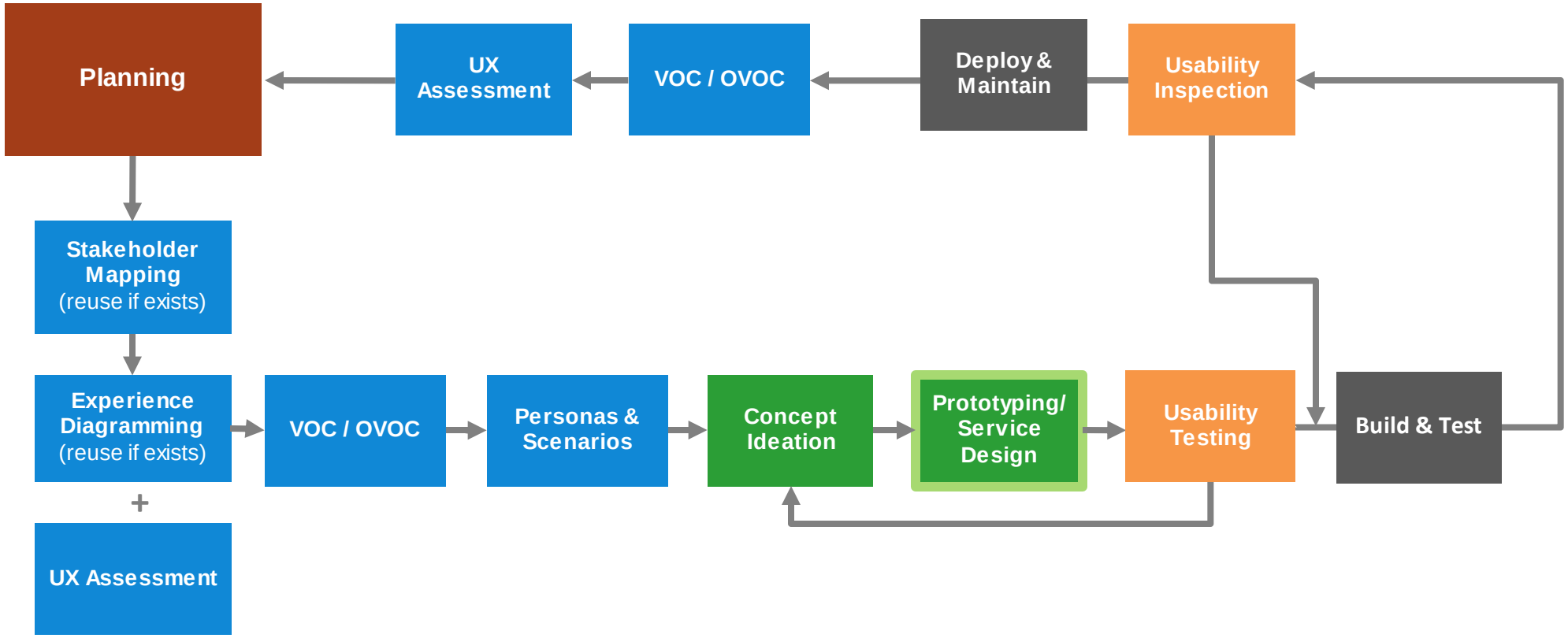
The IT HUE Process



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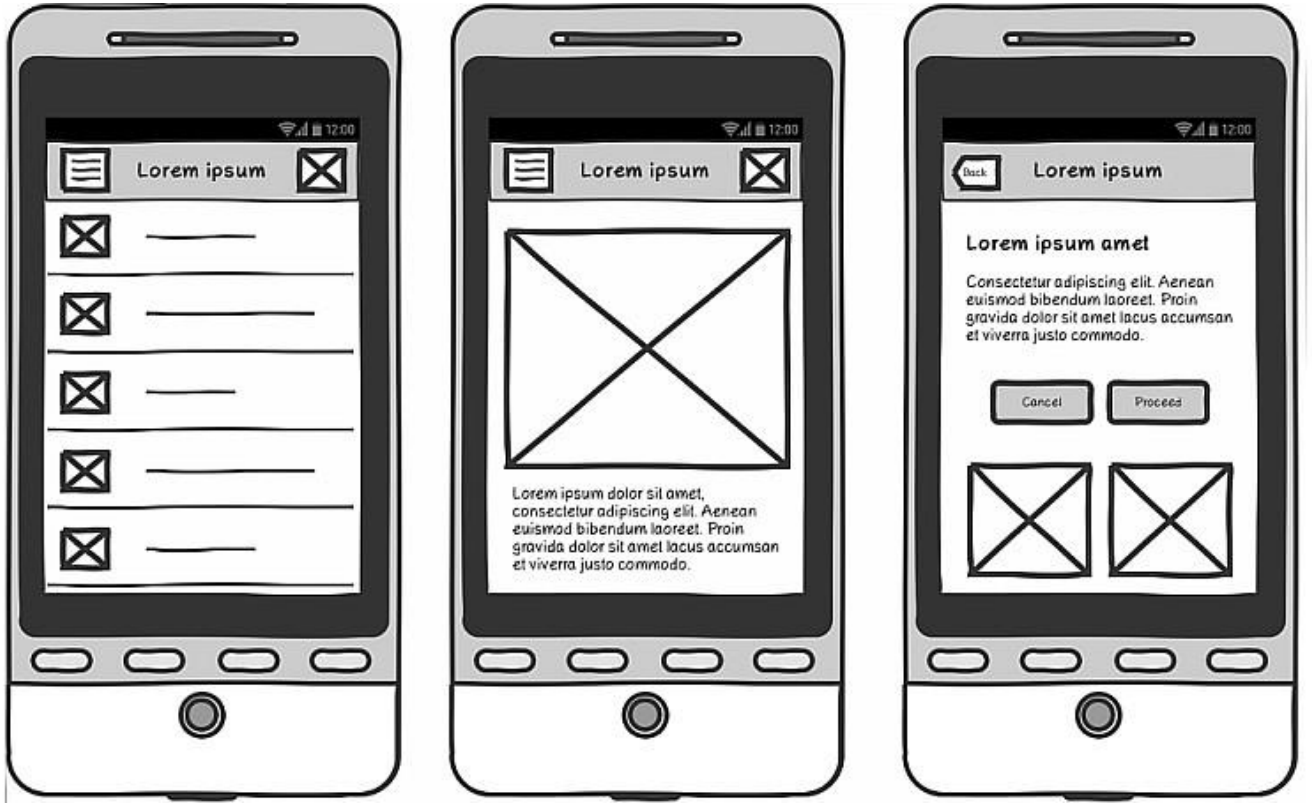
What is a Prototype?

- A working model of a new product or new version of an existing product.
- Made to understand and test.



