

Design starts with users

UXL | User Experience Lab

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Good design



Is it pretty icons?





Is it fancy buttons?



Nice colors?

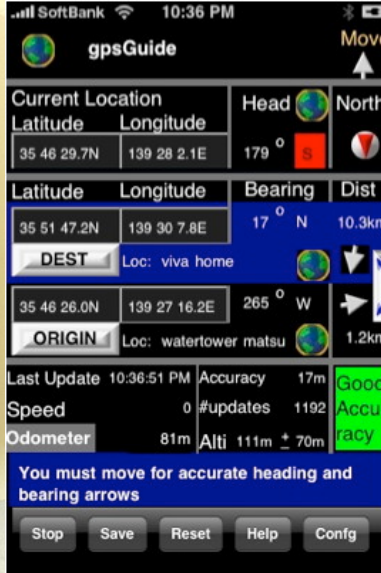
```
58 lineChange = res.indexOf('\n');
59 line = res.substr(0, lineChange);
60 res = res.substr(lineChange+1);
61 if (line!=''){
62     if ($('#lastmove')) Element.remove('lastmove');
63     if (line.indexOf(' ') == -1){
64         move_number++;
65         tr = Builder.node('tr',{id:'lastmove'});
66     }
67     else
68         tr = Builder.node('tr',{});
69     td = Builder.node('td',move_number+' '+line);
70     tr.appendChild(td);
71     $('#moves').appendChild(tr);
72 }
73 while (res.length != 0){
74     lineChange = res.indexOf('\n');
75     line = res.substr(0, lineChange);
76     if (lineChange+1 > res.length) res = '';
77     else res = res.substr(lineChange+1);
78     change(line);
79 }
80 }
81
82 function change(line){
83     var l = line.substr(0,1);
84     var c = line.substr(2,1);
85     var piece = line.substr(4,1);
86     var prefix = piece.toUpperCase()=='b'?'w':'b';
87     if (piece == '.') $('#square_'+l+'_'+c).innerHTML = '';
88     else {
89         $('#square_'+l+'_'+c).innerHTML = '';
91         if (g_player=='black' && prefix == 'b') new Draggable('piece_'+l+'_'+c,{});
92         if (g_player=='white' && prefix == 'w') new Draggable('piece_'+l+'_'+c,{});
93     }
94 }
95
96 function onTimer(gam_id, player){
97     new Ajax.Request('lastmove.php', {parameters:'game='+gam_id+'&player='+player, onSuccess:move}
```

Code?



**It's about your
users**

User-centered design (UCD) is a framework of processes in which the needs, wants, and limitations of end users of a product, service or process are given extensive attention at each stage of the design process. –*Wikipedia*



Why do we care?



Password cannot contain any dictionary words and it must meet the following criterias:

- ✓ Password must be 12 characters long
- ✓ At least 1 character must be alphabetical AND at least 1 character must be a digit OR a special character: ! # \$ %
- ✓ At least 6 characters must occur only once in a password
- ✓ Passwords cannot contain any string that is also contained in the username
- ✓ Passwords cannot contain any common strings such as a sequential series of letters (abcd) or a sequential series of numbers (1234) or pattern of numbers (2468)

Old Password:

New Password: ✓

Confirm New Password: ✓

Continue

Cancel



User-Centered Design Process

What do your users need?

Surveys, Interviews

Observe, Listen, Take notes, photos & videos

Analyze data, identify patterns

Current process

Challenges / Opportunities

Project Start

Product launch

Concept design

Detailed design

Is it good?

Is it usable?

