

# Introduction to User Experience (UX) and Design Thinking

By Jamie Hirst

# Outline

- ▶ What is UX
  - ▶ Why is it Important?
  - ▶ The UX Design Process
  - ▶ Design Thinking
  - ▶ UX and Agile
- 

# Activity: What do you think UX is?

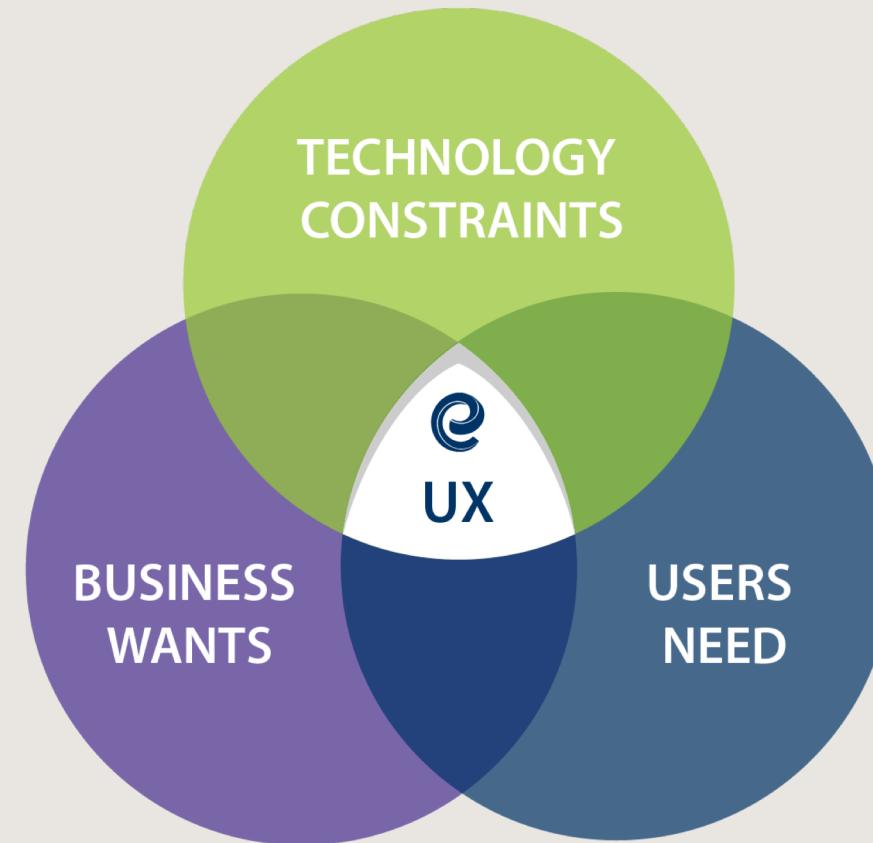
Spend a few minutes brainstorming and jotting down all the ideas that come to mind

# What is UX?

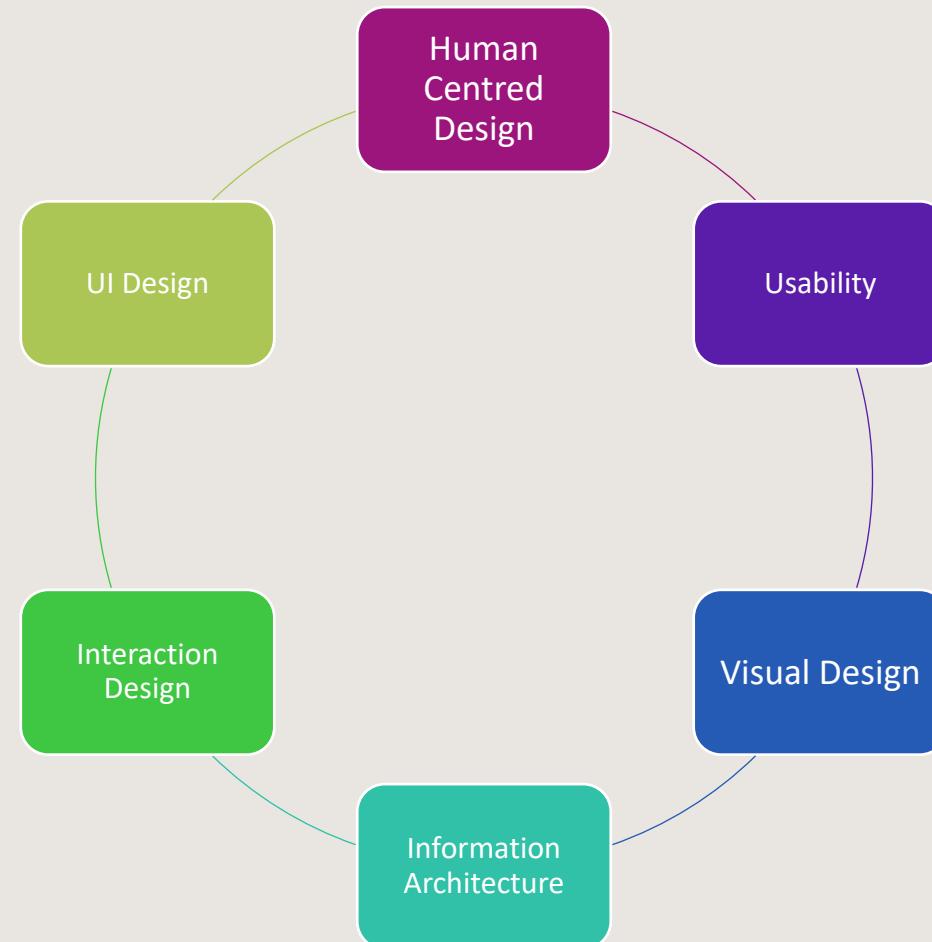
# What is UX

“A person’s perceptions and responses resulting from the use or anticipated use of a product, system or service”.

