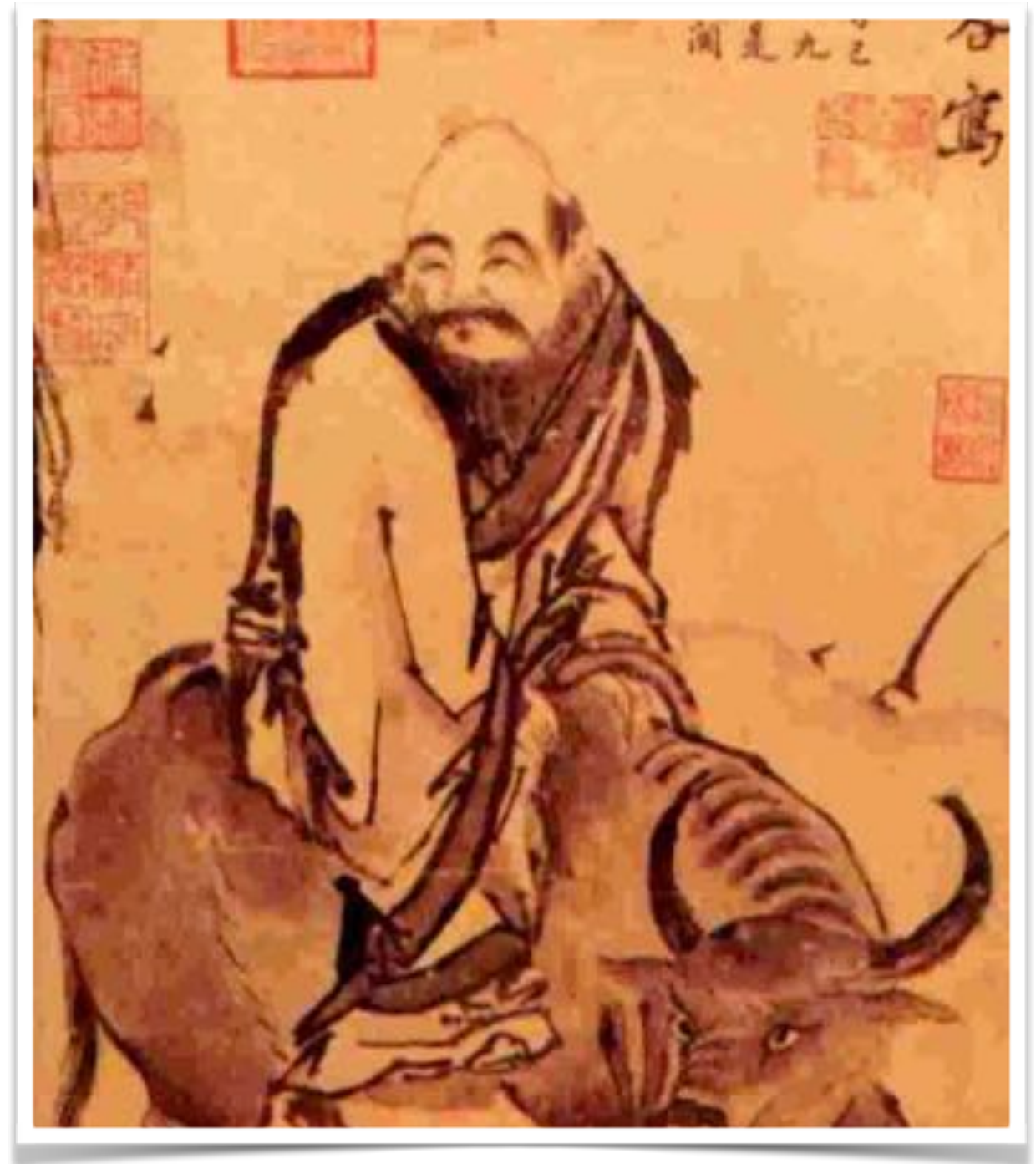


# prototyping approaches

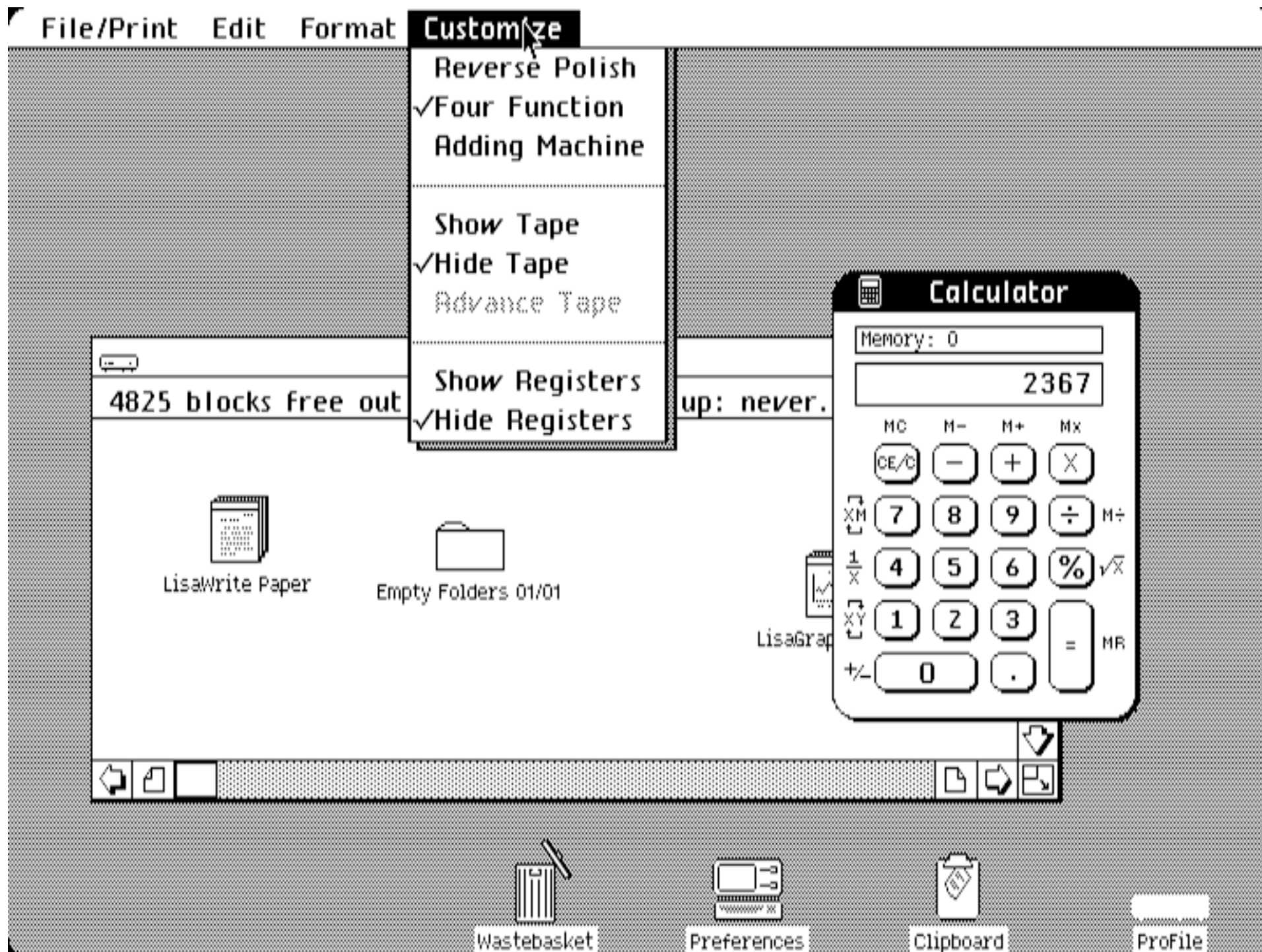
# prototyping

- ❖ What I hear, I forget
- ❖ What I see, I remember
- ❖ What I do, I understand
- ❖ Lao Tse, Chinese Philosopher 604BC