Field test alpha release with actual users

Collect usage data and feedback

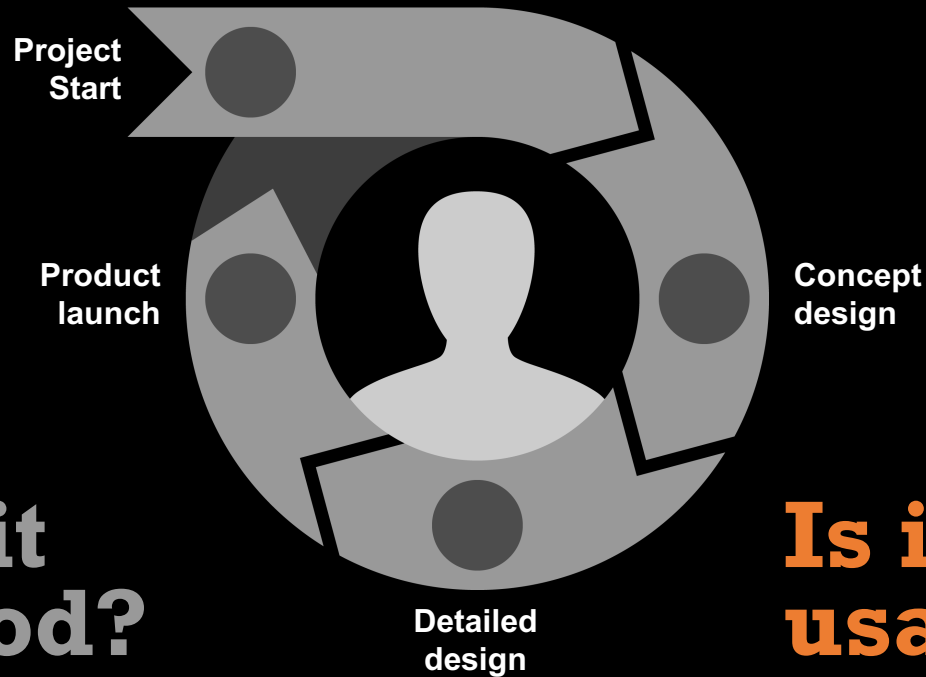
Correct usability defects

Collect ideas for future improvements

Sketch

Prototype

Test



Rapid prototyping

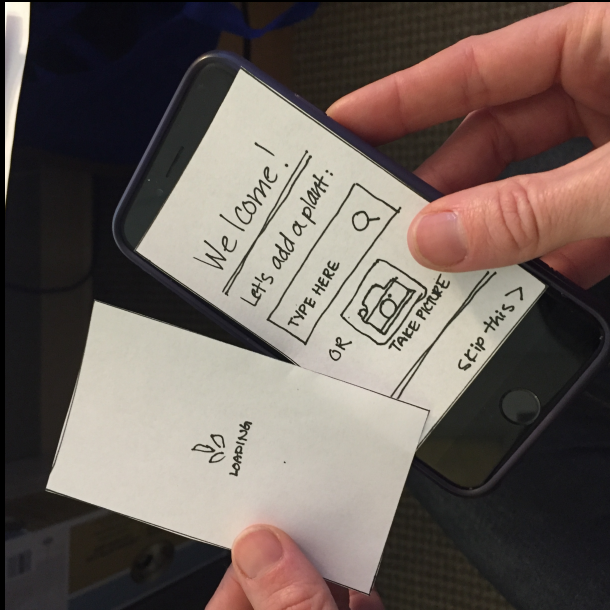
Test your designs in small parts, it's okay to test only one flow (e.g. login)

- Testing too much at once can be overwhelming to both users and testers

Quickly sketch your screens; Spend more time on iterating than on making things perfect

