



28 February 2016
IxDA Interaction 16
EDU Summit

Aaron Ganci

The Forest and Its Trees: understanding
interaction design through service design activities



Assistant Professor of Visual Communication Design
Herron School of Art and Design
Indiana University–Purdue University Indianapolis (IUPUI)

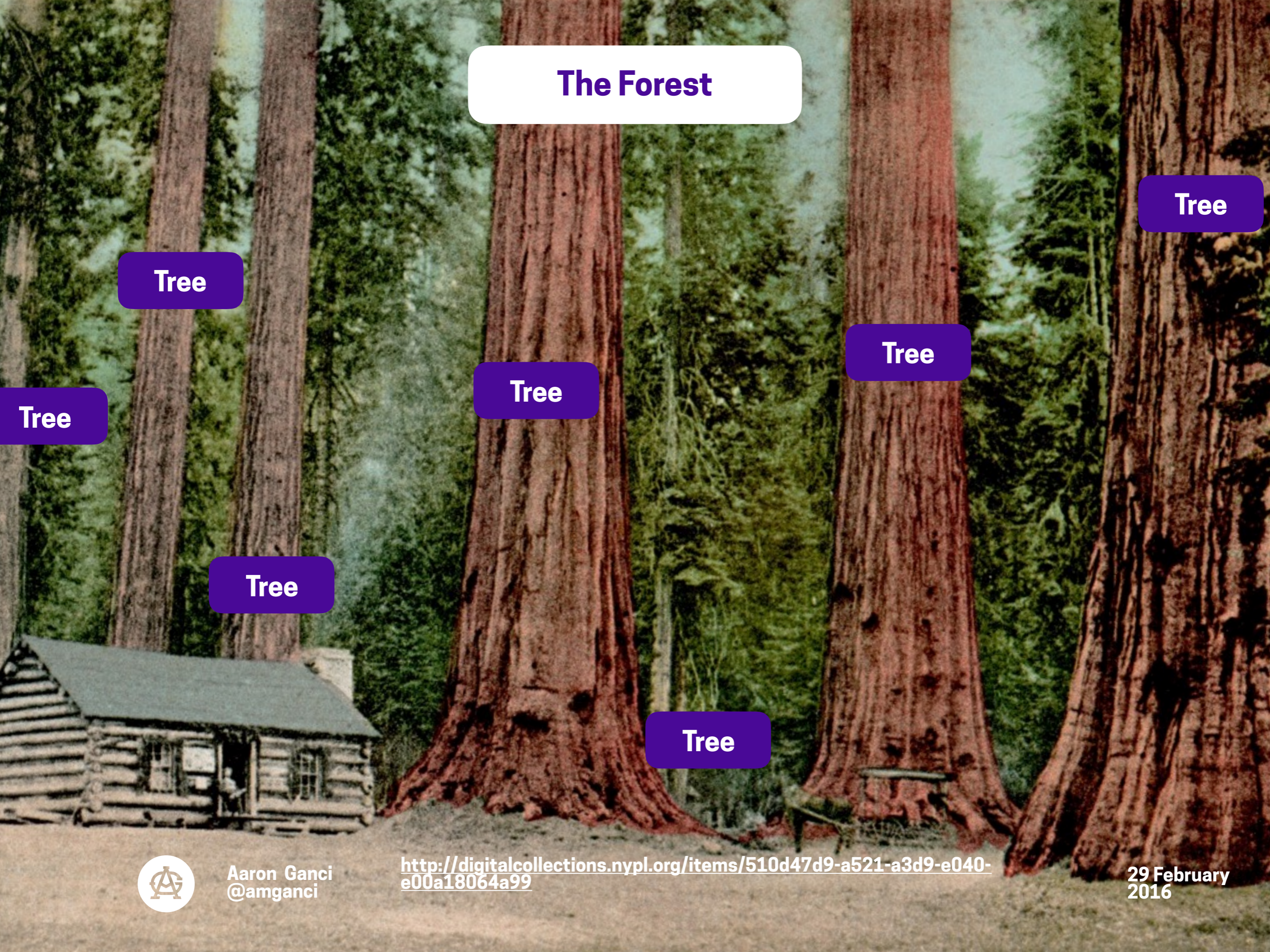


HERRON SCHOOL
of **ART + DESIGN**



Aaron Ganci
@amganci

29 February
2016



The Forest

Tree

Tree

Tree

Tree

Tree

Tree

Tree



Aaron Ganci
@amganci

<http://digitalcollections.nypl.org/items/510d47d9-a521-a3d9-e040-e00a18064a99>

29 February
2016

A Service Experience

Interaction

Interaction

Interaction

Interaction

Interaction

Interaction

Interaction



Aaron Ganci
@amganci

<http://digitalcollections.nypl.org/items/510d47d9-a521-a3d9-e040-e00a18064a99>

29 February
