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UX Awareness and Process

Be a Disruptor

All the companies to the right are touted as digital disruptors. Another thing they have in common is their powerful use of design as cited by Forrester. Not only do they have strong visual identity but with every one of their products they take particular care with the user experience. Along side of the innovative technology and great ideas that lie at their foundation, their success is largely due to how easy their products are to use, how they make us feel, and the sense of accomplishment they give us. And all of those attributes are thanks to the care and consideration given to their UX.

You may have also noticed that all of the companies primarily are customer facing. So how is UX relevant for internal applications? Numerous industry studies have stated that every dollar spent on UX brings in between $2 and $100 dollars in return. This increase in ROI can be found in various elements:

✔ Increase productivity

✔ Increase customer retention & loyalty

✔ Increase competitive advantage

✔ Decrease learning curve / costs

Are UX and UI the same?

On numerous occasions I have heard the terms UX and UI get used interchangeable. But as the graphic to the right illustrates, UI Design is just the tip of the ice-berg. Although the UI is what we see the UX is why we see it the way we do.

Here is a break down of all of these terms and how they relate to each other:
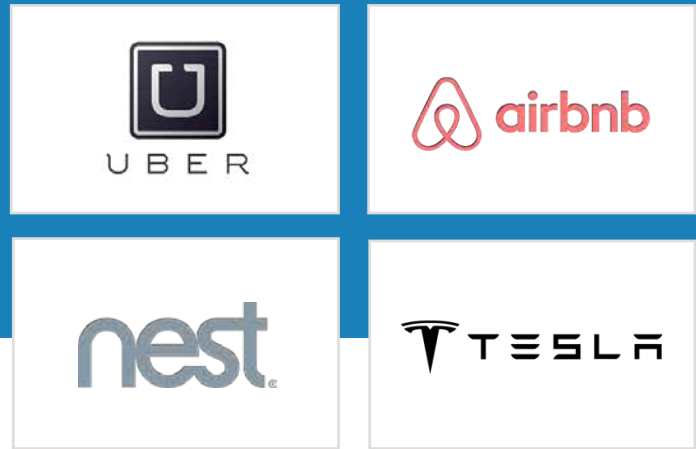
Styling
Individual elements of an applications theme, edited with css

Theming
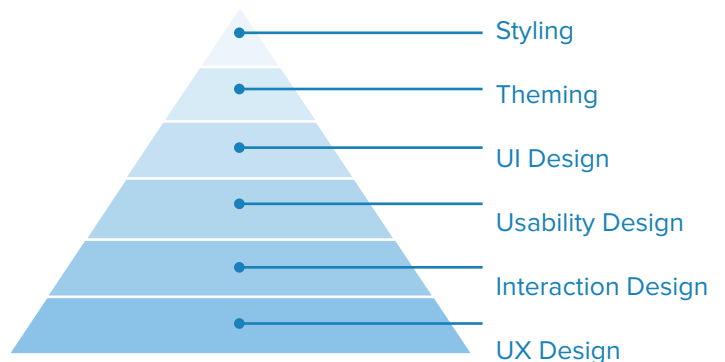A brand's visual identity translated to an app

UI Design
Placement and creation of interface elements on every page

Usability Design
Methods for improving an apps accessibility and ease-of-use

Interaction Design
The structure and behavior of elements in an app through user flows and user objectives

UX Design
Sum of all the elements above with the addition of the actual emotional experience of the user

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UX Terminology & Process

Now that we understand the component elements that make up User Experience, lets explore the steps we need to take to apply UX to a Mendix application in conjunction with Agile.

Prior to the first sprint the Product Owner should consult a UX developer to define 4 main aspects of the Application:

1. **User Groups:** general demographic, technical affluence, jargon specifications

2. **User Objectives:** what are the user's trying to do

3. **User Friction:** how easy is it to complete an objective

4. **Device:** does it need to be responsive, or do different tasks on different screens

User Flows
With these 4 elements above defined the next piece of the puzzle is to map out the user flows. User flows help match user objectives to business goals. They are key to defining the functions of an application through the lens of the end user. These can be done by hand boarding or with tools like Google drawing.

Site Map & Epics
After the key functionality has been mapped out it should be clear as to what pages need to be built, how they connect and the navigation necessary. This is formalized into a site map and Epics to serve as a guide and checklist for business and developers.

Wire frames
At Mendix we use 3 different methods to create and refine user flows and site maps, all of which fall under the term, wire framing.

1. **Low Fidelity:** Rough sketches used to define basic UI design. Prioritized functionality list for each page.

2. **High Fidelity:** Gray scale comps promote quick iterations. They help to refine targeted functionality. Refine the layout for the content within the apps pages.

3. **High Fidelity:** All brand elements, colors, typography, and style are combined to create the overall visual presence of the application. Limit to 2-3 screens to serve as a guide for theming.

Depending on the complexity of your application not all of these steps need to be taken. However every application should at least have low-fidelity wire frames so there is a basic understanding of how functionality should be laid out.

Theme Creation and Styling
After low-fi wire frames have been created and development begins UX continues with either medium and/or high fidelity wire frames if necessary. Styling and defining the theme is completed with css, and working on the layouts within the modeler.

Design QA
To ensure the end-user is being considered as new functionality is added through out the iterative Agile process, a QA session is held with every sprint review. Design Quality Assurance consists of reviewing every user interaction in the app to ensure for consistency.

Usability Testing
After every version of an application is released a round of usability testing should be completed. The goal of this testing is to have a cross section of actual users accomplish tasks in the application without being given a tutorial prior. Based on the collective results we can gauge how intuitive the application is for the end user, and what elements and functionality need to be added or refined in the next version of the application.