**DON'T MAKE  
ME THINK**

# case study

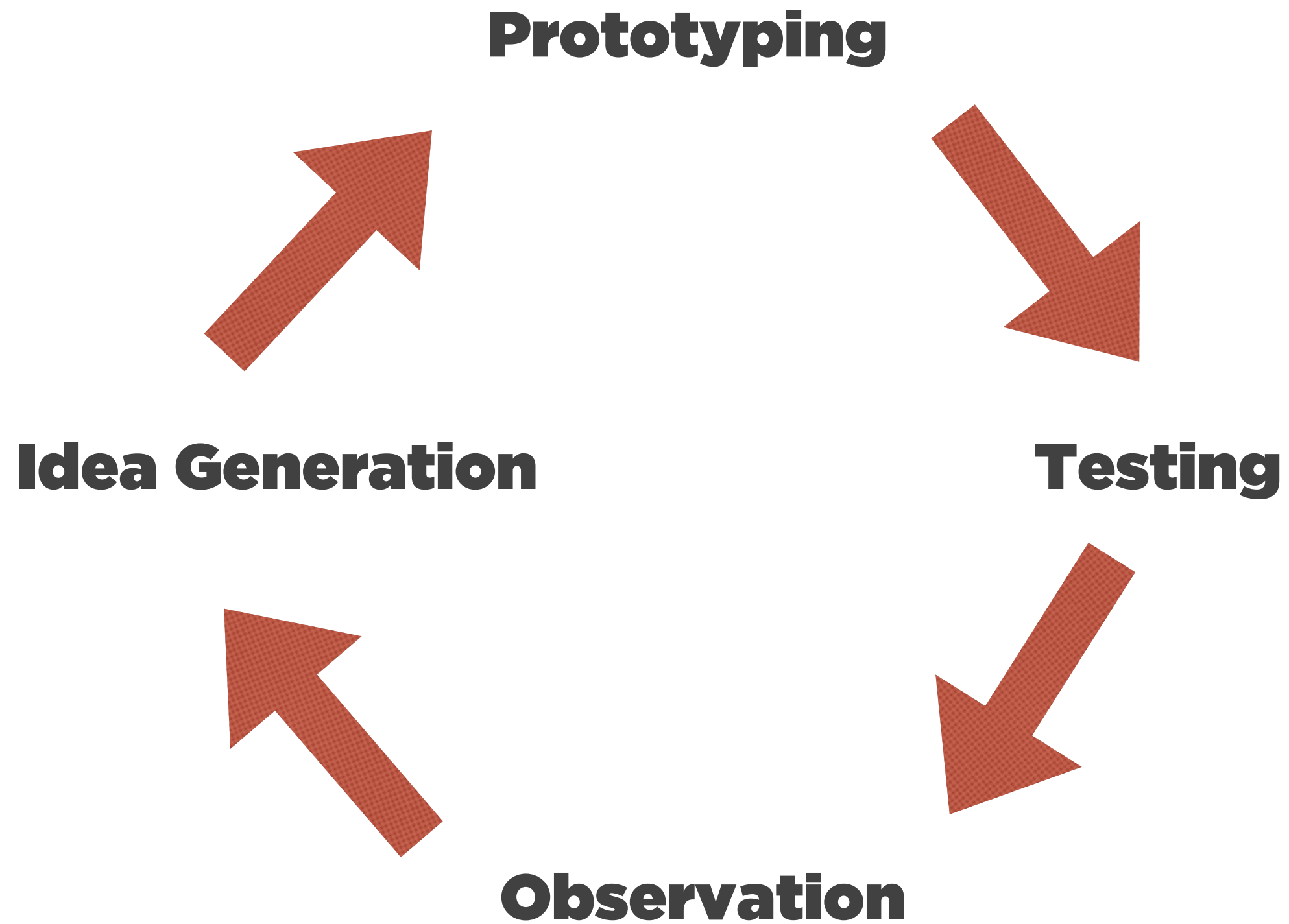


prototype | 'prōtə,tīp |

noun

a first or preliminary model of something, esp. a machine, from which other forms are developed or copied