**ISO 9241-210**



# User Experience Design

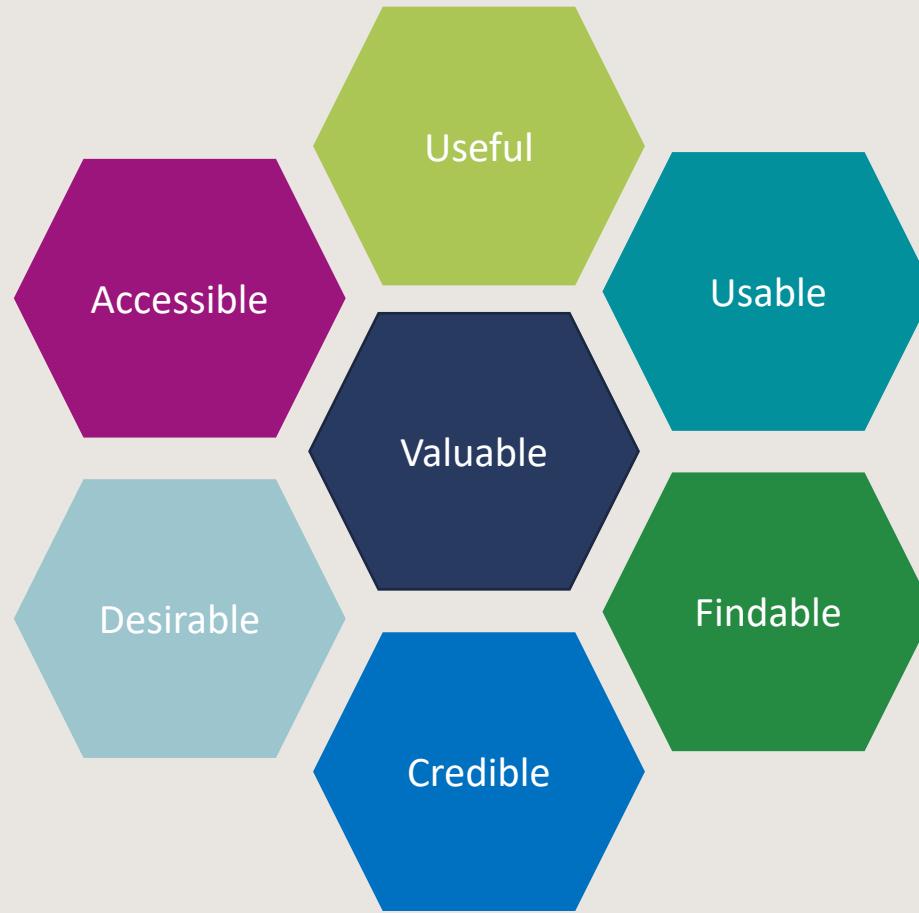


# Why is it Important?

# Users are our customers



# Ensure that a product is:



Adapted from: the Interaction Design Foundation and Peter Morville

# Comparing Development With or Without UX

By focusing on UX from the first, you will save money and resources down the line.



