

# Designing & Prototyping Smart Applications

ViaX James Landay CS Summer School

Summer 2018

Prof. James A. Landay

Stanford University

James Landay CS Summer Camp: Designing & Prototyping Smart Applications

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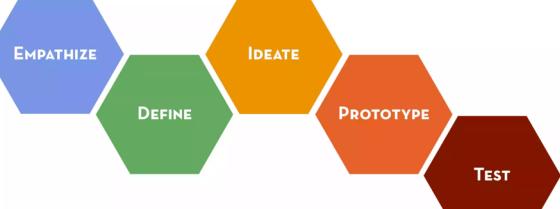
## Experience Prototyping

Prof. James A. Landay  
Computer Science Department  
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Summer 2018  
2018/07/17

\* slides marked Buxton are courtesy of Bill Buxton, from his talk "Why I Love the iPod, iPhone, Wii and Google", remix uk, 18-19 Sept. 2008, Brighton

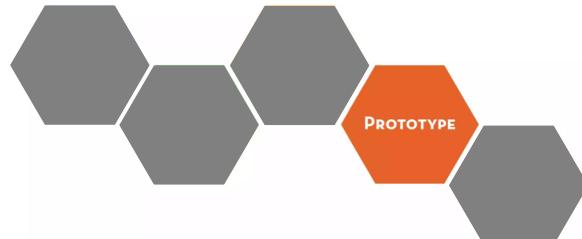
## Design Thinking



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to think



to learn



## TRY THE MARSHMALLOW TEST YOUR ASSUMPTIONS

In 18 minutes, build the tallest free-standing structure out of 20 sticks of spaghetti, 3 feet of tape, 3 feet of string, and one marshmallow. The marshmallow must be on top.