**STAY  
FOCUSED  
& KEEP  
SHIPPING**

POSTER BROUGHT TO YOU BY YOUR FRIENDS AT  THE FACEBOOK ANALYSIS RESEARCH LABORATORY

**DONE IS  
BETTER  
THAN  
PERFECT**

THIS POSTER BROUGHT TO YOU BY THE FACEBOOK ANALOG RESEARCH LABORATORY



**FAIL  
HARDER**

THIS POSTER BROUGHT TO YOU BY THE FACEBOOK ANALOG RESEARCH LABORATORY

**MOVE  
FAST AND  
BREAK  
THINGS**

THIS POSTER BROUGHT TO YOU BY THE FACEBOOK ANALOG RESEARCH LABORATORY

# prototyping

- ❖ A prototype is "a representation of a design, made before the final solution exists."
- ❖ Near completion - it should represent the way it looks, feels, behaves and works.

# why prototype?

- ❖ Define the problem
- ❖ Provides proof of concept
- ❖ Speed up development
- ❖ Reduces development costs
- ❖ Quicker iterations

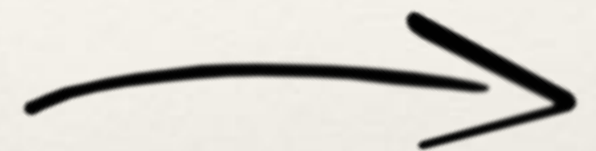


# Has the advantage

- ❖ Quick to make
- ❖ Finds usability problems quickly
- ❖ Conveys the concept
- ❖ Client can sign off what to build

“The most common estimate is that it’s 100 times cheaper to make a change before any code has been written than to wait till after the implementation is complete”

*–Jakob Nielsen*



HORIZONTAL  
prototyping

Today Sep 13

THIS IS YOUR LAST TIMESTAMPT. Refresh?

YES NO

CLIENT: PRINCE TASK

CLIENT: PRINCE TASK

Home List Refresh Settings More

← reply				DONE	
<	Sept 09				>
1	2	3	4	5	
6	7	8	9	10	
11	12	13	14	15	
16	17	18	19	20	
21	...				
🕒	📧	🔄	🔍	...	

TODAY TIMER

SEPT 13, 2009

CLIENT: PROJECT

TASK NAME

3:17

ADD NOTE

START STOP TIMER

⌚ \$ ↺ ⚙ ...

WED 13-04-TODAY 4

Summary

CLIENT: PEARCE  
TASK: 1.15

CLIENT: PEARCE  
TASK: 1.15

NOTES: (continued from p.12)





vertical prototyping





# STEPHANIE

R o u s s e a u

Age **38**  
 Occupation **Highschool Teacher**  
 Marital Status **Married**  
 Social Status **Upper-Middle Class**  
 Hobby **Beer Tasting**

## MOTIVATIONS



## GOALS

- to learn about each brewing company's year specials'
- to recommend to others her favourite beer
- to compare and contrast beers under the same company/between companies

## SCENARIO

Stephanie visits the Toronto Beer Fest every year to pick her favourite beer. This year though, she is visiting with the goal to witness the top 3 beers and their brewing companies, plus learning about the specialties of the top 3 beers.

Stephanie wants to vote for her favourite beer(s), so she can see if other people have the same opinion as her, and to recommend her choice(s) of beer to others.

## USER'S EXPERIENCE

Stephanie uses the voting app of the Beer Fest to view the overall ranking of the beers available. She finds the top 3 beers voted by other visitors, and she clicks the name of each beer to learn about its specialties and its brewing company.