A focus on UX  
reduces support cost  
by up to 90%



R30 spent on UX  
returns R1500



Save 50% of  
development time by  
avoiding rework



Customers are 15% less  
likely to switch brands  
with good UX

# The UX Design Process

# The Basic Steps in The UX Process

1



Get to know your stakeholders and define the problem

2



Observe, engage, get to know users and their context

3



Research into useful data that guides the rest of the process

4



Design a prototype that aligns user needs with business goals

5



Test and refine your prototype, then do it all over again

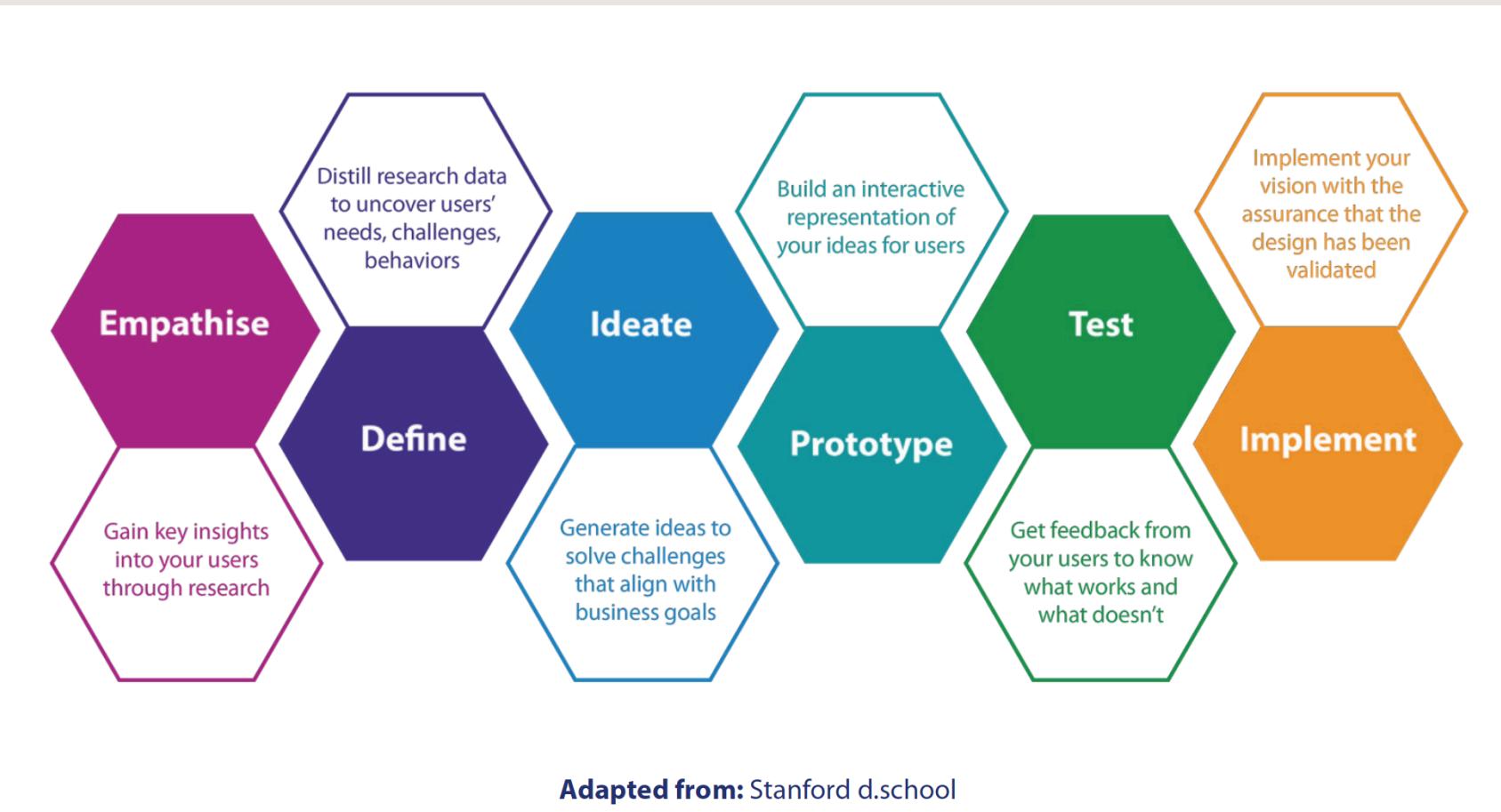
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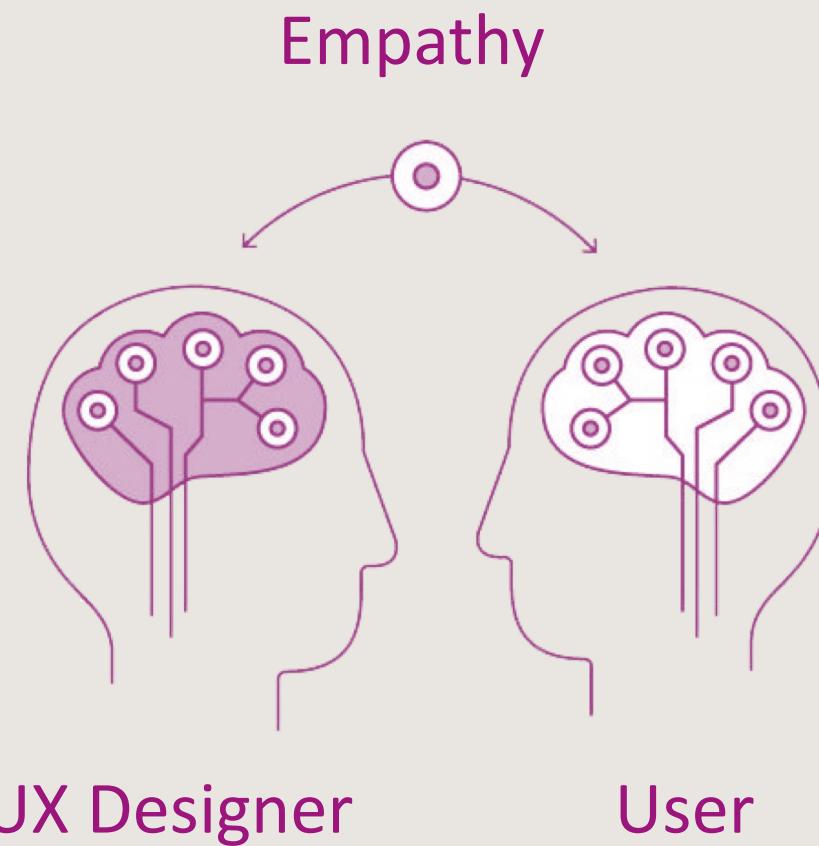
Implement your vision in the real world and measure for success!