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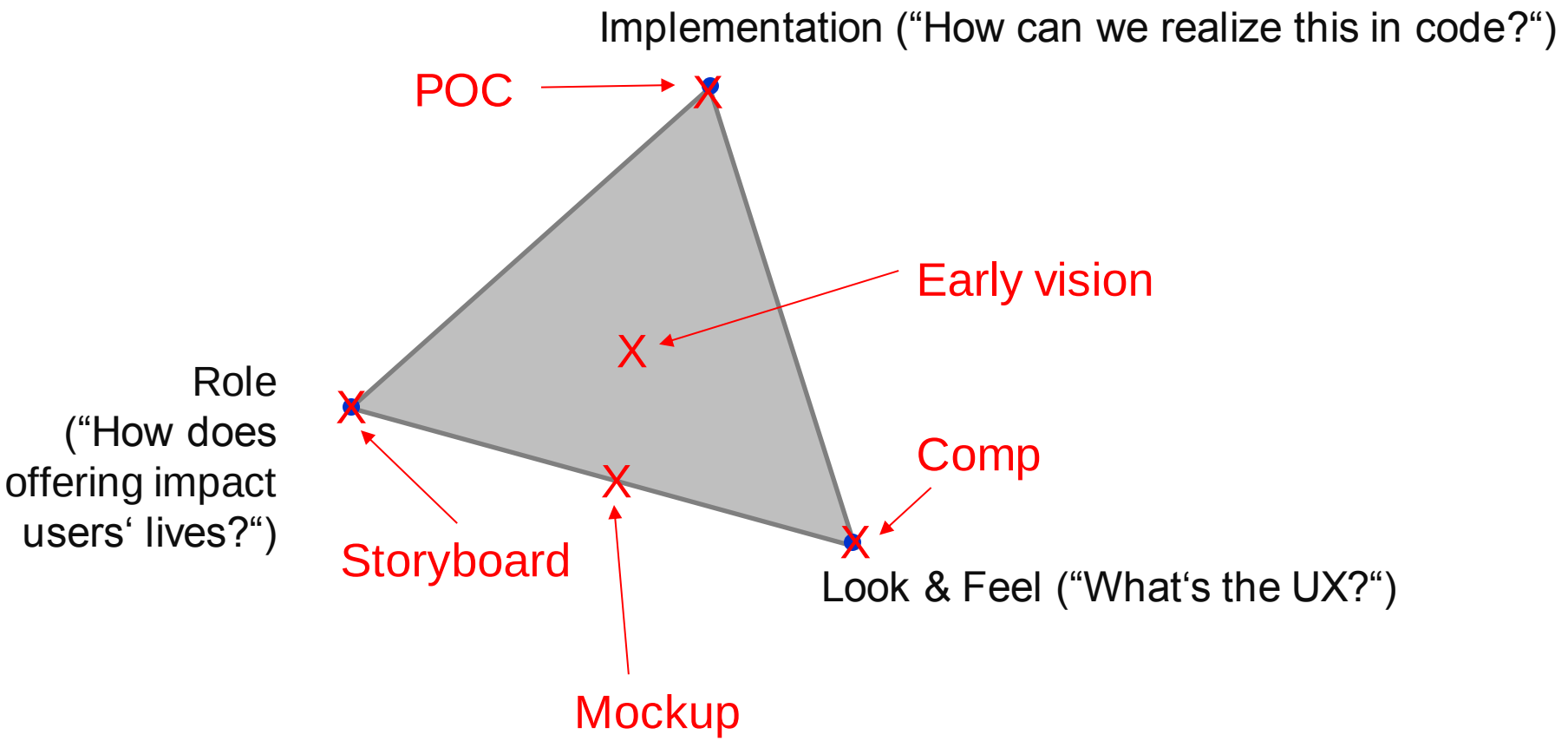
Scopes of Prototypes

What should it focus on?



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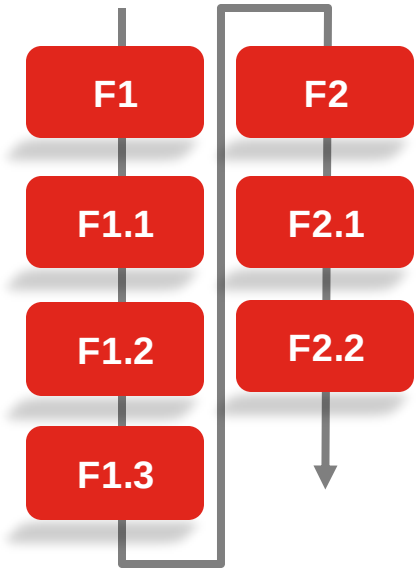
Scopes of Prototypes

How much detail should be covered?

Horizontal Prototype
Width first
→ Good for overview

Vertical Prototype
Depth first
--> Good for POCs



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Scopes of Prototypes

- Paper sketches
- Wireframes
- Clickthrough static screens
- Dynamic and interactive screens with hard-coded behavior
- Functional prototype on target platform

	Low-fi Prototype	Hi-fi Prototype
Cost and Time	Quick & dirty	Almost the real thing
Detail Richness	Low	High
Clarity for Test Users	Low	High
Closeness to Final Product	Low	High
Flexibility of Redesign	May be low (!)	May be high (!)
Effectiveness	**Medium**	**High**
Efficiency	**High**	**Low**

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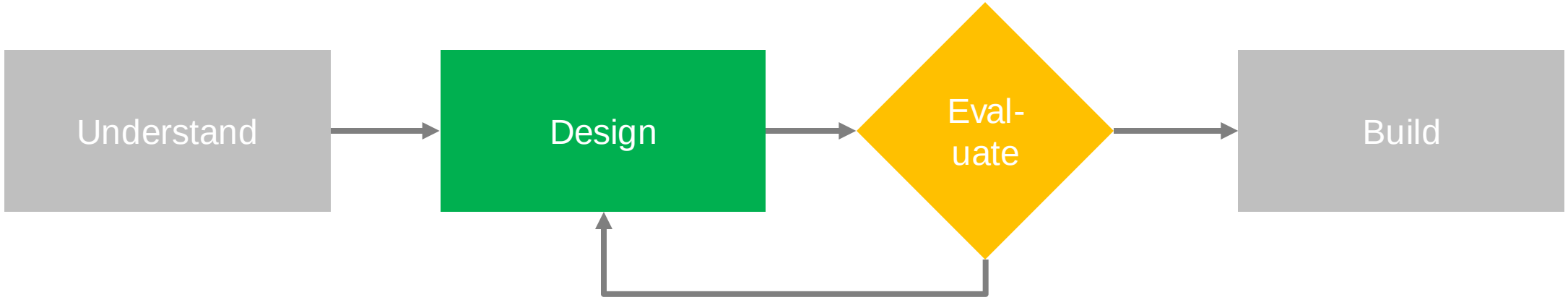
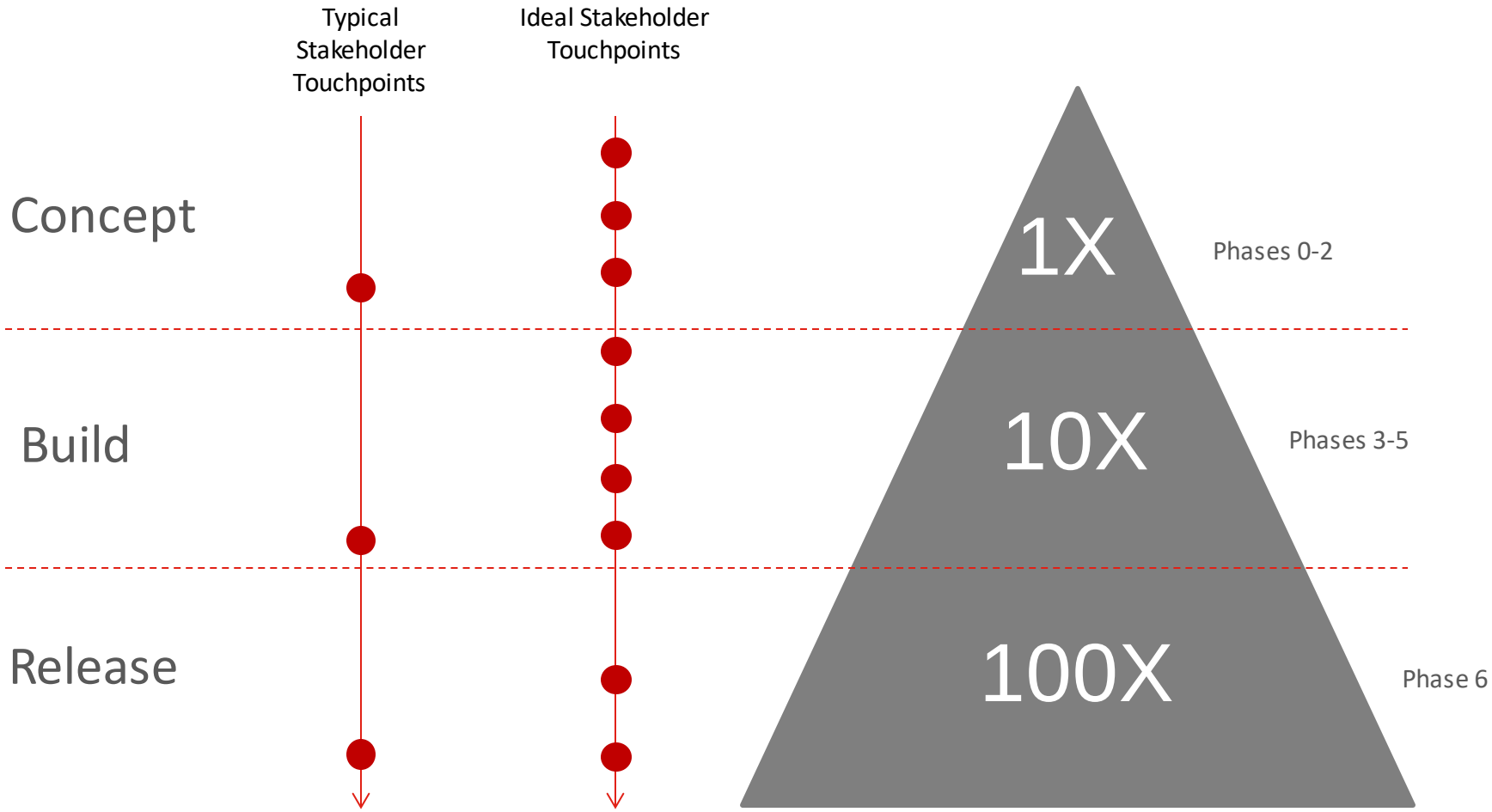
Iteration