2016

How might **interaction design students** use **service design methods** to better understand their own practice?



Aaron Ganci
@amganci

29 February
2016



Herron has ~ 150 VCD Students in three cohorts

Focus by year

Year 1 Bauhaus foundation

Year 2 Semiotics, typography, and form

Year 3 People-centeredness and Design Intent

Year 4 Innovation, Research, and Experiences



Aaron Ganci
@amganci

29 February
2016

Herron Visual Communication Design's short mission:

Improve people's lives through design

With...

...**A people-centered process**

...**ethnographic research**

...**a focus on the visual**



Aaron Ganci
@amganci

29 February
2016

The problem:

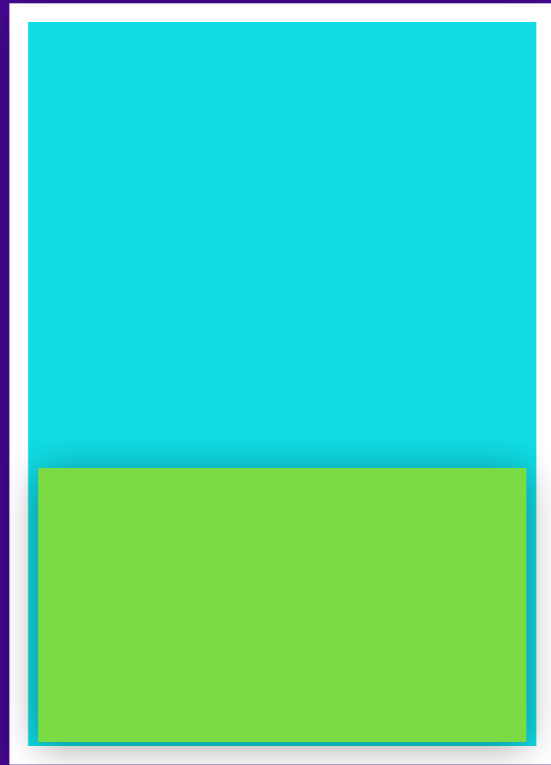
Making “Things”



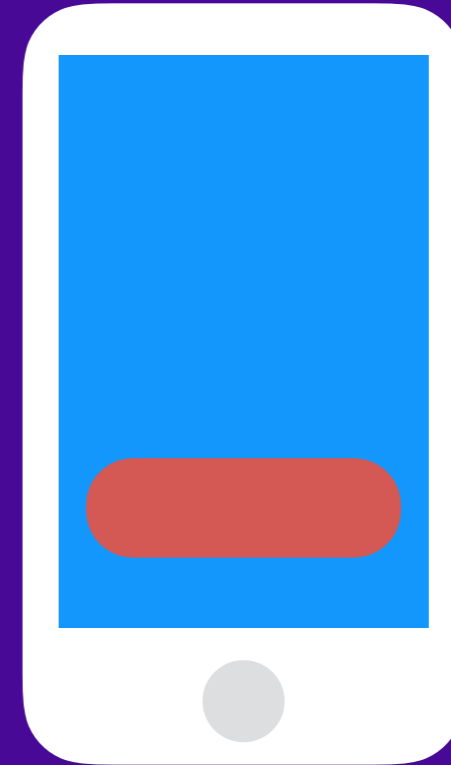
Aaron Ganci
@amganci

29 February
2016

Make a poster.