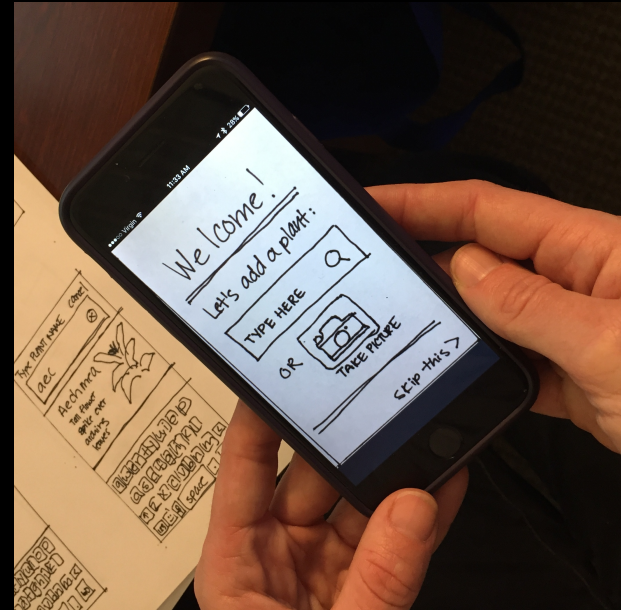
Increase the level of fidelity as your design evolves

1. Paper prototypes
2. Sketches assembled in low fidelity digital tool
3. Clickable wireframes (not shown here, using a free tool like Justinmind)



**Use your paper sketches
as the interface**

Or...



**Use a tool to test your
sketches on a device**

Testing your prototype

Test early, test often!

You don't have to test lots of people, there are few surprises after a few — 5 to 8

Find realistic participants

(Screen by age: **students**, gender: **M/F**, location: **n/a**, need/interest: **plant care**)

Prepare a script so you know what questions to ask, and you are consistent in your testing

Don't test for more than one hour

Takes notes, photos and/or video so you can refer back to the test in the future to analyze your data (*or use a tool like Marvel for video*)

Document your findings

- Prioritize what to keep in your product
- Things that need to be improved
- Write down ideas for future releases

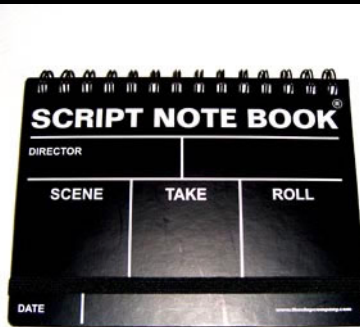
What you will need:



Prototype



Participants



Script



Note-taking materials



Be ready for the unexpected...

Sample Script– Introduction

Hi _____, my name is Julie and I am going to walk you through this session today.

Thank your for offering your time. We are asking people like you to try an iPhone application to help people better care for their house plants. We want to get your input to better understand **what is working well, and what is not working well** with this app. The session should take approximately **5 minutes**. If you need or want to stop at any time, that's ok. Just let me know.

Let me tell you how this will work: **I will ask you to do something** on this app and **I will observe how you do it. Please talk out loud as you perform these tasks**: say what you are looking at, what you are trying to do, what you are thinking about. This will be a big help to us.

I want you to know that **we are not testing you, we are testing the application**. There is no right or wrong way of using it. Also please **don't worry about hurting my feelings**. We want to improve this app and appreciate your honest feedback.

*If recording- If it's ok with you, **I would like to record this session** in case we need to refer to parts of this session in the future. No one else except for the people working on this app will have access to this recording. Is that ok?*

Ok, we are ready to start. Do you have any questions?

Sample Script– Test

☐ Give the participant the plant

You have brought this plant for your home. Tell me what you would normally do when you bring it home from the store?

How do you know that you have placed it in the best location to receive the right amount of light?

How do you know how often to water it?

This application is meant to help you take care of your plants.

☐ Give the participant the phone

Task	Sub-task	Pass / Fail	Usability rating (1= very hard, 5= very easy)
Set up this plant on the app			
	a) Add a plant (type, pic)	<div>PASS</div> <div>FAIL</div>	<div><div></div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div><div></div></div>
	b) Check light levels	<div>PASS</div> <div>FAIL</div>	<div><div></div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div><div></div></div>
	c) Set watering notifications	<div>PASS</div> <div>FAIL</div>	<div><div></div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div><div></div></div>

Findings

What did we observe?



UXL is a user experience and design firm focused on helping clients develop innovative and usable solutions to complex product user interface and information problems.