# Design Thinking

# Design Thinking



# 1. Empathise



# 1. Empathise

## User and Stakeholder Interviews

- ▶ Understand the business problem
- ▶ Perform contextual inquiries
- ▶ Use card sorting to organise information
- ▶ Use focus groups

## 2. Define

► Create meaningful personas of users from actual user research

► A persona represents a group of users



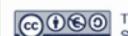
**Rachel**  
Cooking foodie

**Age** 28  
**Occupation** Government policy advisor  
**Education** Bachelor degree  
**Family status** Defacto  
**Location** Surry Hills, NSW  
**Challenges** Mildly dyslexic

**Online locations:** Work, Mobile  
**Computer type:** Windows desktop, iPhone  
**Connection type:** ADSL2, 3G mobile  
**Internet usage:** 5–6 hrs

**Top five bookmarked websites:**

- Twitter
- Gmail
- Facebook
- Food blogs (various)
- Epicurious



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Food is central to Rachel's enjoyment in life. If she's not talking about it, she's thinking about it.

**What is getting in the way?**

- Forgetting, or lacking time, to plan food for the week ahead
- Eating out
- Lack of time to cook more complex meals

How will Rachel interact with FlavourCrusader?

Referrer Twitter mention  
 Introduction touchpoint iTunes page

Questions

- What produce is currently in season?
- When is a specific ingredient come into season?
- What can I do with a specific ingredient? What goes with it? How do I prepare/cook it?
- What can I do with the food I have in the fridge?
- Where is a specific ingredient grown in Australia?

Reasons to return

- Checking what's in season when planning the week's meals
- Finding when something comes into season to know when a recipe can be made
- Finding recipes for a specific ingredient
- Post a photo of a cooked meal from a listed recipe
- Post own recipe (via website)
- Post a photo of interesting produce found at a market

Who influences Rachel?



**Rachel's situation**

**Goals/Motivation**

- Enjoy great food to share with friends and family
- Find new ingredients or techniques (to share with other foodies)
- Increase knowledge about food — cooking, preparation, seasonality, provenance etc.

**Frustrations and pain points**

- Not being able to find good quality, locally-sourced and affordable produce between market days
- The "cult of organic" — people who don't really "get it"
- Friends not being interested in food as much
- Online recipes and sites (like Epicurious) so American-centric

**Key words**

chefs, restaurants, recipes, cookbooks, ingredients, seasonal, local, farmers' markets

**Rachel's story**

Food was always a big part of family activities — a chance each day to meet around the table — and I'm continuing in that tradition. On weekends I'll often spend the whole day going to the markets, preparing then cooking in the afternoon to host a dinner with friends.

My friends were getting sick of me talking about food, so I was really glad to connect with food bloggers and people on Twitter who share my passion for food. I love the stories behind food — whether from food bloggers or the producers at my local farmers' market. That direct connection to producers is much more important to me than if something is 'certified' or not. I learn so much from them about seasonality, techniques and tips on preparing and cooking food, and just what's involved in getting the food on my plate. I appreciate their efforts so much more since I've got to know some of them better.

I really enjoy simple, produce-driven recipes and I get excited finding new ingredients and flavours and trying new techniques. I'm always learning. I have so many cookbooks, but I don't really get into them as much as I'd like.

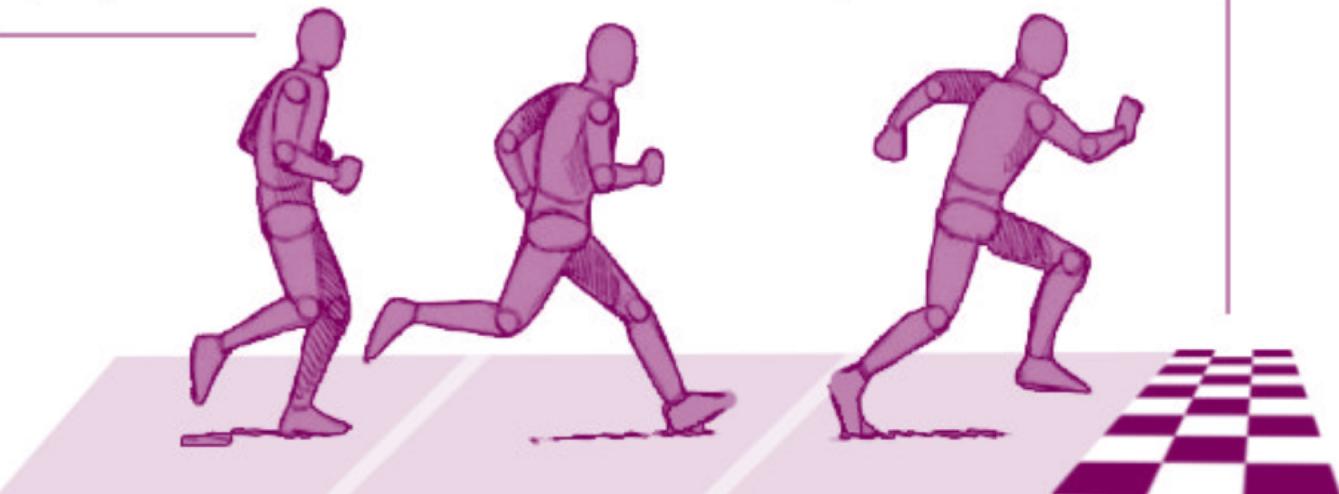
I don't like buying fresh fruit and veg from supermarkets because I find the quality and taste of the produce is pretty poor. I try to stock up at the farmers' markets on the weekends instead. It's a bit more expensive, but it tastes soooo much better, and lasts longer anyway. I try to get to the local greengrocer instead of Coles or Woolies for the things I can't get elsewhere or if I've not been able to get to the markets for the week — but I wish there were more options.