Why iterate?



Reduced program risk through early stakeholder engagement

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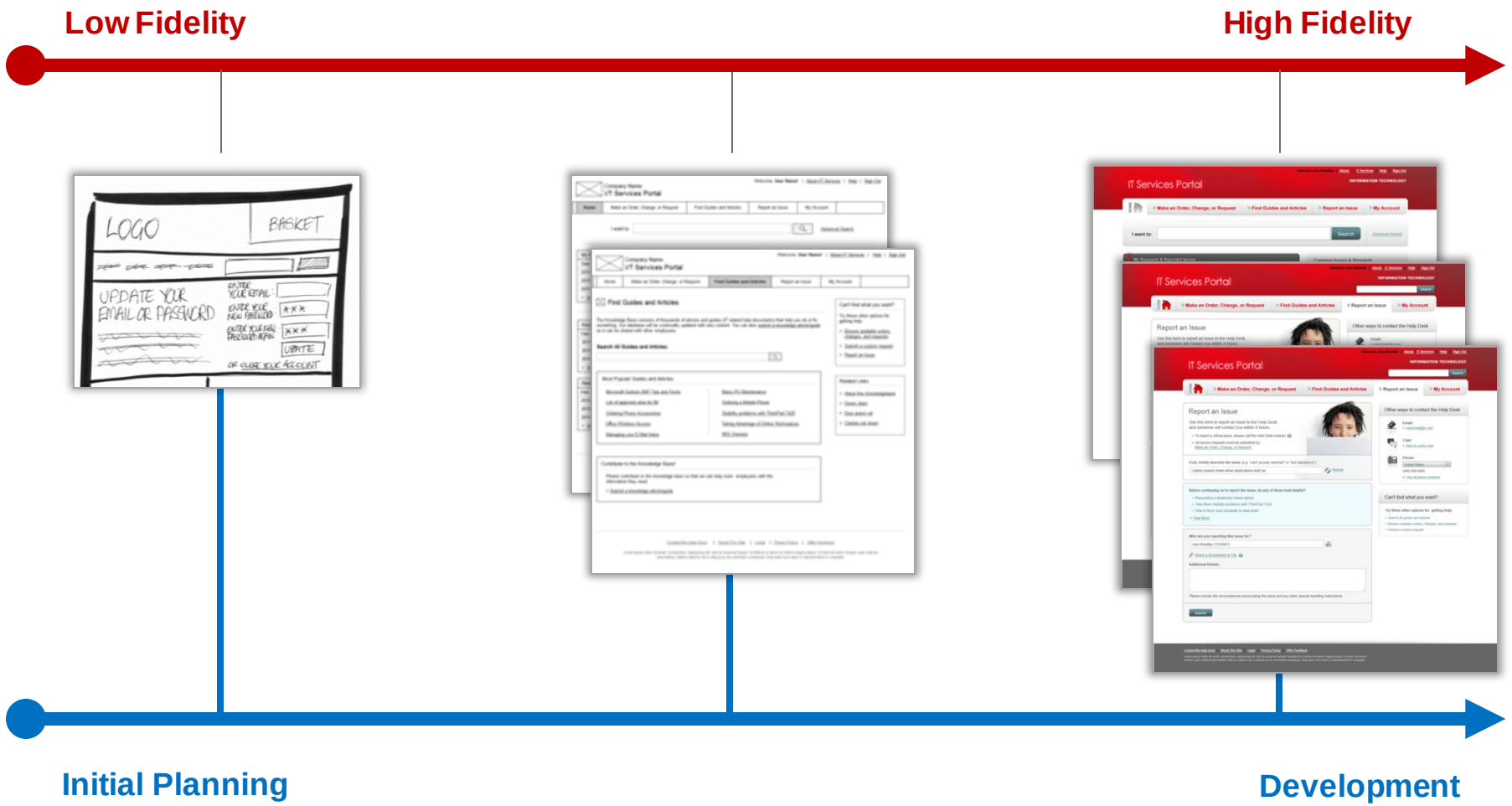
Iterative prototyping examples



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Iterative prototyping examples

	Sketch	2D	3D	+ CMF
TOOLS	•Paper & Pen •Quick e-sketching pad	•2D rendering tool: AI, CorelDraw, Photoshop, Sketching book Pro	•Simple/quick prototyping (paper board, sewing) •3D print, CNC, etc.	•Color Palette •Finishing sample •Material library
FUNCTION RESULTS	Sketch concepts	2D color rendering	ID 3D prototype (Rapid prototyping, 3D printer)	CMF Design
	Ideations brainstorming Concepts iteration	Refining specific concepts Color/shape iteration	Scale/Volume/shape confirmations Function iteration	Decide Color, material and Finishing of product

Low Effort — High Effort

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Paper Prototyping

What is a paper prototype?