Make an app.



Aaron Ganci
@amganci

29 February
2016

**I can't
wait to
use Yelp!**



Aaron Ganci
@amganci

<http://www.flickr.com/photos/72098626@N00/4159766506>

29 February
2016

**I can't
wait to go
out to
lunch and
be best
friends!**



Aaron Ganci
@amganci

<http://www.flickr.com/photos/72098626@N00/4159766506>

29 February
2016

Service Design!



Aaron Ganci
@amganci

29 February
2016

Year 4 (Senior Year)

Fall

Digital
XD I

Service
XD I

OR

Design
Research
Methods

Spring

Digital
XD II

Service
XD II

OR

Portfolio

16
weeks



Aaron Ganci
@amganci

29 February
2016

Year 4 (Senior Year)

Fall

Spring

16 weeks

People-centered Experience Design

Design Research Methods

Digital XD I

Service XD I

OR

Digital XD II

Service XD II

OR

Portfolio



People-centered Experience Design addresses

- ➔ **What is an experience?**
- ➔ **How do you talk about them?**
- ➔ **How do you document them?**
- ➔ **How do you design artifacts with experience in mind?**



Aaron Ganci
@amganci

29 February
2016

Service



Aaron Ganci
@amganci

29 February
2016

Service



Interaction



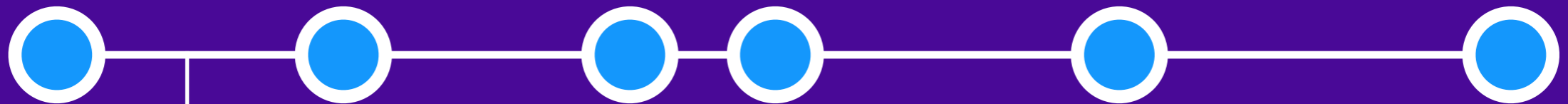
Aaron Ganci
@amganci

29 February
2016

Service



Interface



Interaction



Aaron Ganci
@amganci

29 February
2016

Through Service Design, Interaction Designers can...

- ➔ **Think beyond the app**
- ➔ **See an integrated system**
- ➔ **Understand their intervention**
- ➔ **Take on more complex problems**



Aaron Ganci
@amganci

29 February
2016

Course broken down into 3 assignments

1. Convey an experience

2. Articulate an experience

3. Design a new experience (an its parts)



Aaron Ganci
@amganci

29 February
2016

Project One [2 weeks]

Convey



Aaron Ganci
@amganci

29 February
2016

Convey an experience

- ➔ **Groups of 4**
- ➔ **Pre-defined contexts
(library, student center, grocery story)**
- ➔ **Observe an experience and describe it
to someone who wasn't there.**
- ➔ **Medium is completely open**



Aaron Ganci
@amganci

29 February
2016

"Wonderfully readable, in fact gripping, with surprising bursts
of recognition, humor, and wonder"—*The Washington Post Book World*