## 2. Define

- ▶ Create scenarios from each persona
- ▶ Can be used to further create user stories

### 1. Persona

Distillation of real data to create characters that represent actual users. This persona has attitudes, motivations, goals and pain points etc.



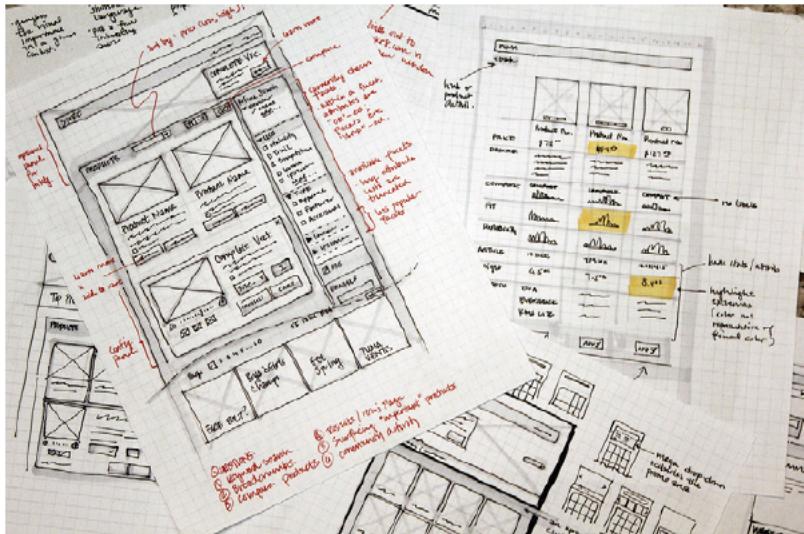
### 1. Goal

Defines the need the persona wishes to fulfill. This is the motivation behind engaging with the product. This marks the end of scenario.

### 1. Scenario

Defines the 'when, where and how' the persona engages with the product. This describes how a persona behaves, as sequential events leading to a desired goal.

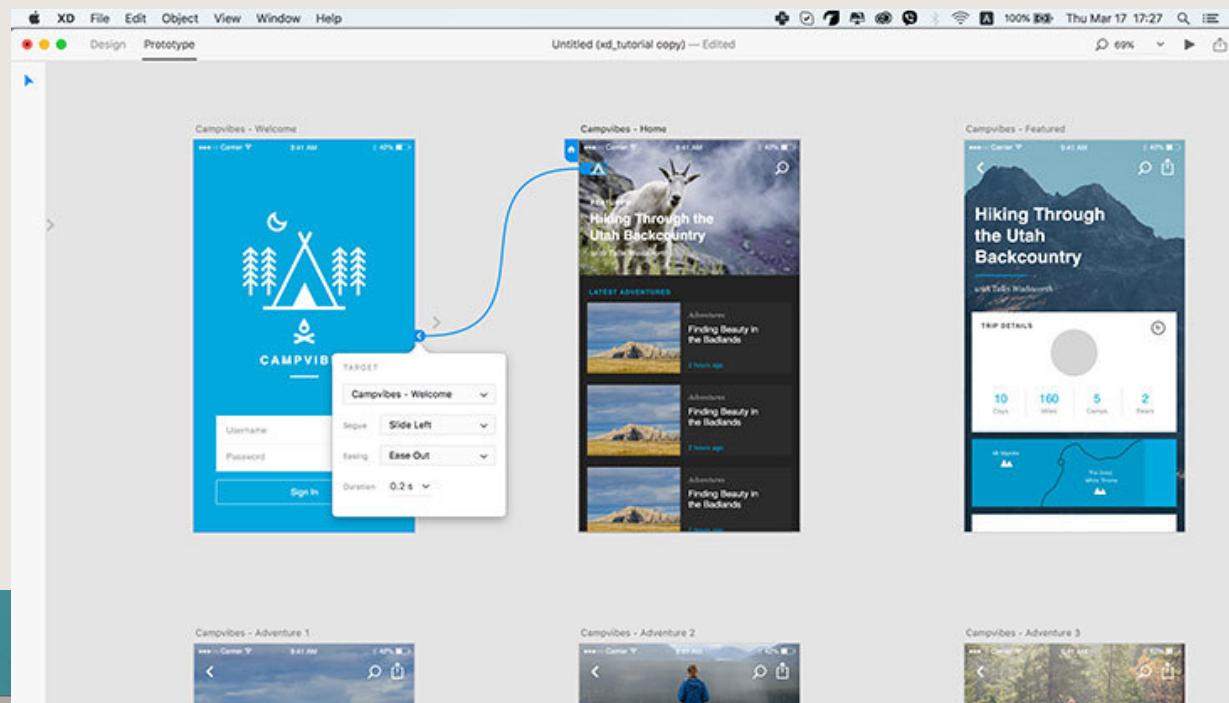
## 3. Ideate



► Brainstorm and design different solutions

## 4. Prototype

- ▶ Create interactive designs to assess our solutions.
- ▶ Use paper prototypes or software