- Low barrier to create, applicable in workshops
- No real interactivity, state changes have to be simulated
- Best suited for low-complex scenarios

→ Helps make ideas tangible without the use of software

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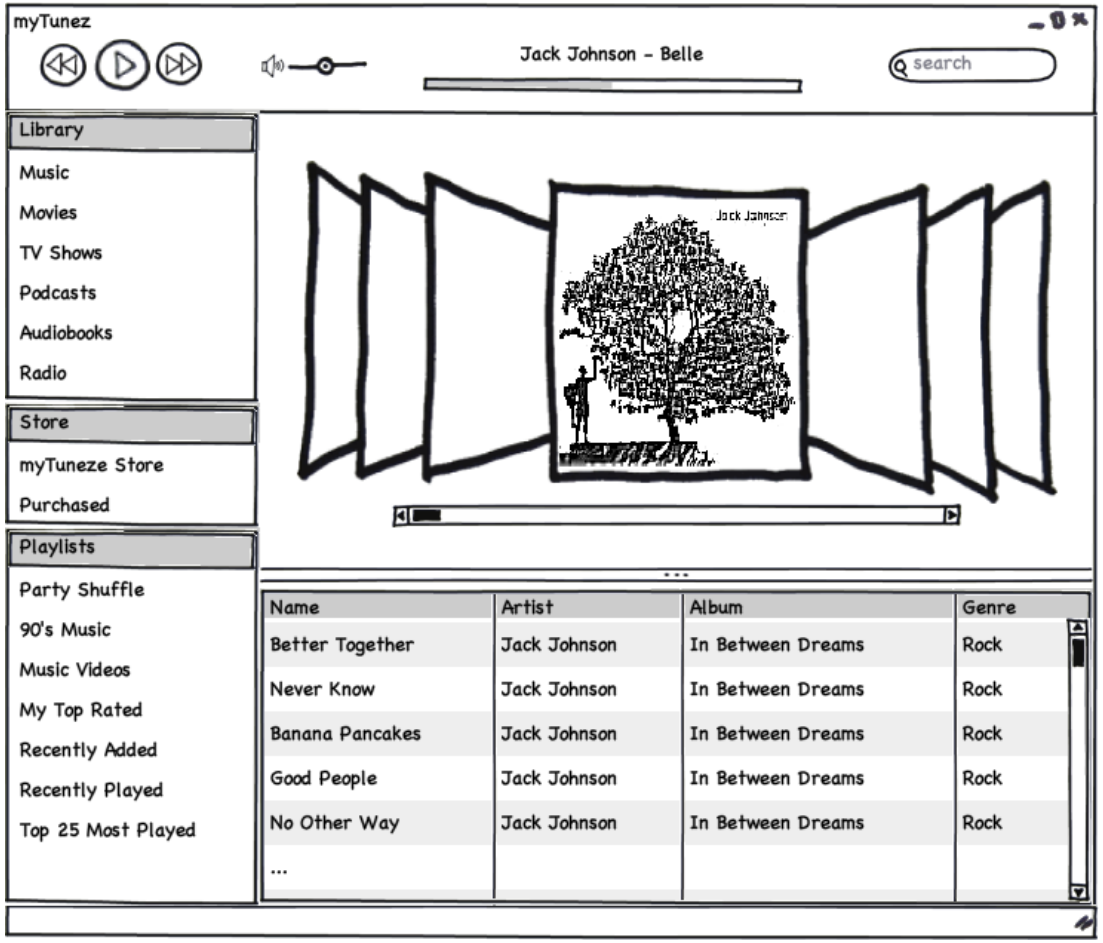
Wireframing

What is a wireframe?

- A grayscale drawing of a UI that represents layout, principal content and functionality
- Does not contain styling
- Similar to the way blueprints show a house without interior design
- Could have minimal clickability, making it a prototype

→ Skeleton version of a digital product



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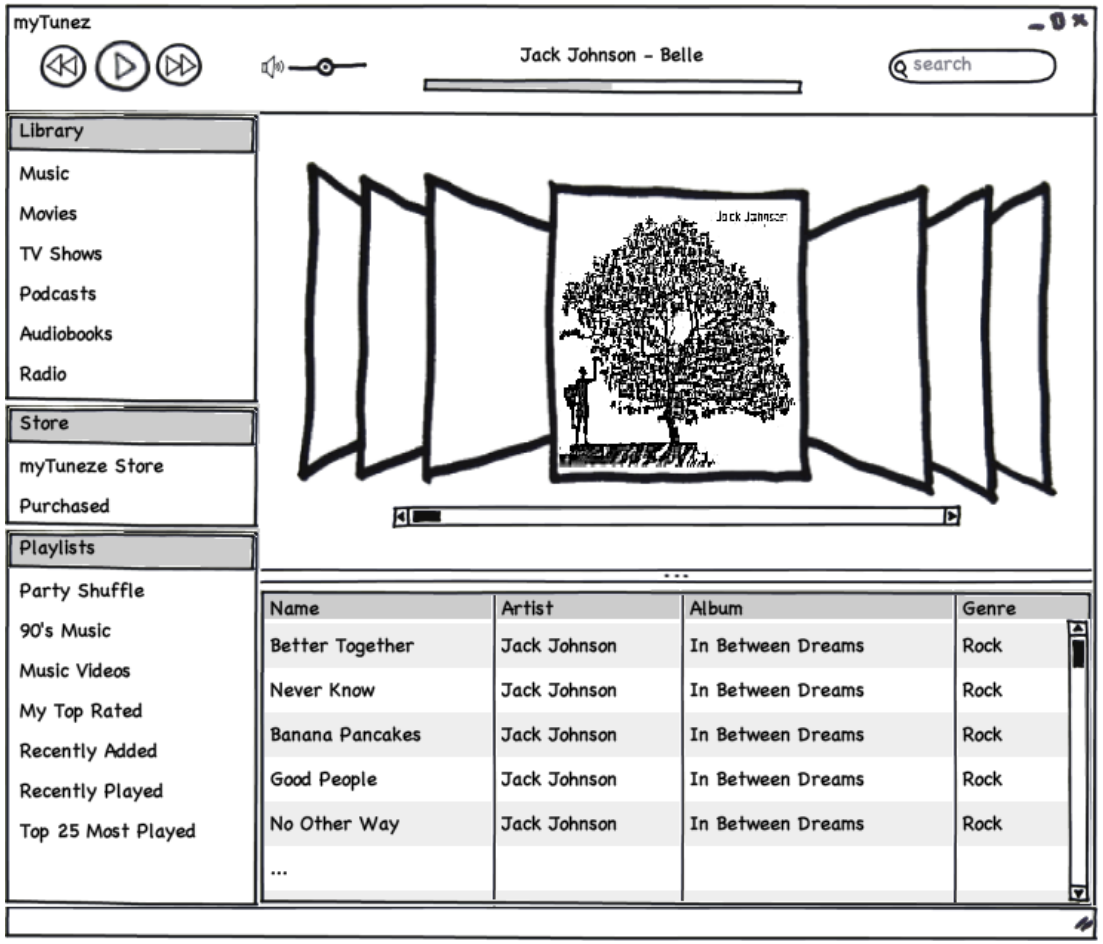
Wireframing

Why wireframing?

