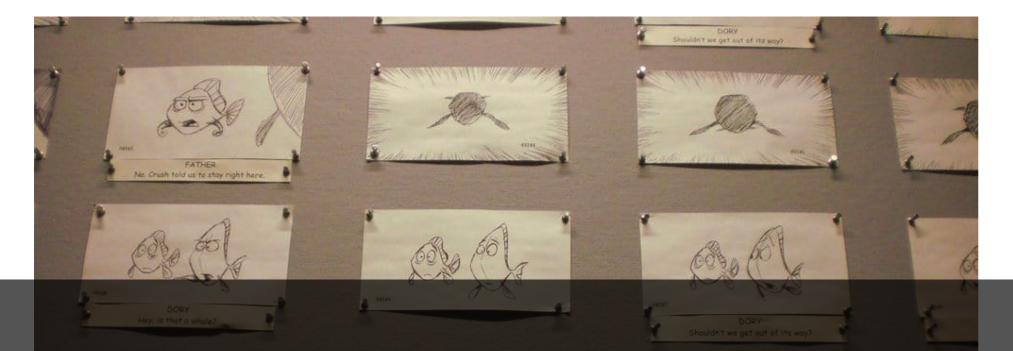




#### Pixar makes detailed and beautiful films

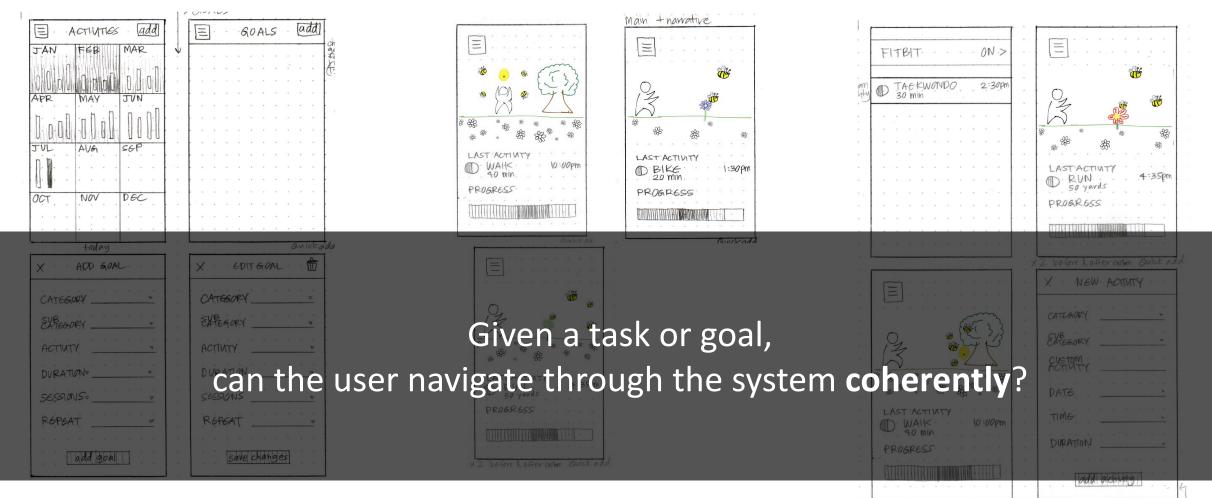


#### They always start with a storyboard. Why?



Storyboard can test the **coherency** of a story at a high level, while it is still easy to change it.

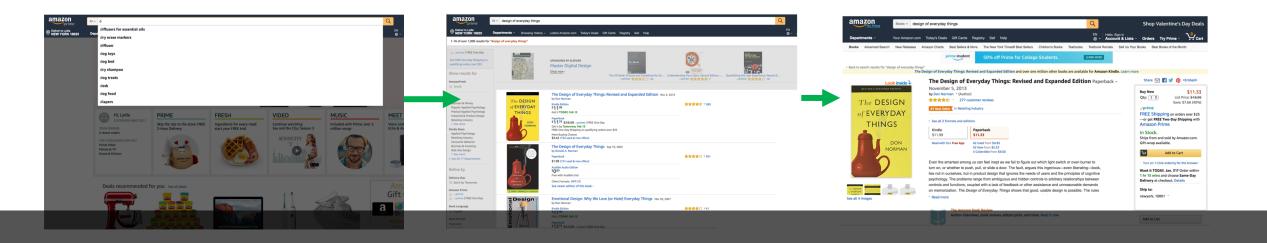
# Storyboards are also good for prototyping software interactions



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# For complex goals, break the task into states, options, and transitions to new states.