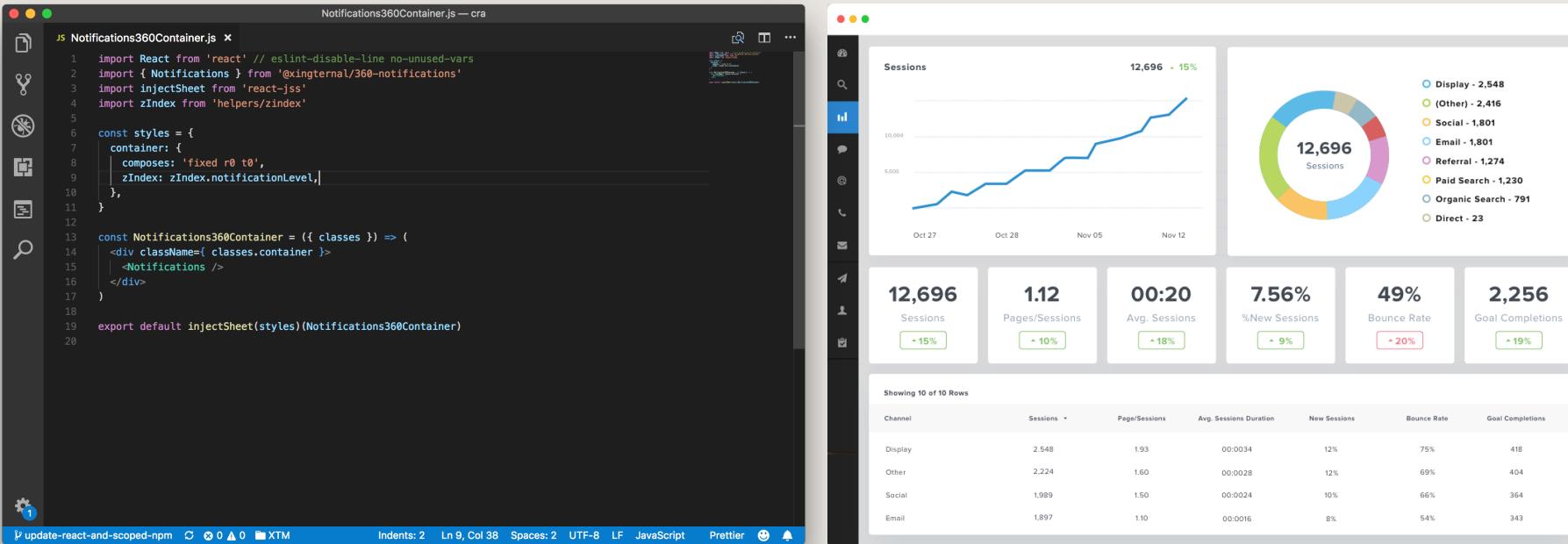
## 5. Test

- ▶ Test designs to validate decisions with real users



# 6. Implement

## ► Build and test features



The image displays two side-by-side screenshots illustrating the 'Build and test features' phase.