20 sticks of spaghetti + one yard tape + one yard string + one marshmallow

## TRY THE MARSHMALLOW TEST YOUR ASSUMPTIONS



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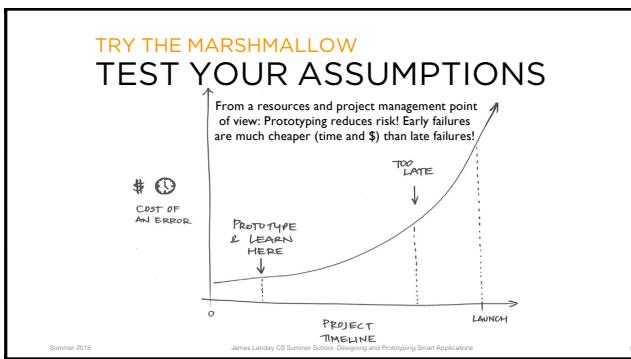
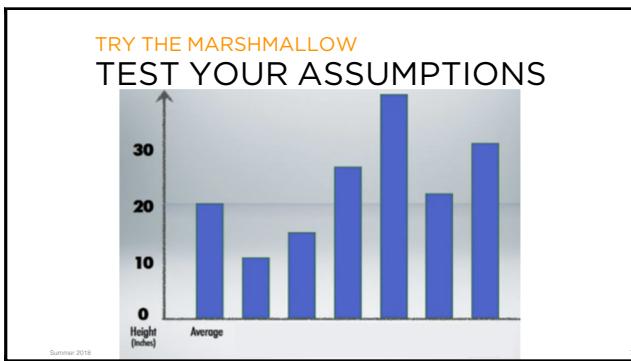
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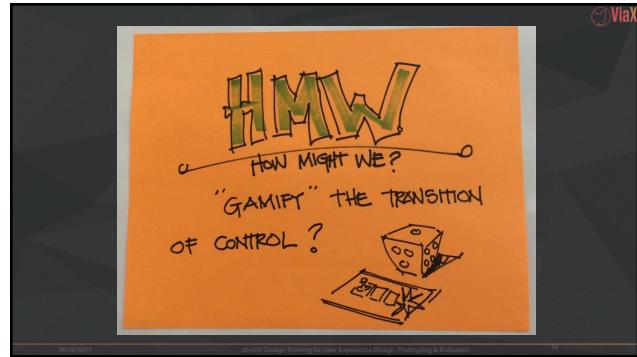
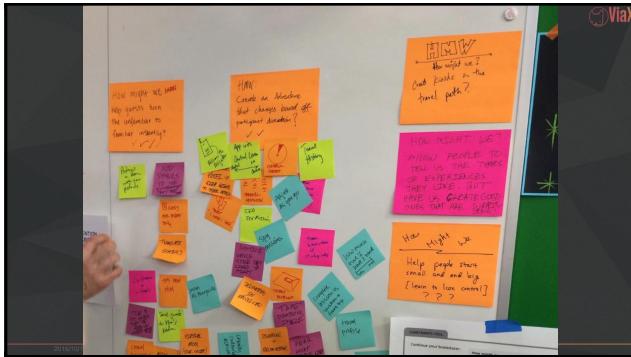
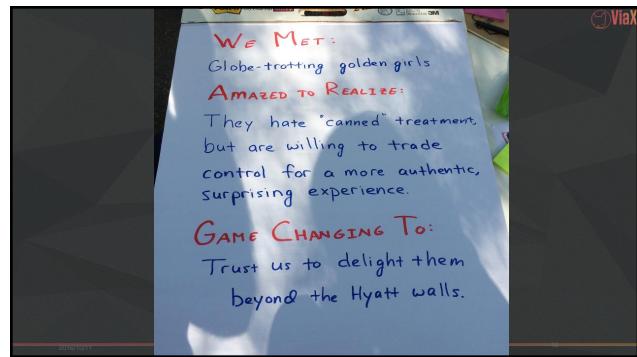
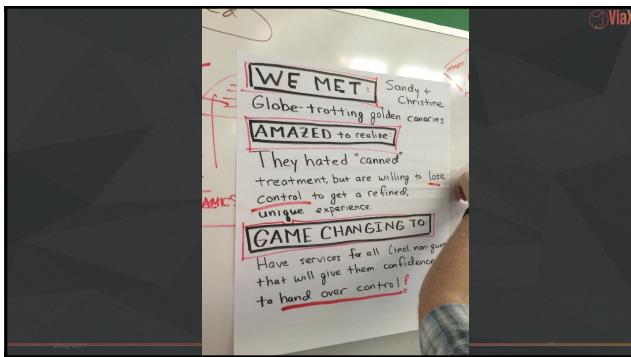
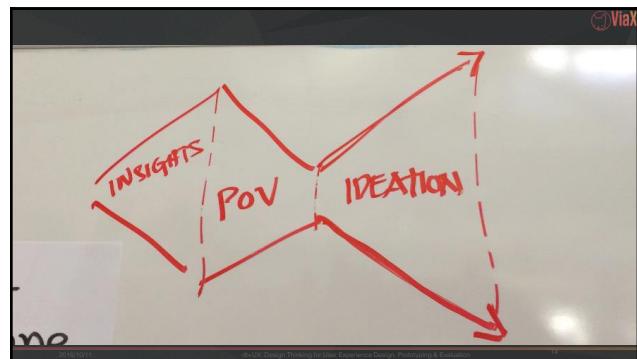
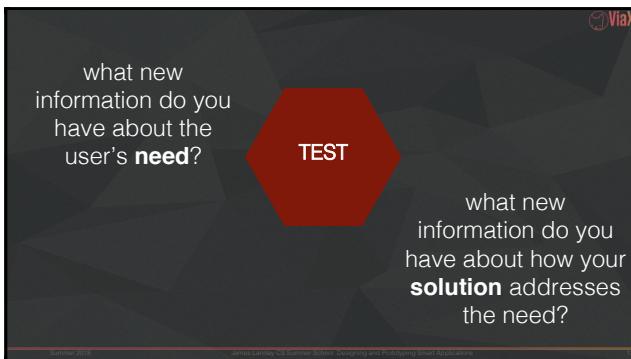
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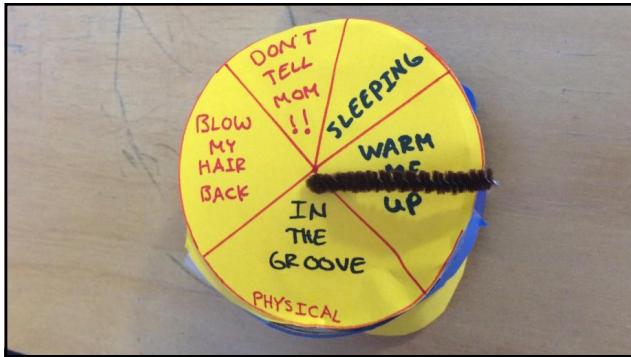
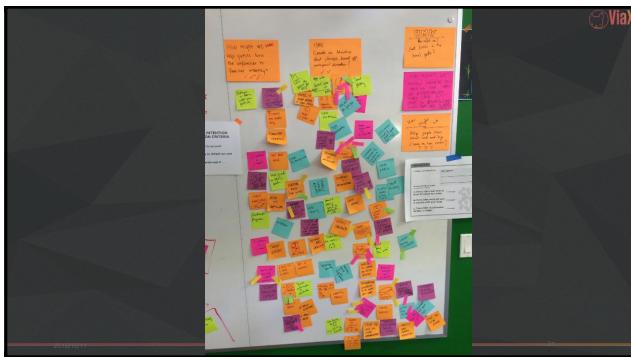
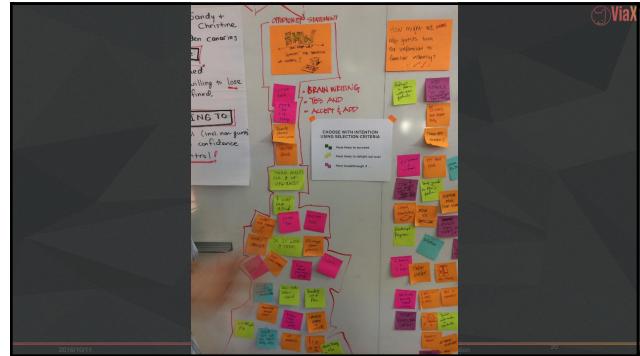
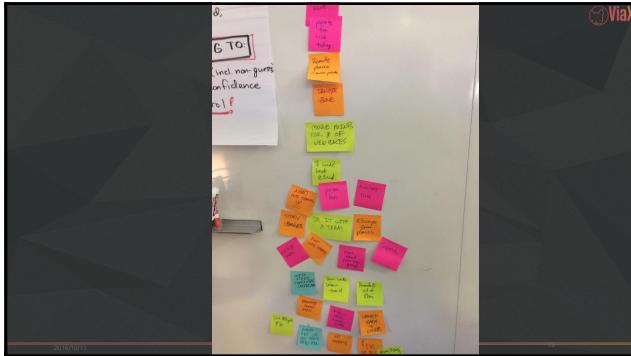
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**IMPROVISING TOOL**