Stephanie uses the voting app of the Beer Fest to search from the list of beers, arranged in alphabetical order. She finds her ideal beer(s) and click its name to enter its info page. She clicks the 'VOTE' button, then she is directed to the overall ranking.

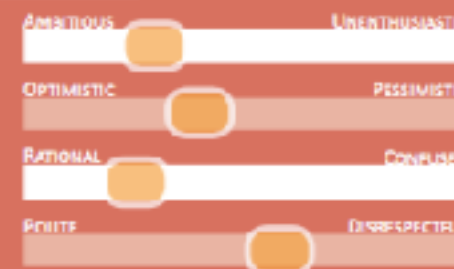


# ROBERT

B o n h o m m e

Age **42**  
 Occupation **Businessman**  
 Marital Status **Single**  
 Social Status **Upper-Middle Class**  
 Hobby **Making money**

## PERSONALITY



## GOALS

- to learn about each brewing company's year specials'
- to learn about people's favourites
- to witness each brewing companies' potential
- to find potential partners for business

## SCENARIO

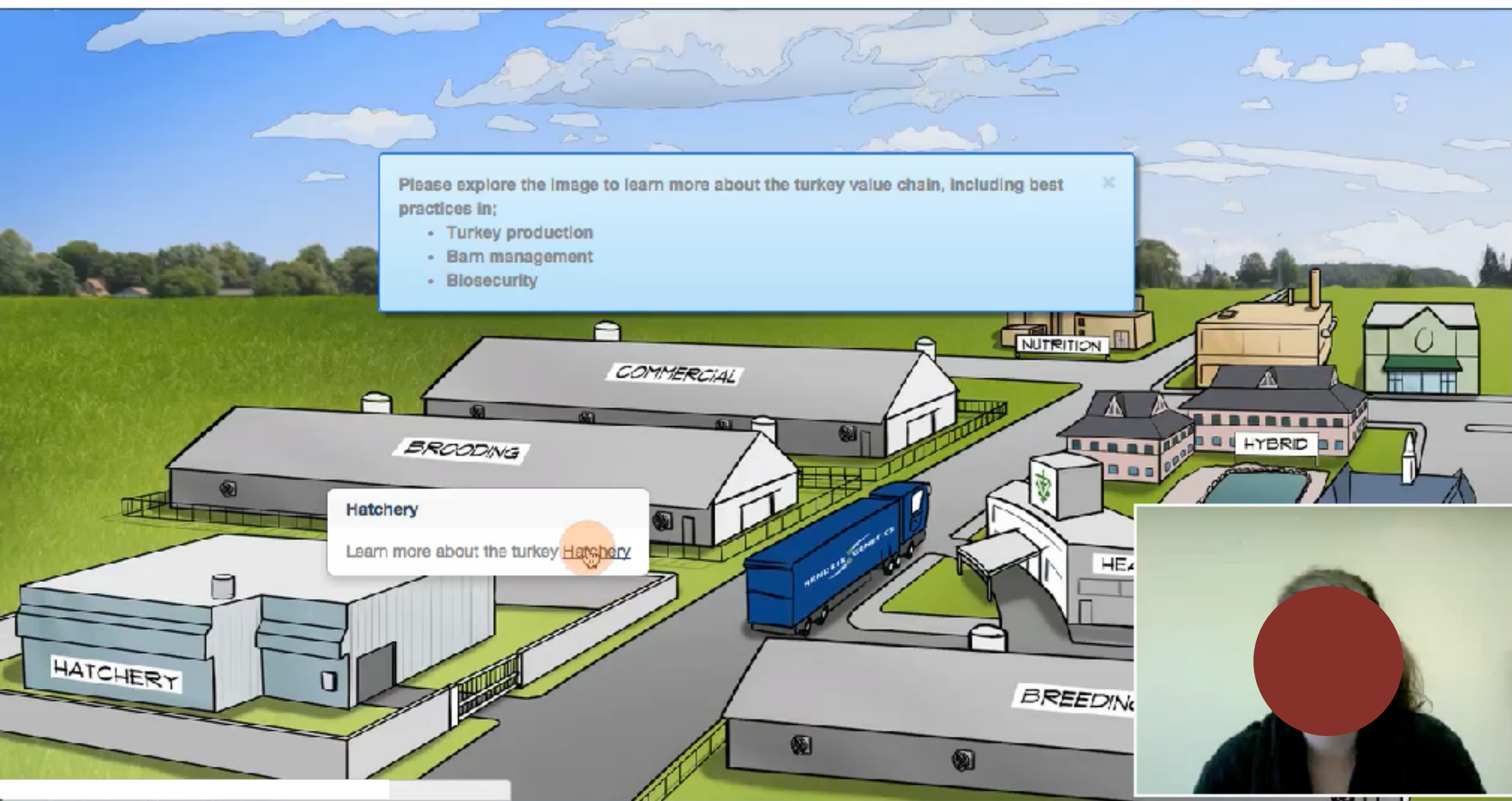
Robert missed his chance to visit the Toronto Beer Fest this year. He sits in his office, looking through this app to see rankings of the beers available. He is also interested in the reasons why certain beers are more beloved than the others.