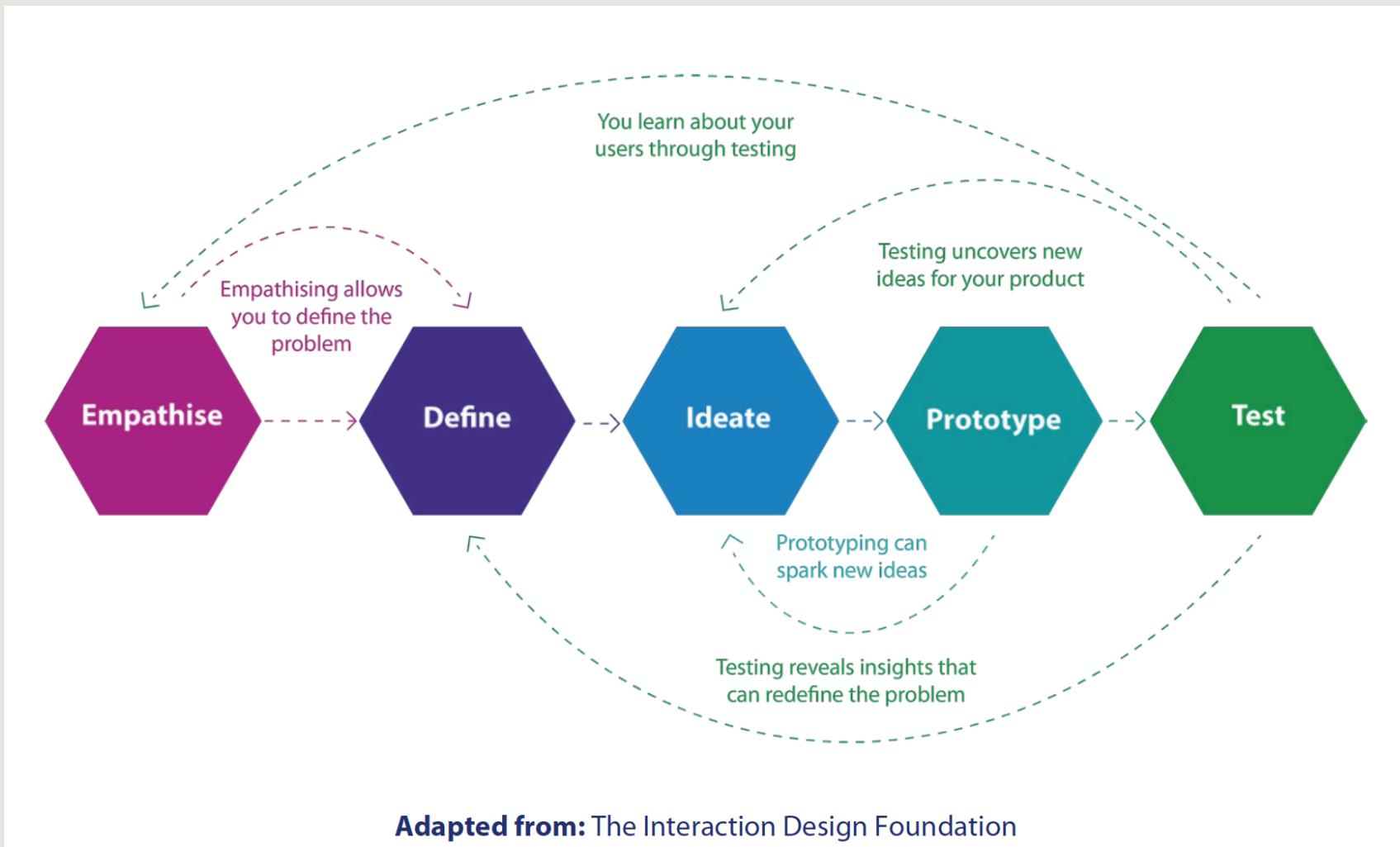
**Code Editor Screenshot:** Shows the file `Notifications360Container.js` in a code editor. The code defines a component that injects a style sheet and renders a `<Notifications>` component. The code editor interface includes a sidebar with icons for file, search, and settings, and a status bar at the bottom.

```
JS Notifications360Container.js — cra
1 import React from 'react' // eslint-disable-line no-unused-vars
2 import { Notifications } from '@xinginternal/360-notifications'
3 import injectSheet from 'react-jss'
4 import zIndex from 'helpers/zindex'
5
6 const styles = {
7   container: {
8     position: 'fixed',
9     top: 0,
10    zIndex: zIndex.notificationLevel,
11  },
12}
13
14 const Notifications360Container = ({ classes }) => (
15   <div className={ classes.container }>
16     <Notifications />
17   </div>
18)
19
20 export default injectSheet(styles)(Notifications360Container)
```

**Analytics Dashboard Screenshot:** Shows a web-based analytics dashboard with various metrics and visualizations. Key data points include:

- Sessions:** 12,696 (15% growth from Oct 27 to Nov 12)
- Source Breakdown:** 12,696 Sessions (Display: 2,548, Other: 2,416, Social: 1,801, Email: 1,801, Referral: 1,274, Paid Search: 1,230, Organic Search: 791, Direct: 23)
- Performance Metrics:** 1.12 Pages/Sessions, 00:20 Avg. Sessions Duration, 7.56% New Sessions, 49% Bounce Rate, 2,256 Goal Completions
- Channel Data:** Display (2,548), Other (2,224), Social (1,989), Email (1,897)

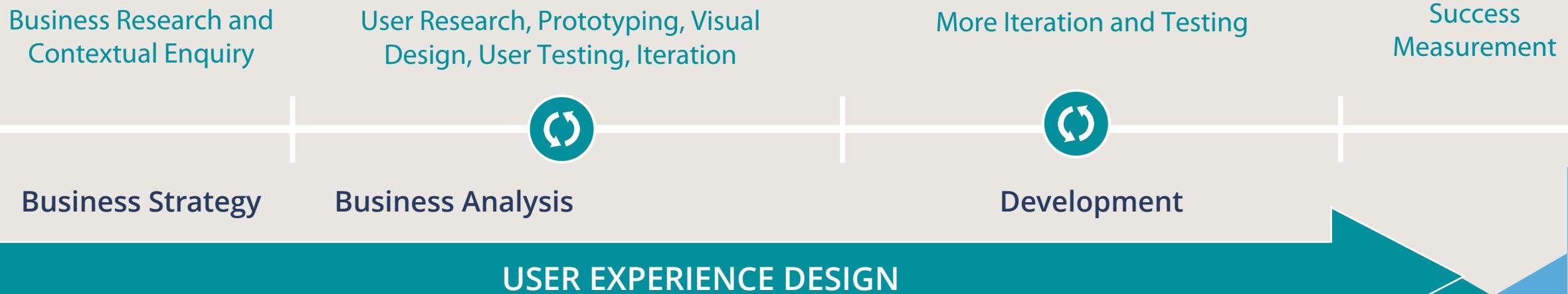
# Design Thinking in Reality



# UX in a Project Environment

How does it fit in?