How to improvise to bring an experience to life

**SET THE SCENE**  
Imagine yourselves in a specific location.  
(“Okay, we are at the \_\_\_\_\_ . . .”)

**DEFINE ROLES AND START PLAYING THEM**  
Just jump into what makes sense.  
(“I’m the \_\_\_\_\_ person and you are \_\_\_\_\_ . . .”)

**IMPROVISE TO DISCOVER**  
Build on each other’s ideas and keep the scene alive.  
Try out ideas by playing through them.

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**SCENE-PROPS-ROLES TOOL**

**SCENE**  
of the experience  
.....  
how do you make where  
you are feel like the  
your setting/context?

**PROPS**  
in the experience  
.....  
what are the rough  
versions of the physical  
things?

**ROLES**  
involved in experience  
.....  
what are the roles of those  
“creating” the experience?  
who are “receiving”  
the experience?  
(Give these roles for testing)

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**Parallel Experience Prototyping Goal**

• Prototype to **test an assumption**

• Prototype can be a **piece of idea** rather than a complete solution

• Think of it as a **needfinding** technique

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**Summary**

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Experience prototyping allows us to try many ideas quickly & learn more about the problem & solution space (*prototype to learn*)

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**Do It Now**

• Create/test experience prototypes for top 3 solutions

• Test each prototype with at least 1 target users

• Capture in 1 slide what you learned!

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