Robert, as an earnest businessman, is interested in making a business out of selling beer. He is interested in exploring the brewing companies that brewed people's favourite beers, and hopefully to find a business partner.

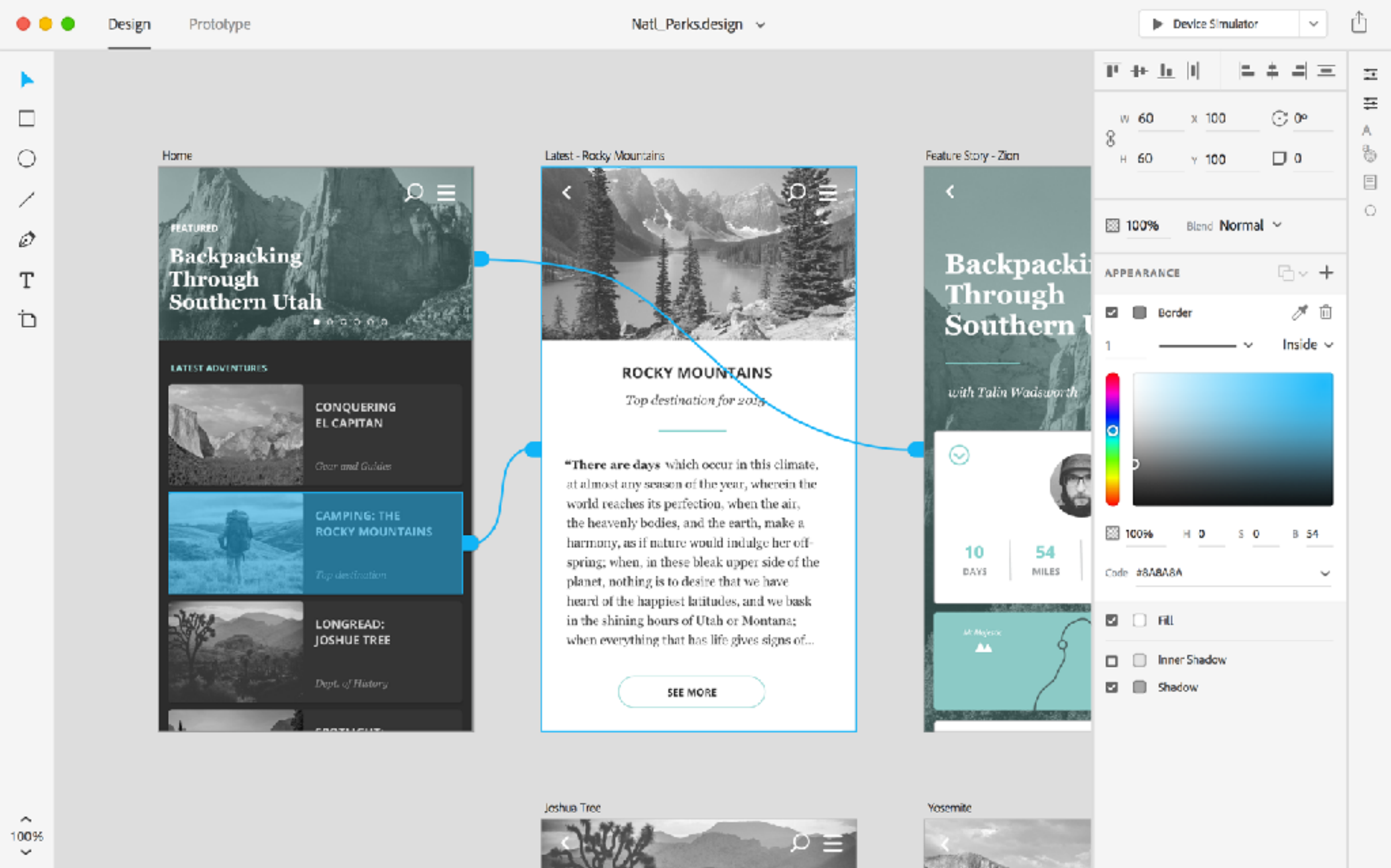
## USER'S EXPERIENCE

Robert looks through the voting app to view the overall ranking of the beers available. On the page of overall ranking, he clicks the names of the top ranked and lower ranked beers to learn about the brewing process and ingredients.

After learning about different beers' specialties, Robert returns to the page of overall ranking to scroll and check the brewing companies that brewed beers beloved by lots of people (ranked high), as well as the companies that brewed the most beer.







❖ Adobe XD      Balsamiq



# Buttons and navigation

Seconday link

Something else here

Use these vector based elements to mockup a Bootstrap website with form elements.  
All elements are full customizable.

Buttons ▾

Navigation ▾

Labels

Badges

Typography

Thumbnails

Alerts

Progress bars

Miscellaneous

Default

Primary

Info

Success

Danger

Warning

Inverse

1

Default

Primary

Info

Success

Danger

Warning

Inverse

2

Default

Primary

Info

Success

Danger

Warning

Inverse

4

6

8

Large action ▾

Large action ▲

Default

Success

Warning

Important

Info

Inverse

10

1

2

3

4

Left

Middle

Right

Home

Profile

Messages

Home

Profile

Messages

Home / Library / Data

«

1

2

3

4

»

← Older