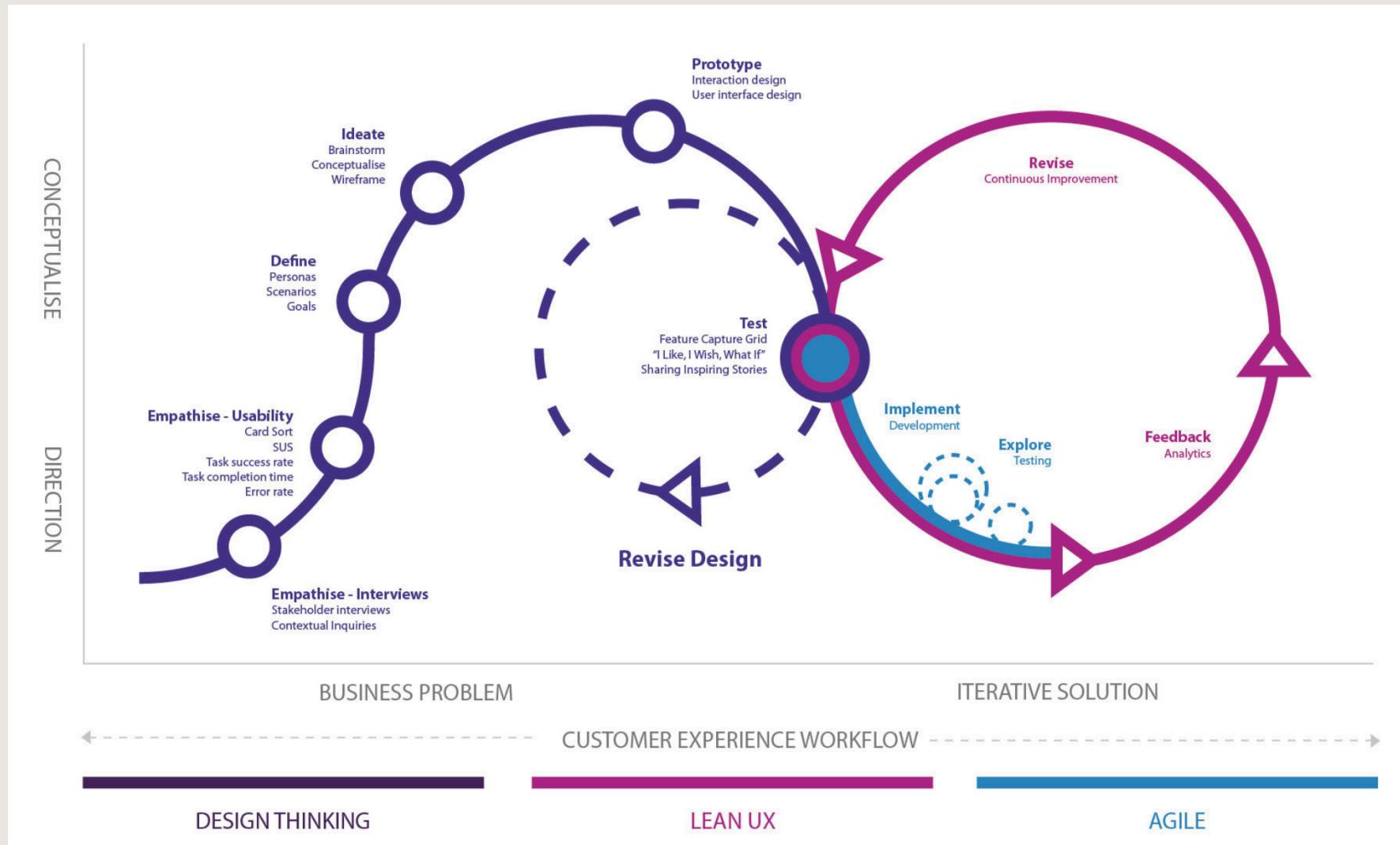
# Integrating UX and Design Thinking into a Project



# Different UX Methodologies

	<b>Design Thinking</b>	<b>Lean UX</b>	<b>Design Sprints</b>
<b>Research</b>	Heavy upfront, iterative later	Iterative (research, develop, repeat)	User testing at end of cycle
<b>Time frames</b>	Have time	Little time, need it out now	5 days for one solution to a problem
<b>Environment</b>	Waterfall or before Agile	Agile	Agile
<b>Best time</b>	A few months before a new project	In an existing agile project (slots in)	Anytime (Before start-up or aim at specific problem)
<b>Pros</b>	Research upfront gives clear direction	Quick delivery on an MVP	Reduces Start-up Failure (Learn fast)
<b>Cons</b>	Time and resource intensive	Higher chances of delivering the wrong thing	Burn out if done too frequently

# Combining Design Thinking and Lean UX into Agile



# Activity: Applying Design Thinking

Design the perfect pair of shoes for the person sitting next to you

# The End.

Any questions?