- More detail than a sketch → helpful for SMEs and users to understand the design intent
- Less detail than running code → cost-efficiency



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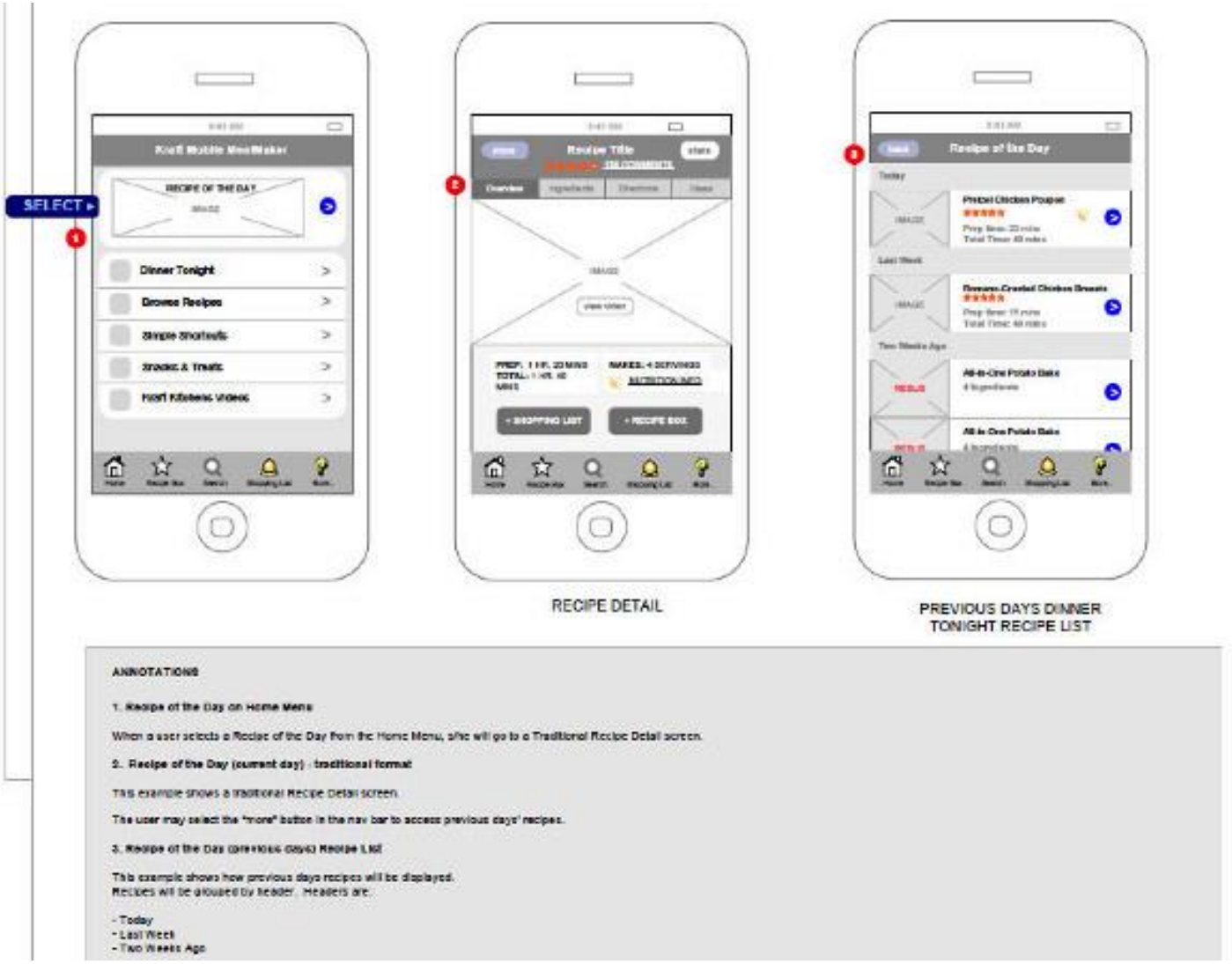
Annotated Wireframes

- Wireframes plus explanation text
- Good to convey dynamic behaviors/transitions/state changes
- Similar to a specification, but not as detailed



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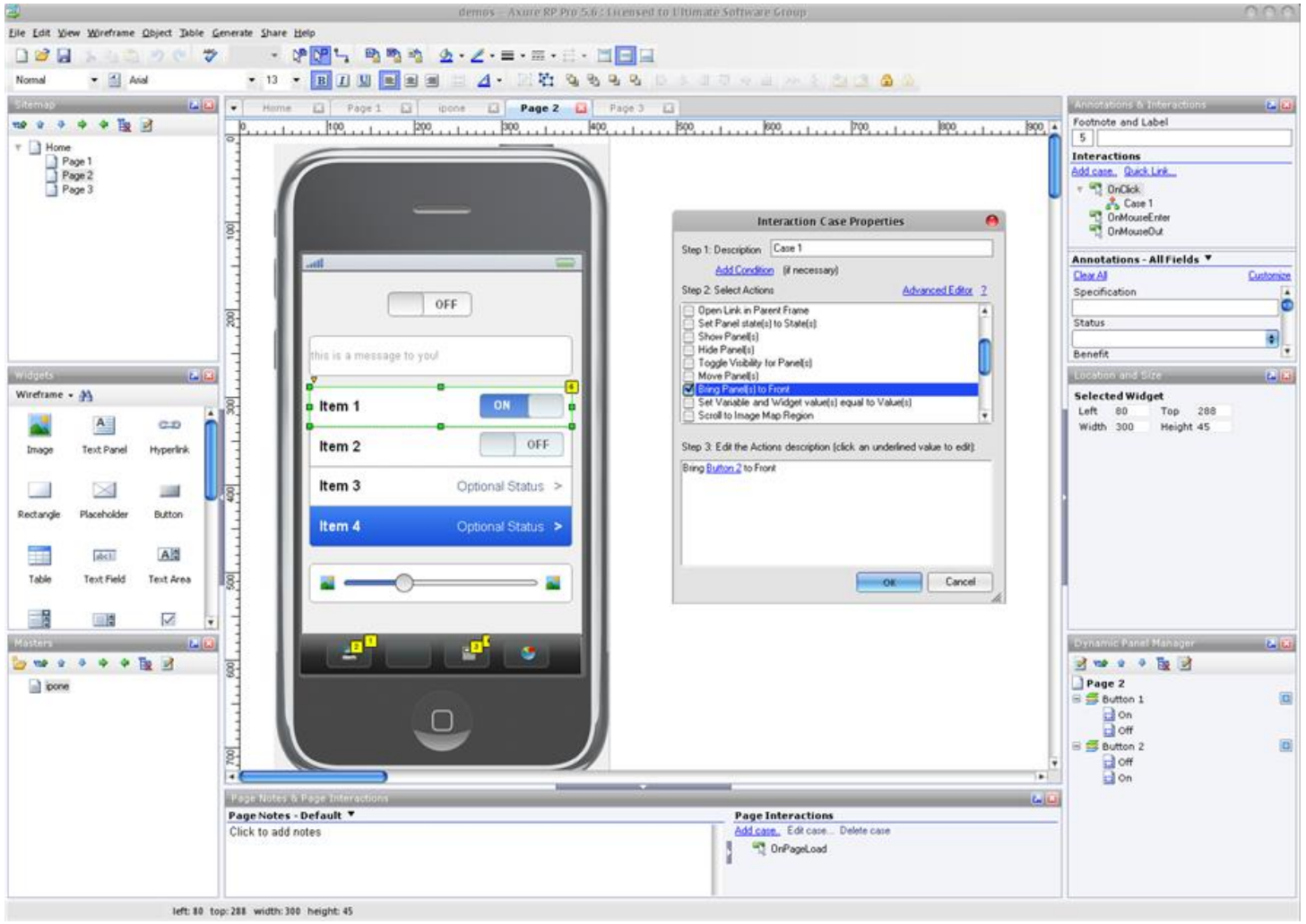
Experience Prototypes

- Simulated actual interactivity and contents, providing almost realistic user experience
- Not complete coverage of all possible navigation paths (→ links to empty pages)
- Done with prototyping tools like Axure, Balsamiq
- May or may not be styled
- Code reusability not a primary concern