Newer →

Home

Profile

Messages

Home

Profile

Messages

🏠 Home

📖 Library

✍ Applications



Use this PSD to design your Bootstrap website.  
Hope you can use it, [RepixDesign.com](http://RepixDesign.com)



# pointers

- ❖ Don't become too attached to prototype, if it's not working - re-evaluate the solution and move on
- ❖ Be careful of “feature creep” - testers often think they can have anything - whether good or bad
- ❖ Be time conscious - goal is to reduce time and costs

throwaway  
prototyping



# definition

- ❖ Throwaway prototyping is where the objective of the evolutionary development process is to understand the customer's requirements and hence develop a better requirements definition for the system. The prototype concentrates on experimenting with the customer requirements that are poorly understood.
- ❖ (Sommerville: Software Engineering, 8th Edition)



# Questions for prototyping

- ❖ What does the user expect to see?
- ❖ Does the app make sense?
- ❖ Has any process been left out?
- ❖ Is it easy to learn?
- ❖ Are tasks easy to complete / Is the app efficient to use?
- ❖ What errors can the user make?



# Exercise

- How would you create a system to pick 5 favourite riders from 200 competitors in the Tour De France?
- How do you visualise the picking system?
- How does the user sort through 200 riders on the screen?
- Where do you start with the display order?
- What information is given to help the user sort?
- Create a series of wireframes to show the user experience