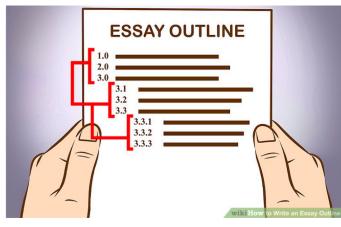


#### Prototypes test the coherency of navigating through the app



#### Other domains with low-fi prototypes

Essays: outlines



Acting: Table reads



Painting: Sketches



Fashion: Sketches



Sports: Diagram "plays"

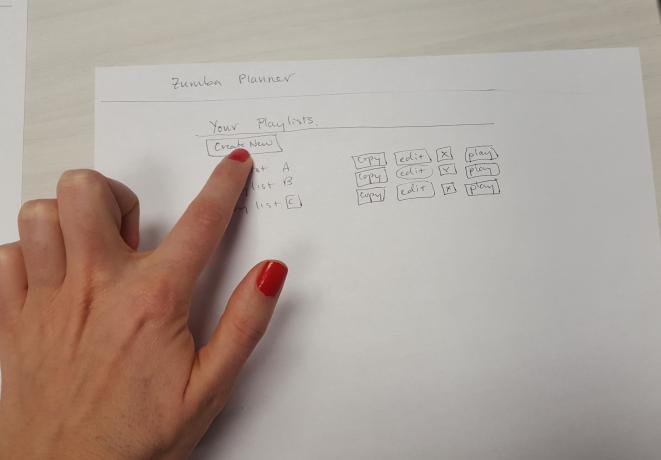


### Write down a **Persona**: **Person**, a high level **Goal**, 4 or 5 **subgoals**

- Idea: Zumba playlist maker
  - Person:
    - You are Katie a Zumba instructor in New York City.
  - Goal
    - Your goal is make a playlist of dance songs that last 20 minutes (at least 19 minutes and at most 21 minutes)
  - Subgoals:
    - 1. Create a new playlist
    - 2. Add a song to the playlist
    - 3. Add songs to the playlist until the play list is at least 20 minutes long
    - 4. If the playlist is too long, remove a song
    - 5. Play the playlist

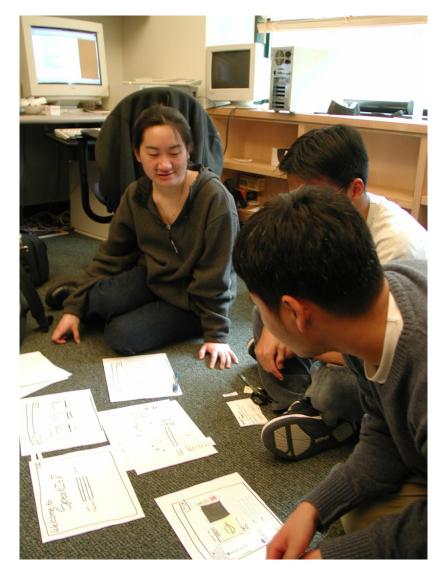
#### Subgoal 1: Create a new playlist

Zumba Planner		
Your Playlists. Create New] Playlist A Playlist B Playlist E]	Copy edit X play Copy edit X play Copy edit X play Copy edit X play	



You will probably learn as much from making the prototype, as you will from running it.

#### Running Prototypes



- Put your low-fi prototype in front of users.
- Read them their goal, and ask them to
- Ask them to think out loud as they do the task
- Don't interrupt them.
- Don't lead them.
- Observe "critical incidents"
  - Times they are unsure
  - Times they did something you did not intend
- Write it down, take screen shots.

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You get the best feedback when you are observing and listening. Not instructing:

- Give the user a **subgoal**:
  - "Log into the system and post on somebody's wall"
  - "Search for tweets using the most popular hashtag"
  - "Add a new slide with two column template"
  - "Edit a post"
- Observe what they do
  - Encourage people to think-aloud
  - Look for "critical incidents."
    - Times were users are unsure what to do, do the wrong thing
  - Resist the temptation to "rescue" them or tell them what to do.

# TODAY: everyone tests a prototype on a classmate.

- I demonstrate with 3 volunteers: Layne, Annie, Evan. (THANK YOU!!!)
- I will put you in groups of 4. Let's practice now!
  - Name yourselves person A,B,C,and D.
  - Assign these alphabetically based on your Zoom screenname
- Running paper prototypes
  - One person runs their prototype
  - One person tests the prototype
  - One observer writes notes of "critical Incidents" (take a screen shot if you can)
  - One observer reminder the Prototype runner not to say too much,
    - Please say "Give the user a chance to figure it out."
    - AND runs the discussion of critical incidents afterwards.
- Break you group into 2 groups of 3 people:
  - 15min: Person A runs prototype, B tests, C, observes, D runs the discussion
  - **15min**: Person B runs prototype, C tests, D observes, A runs the discussion
  - 15min : Person C runs prototype, D tests, A observes, B runs the discussion
  - 15min : Person D runs prototype, A tests, B observes, C runs the discussion

#### HW10

- Run both HW9 prototypes on at least one person.
- Write down your reflections.
- Iterate on both of the Google Slide Prototype:
  - It should have all the media the eventual application will use.
  - If you can't find or make all the media in the next week, you have to pick a different idea.
- Test them on two people each (iterative between in person if you need to)
- Decide which one you will implement.

## Fill out participation with one thing you learned from prototyping (from your own or others)

Columbia University

### User Interface Design

COMS 4170 · Spring 2020

Home	Grading	Syllabus	Piazza		
11	APRIL 6			APRIL 8	APRIL 10
	MW group s	essions with TA		Homework 9 due @ 4pm Participation Form	Lecture: Running Prototypes Friday group sessions with TA