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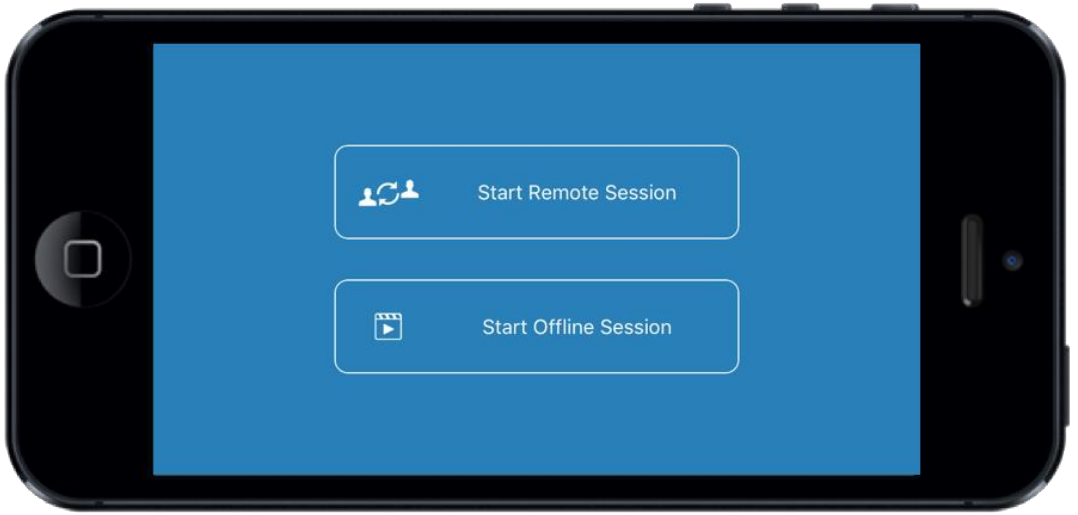
Dynamic Functional prototype on target platform

- Can be proof of concept, alpha-version
- Code-reusability



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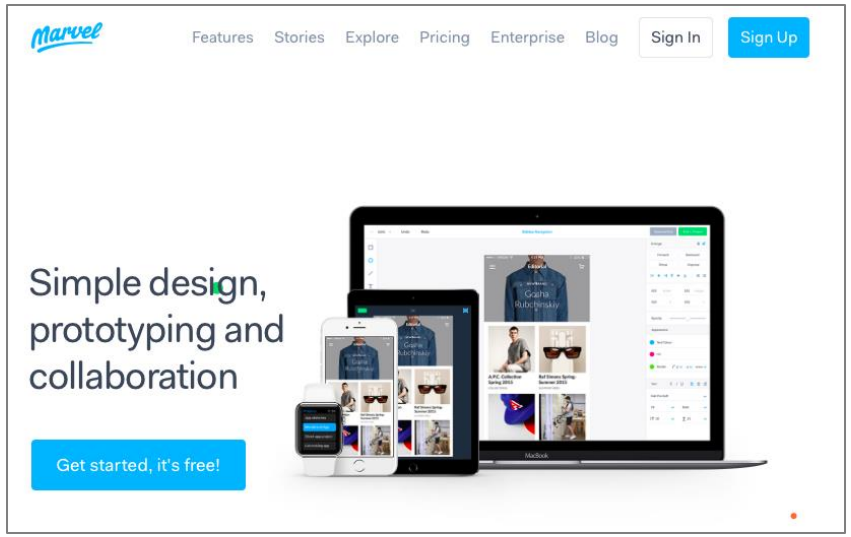
ACTIVITY: Prototyping

Scenario

You are on the project team that has the charter to come up with a smartphone version of our corporate Childcare Viewing site.

Instructions

- Consider what you want to exemplify and what to learn from the prototype
- Based on the knowledge gained from the previous activities, select a task scenario to be covered with the prototype
- Using the Marvel Prototyping application to mock up the concept. (https://marvelapp.com)
- Simulate only as much functionality as needed for the scenario
- Include authentic content
- Indicate areas of the prototype that are incomplete



Time: 20 minutes

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Iterative Prototyping Steps

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Iterative Prototyping Steps Overview

Make	1	Create Prototype	Use a prototyping tool like Axure/Marvel to display how different interactive elements will behave on user interaction.
Improve	2	Low Fidelity	Identify key ideas coming out of the idea generating discussion by using a difficulty-important matrix to prioritize ideas.
	3	Finalize DLS compliant ver.	Identify features belonging to target and strategic quadrant and visualize the solutions using rough wireframes.
Share	7	Store & Share	Store report as project artefact on project share drive

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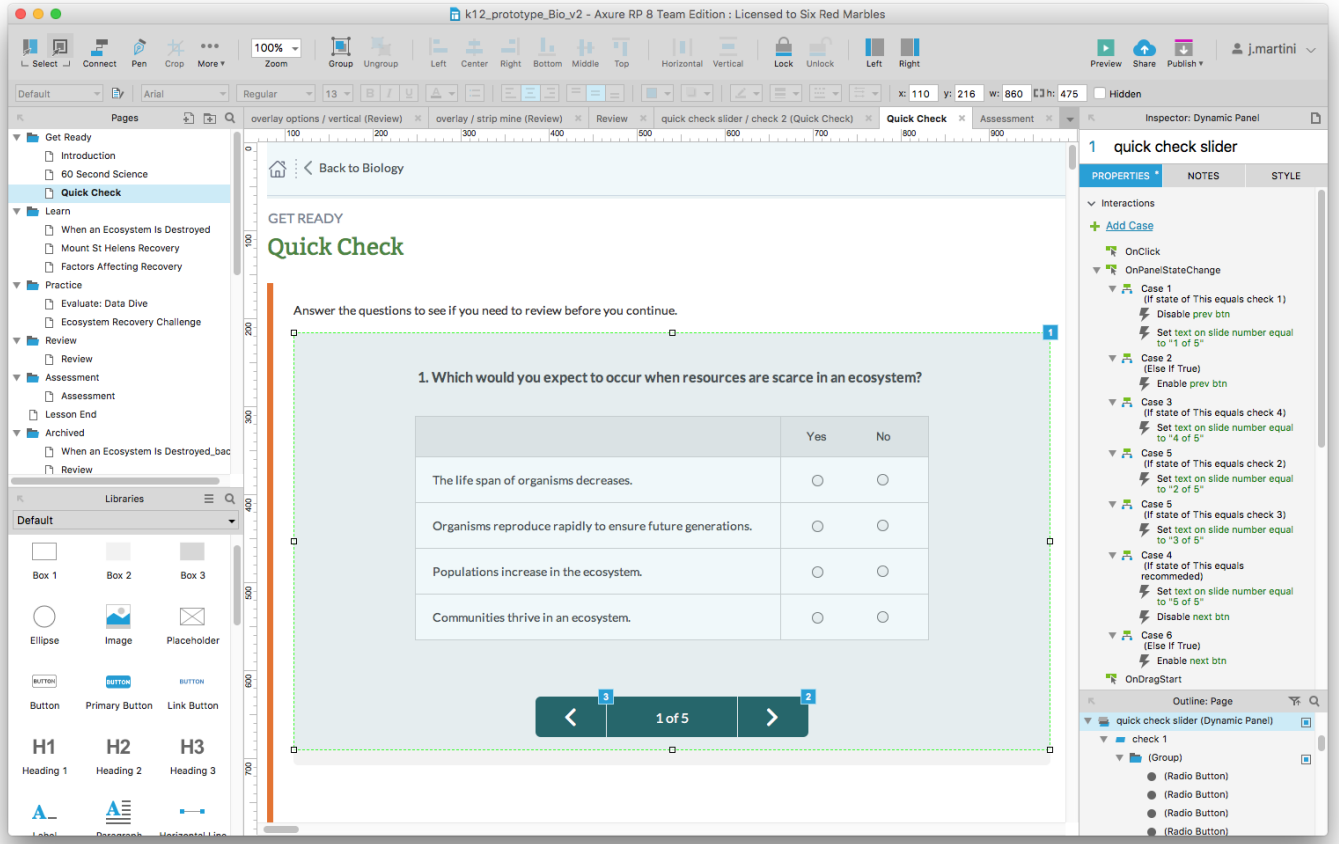
Step 1: Create Prototype in a Design Tool

- Based on the already made wireframes, use a prototyping tool like Axure/Marvel to display how different interactive elements will behave on user interaction.

- Prototypes at an early stage can connect wireframes to test with users in usability testing or heuristic evaluation.



Refer to “Concept Ideation” training for wireframing steps.

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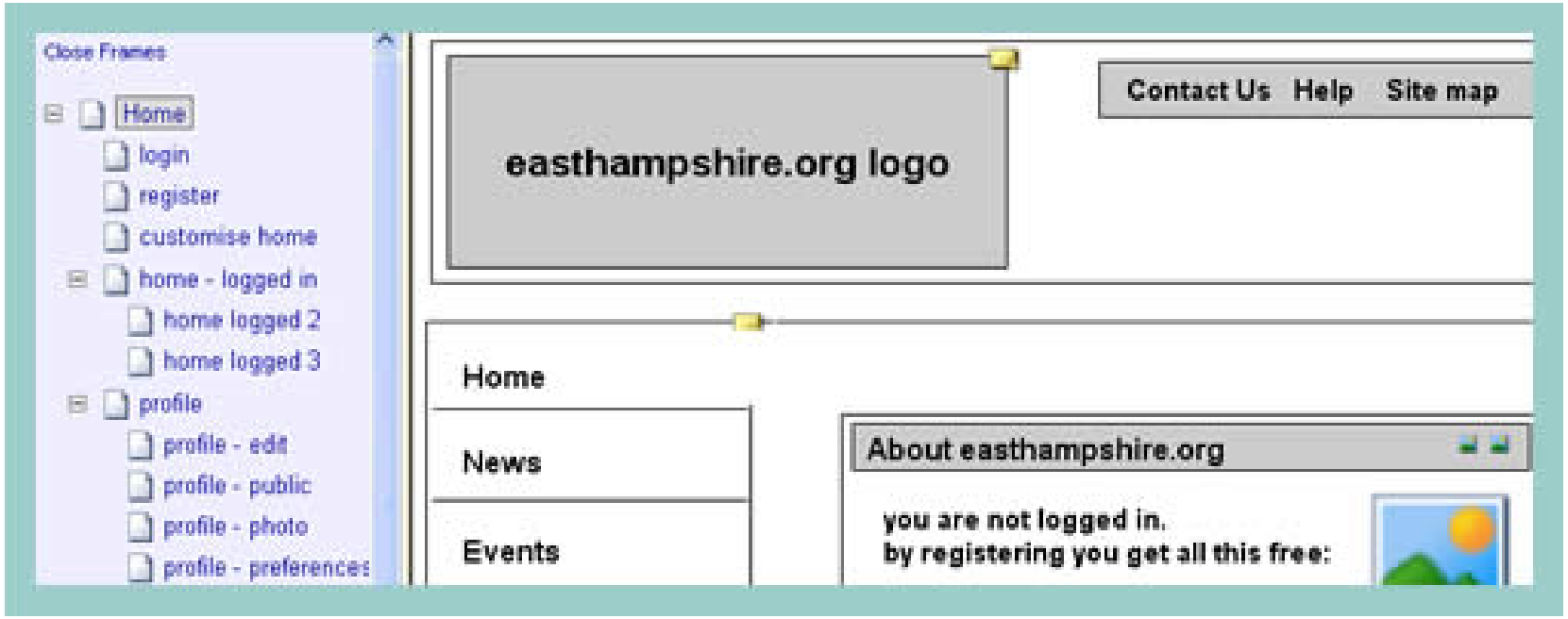
Step 2: Make it a Low-Fidelity Wireframe

A low fidelity prototype helps you to gather feedback from stake-holders and end users early in the design process, make changes quickly, and improve your initial designs.



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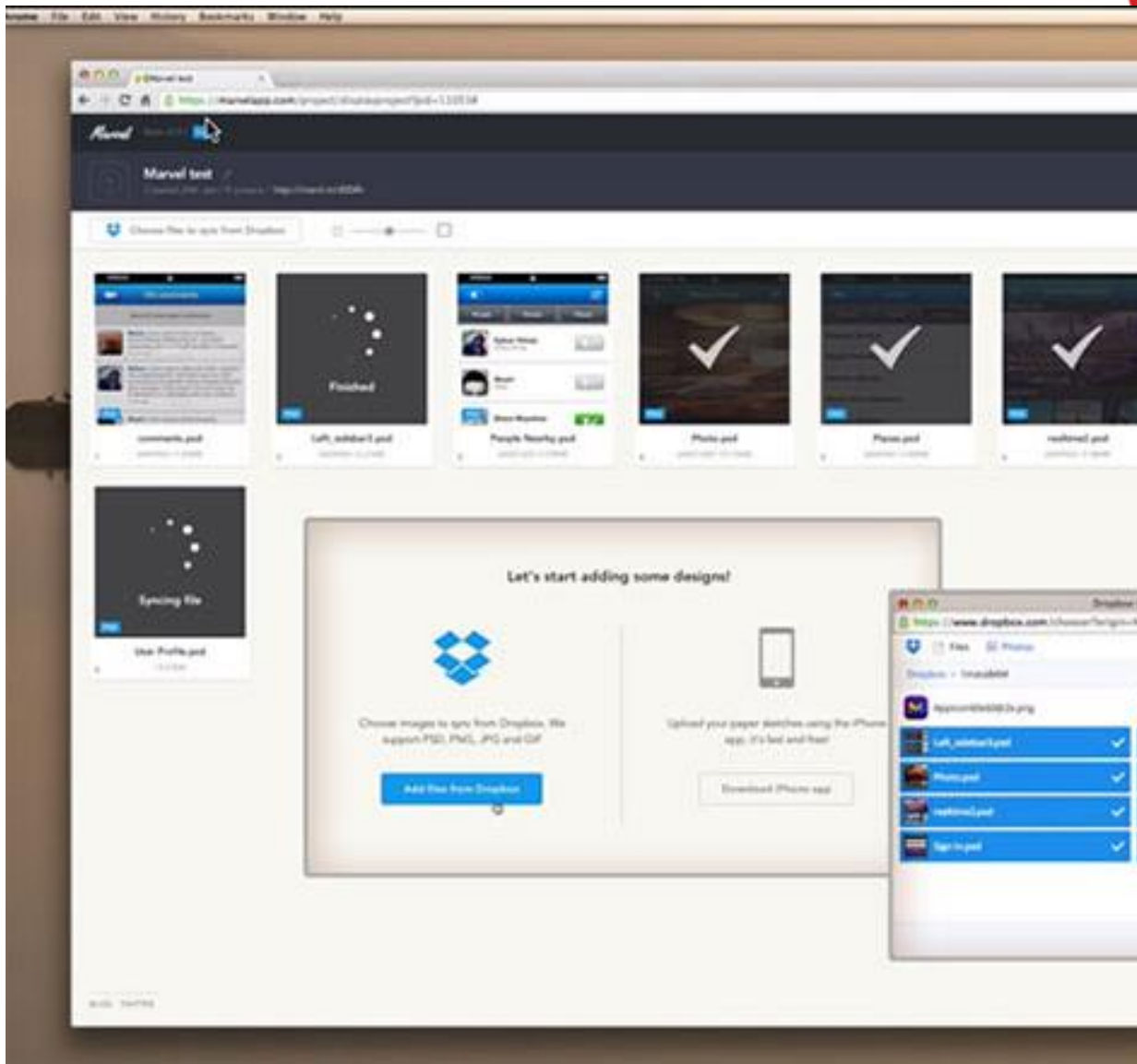
Step 3: Finalize DLS Compliant Version

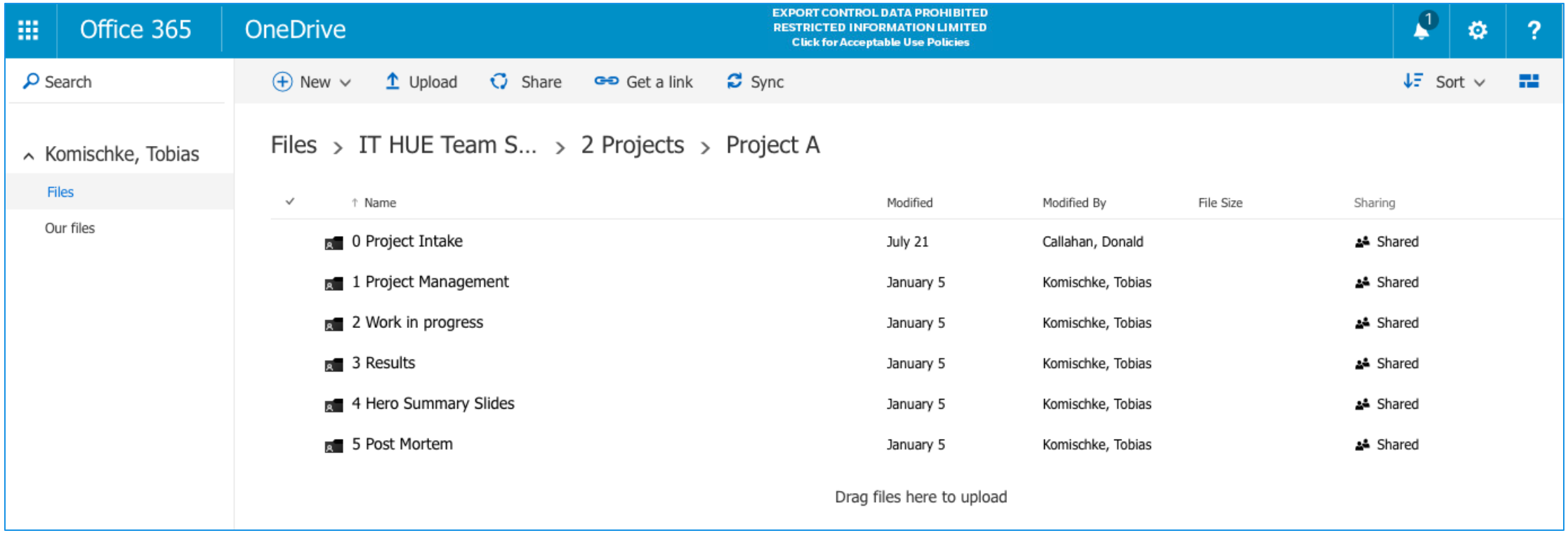
- Use finalized designs with DLS (Design Language System) treatment applied visually to create high fidelity prototypes.

- Use this to get final stakeholder approval and end user feedback and communication to developers to convey design thought process



Step 4: Store and Share

- Store prototype as project artifact on a shared location, e.g. AxShare, MarvelShare



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And then what?

- Prototypes are created to make ideas and concepts tangible

- Use them to validate your assumptions on role, implementation, look & feel
  - Show to stakeholders and
  - Do usability testing with target users

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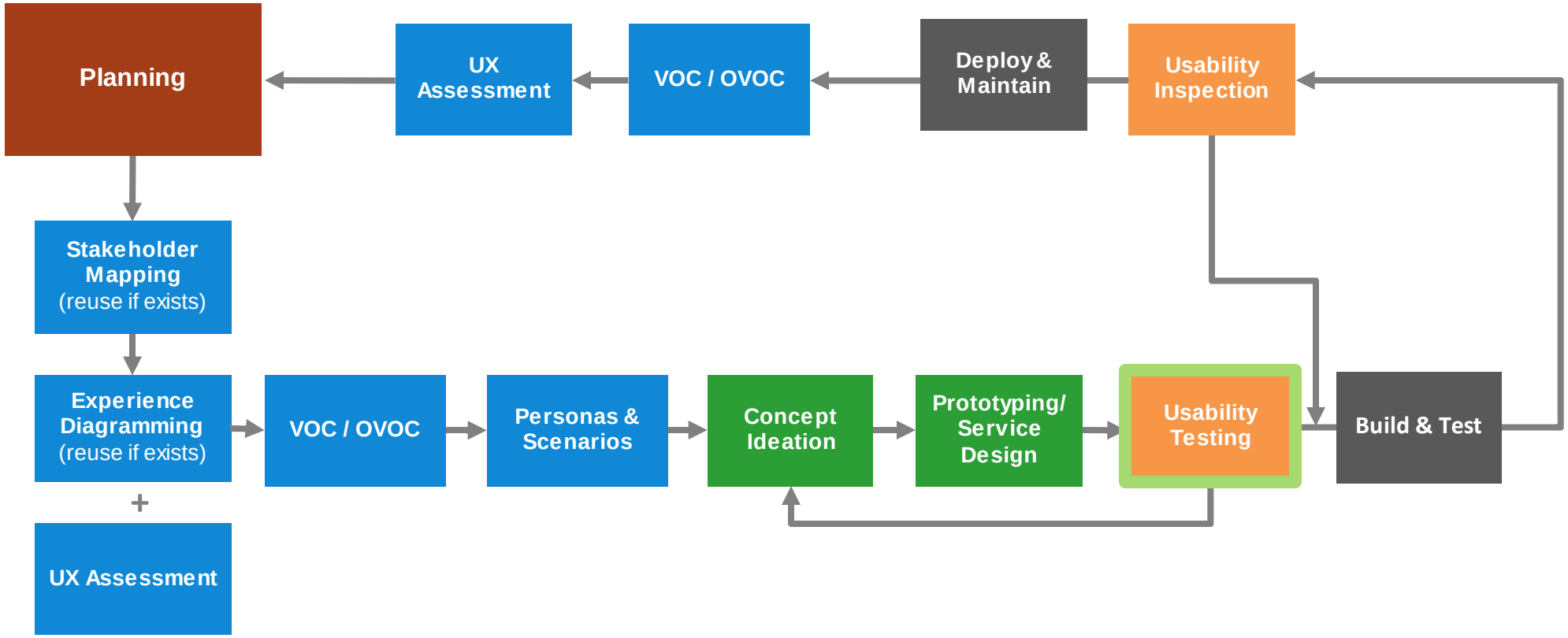
Next Steps



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Feedback

- Have your expectations been satisfied?
- What did you like?
- What can we do better?

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The End

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