The Mezzanine

Nicholson Baker

Bestselling Author of *Vox* and *The Fermata*



Aaron Ganci
@amganci

29 February
2016

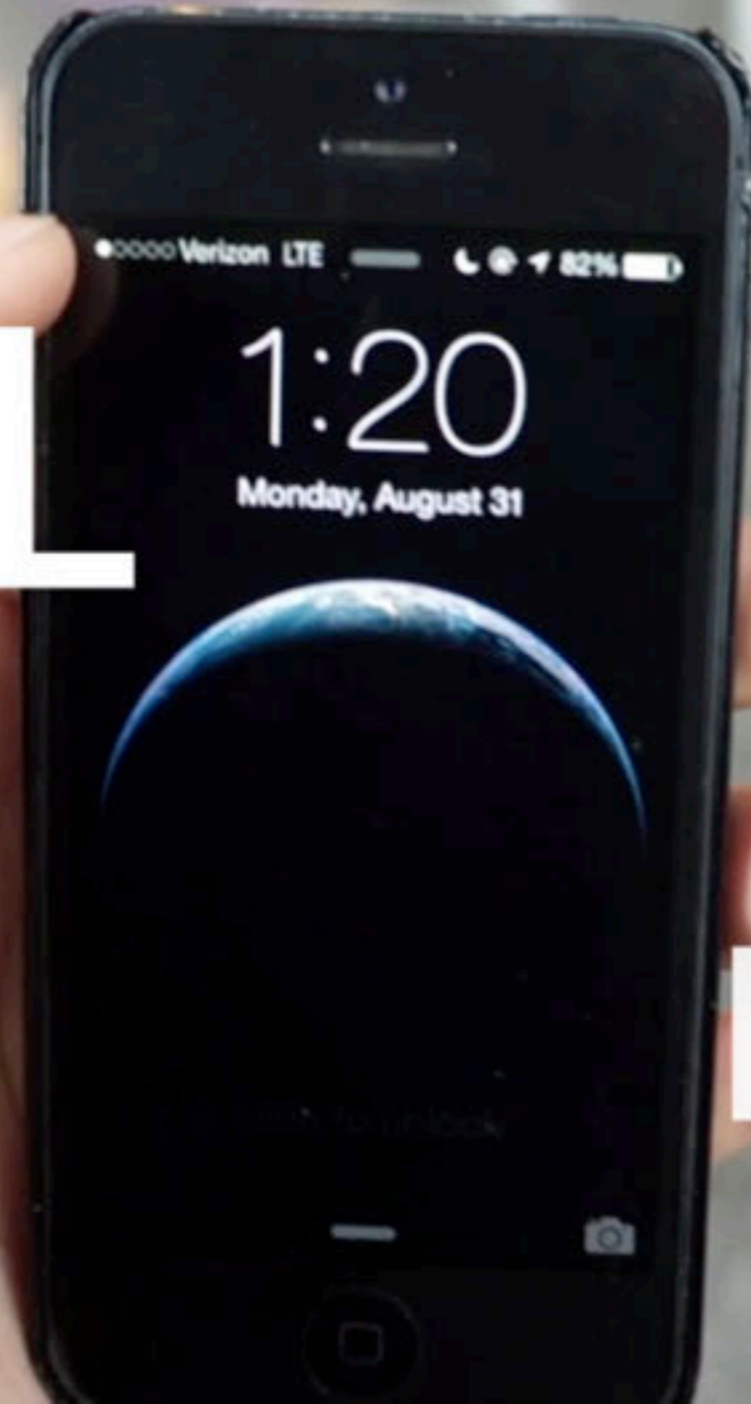
CHECKING OUT



**No long queue
Speedy
Save time**



**HIS
GOAL**



**FIND A
CLEAN AND EMPTY
TABLE**

**IN 20 MINS
OR LESS**

CAMPUS CENTER

top to buy food now.
add 15 mins

You are getting hungry.

You found a seat in the Quiet Room to study.



You read one chapter of your textbook.
add 2 mins

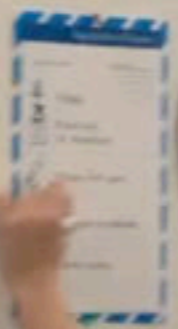
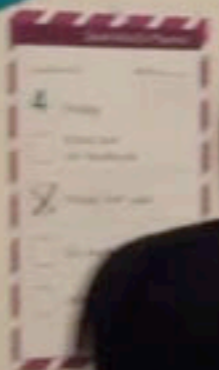
You seriously have to go to the bathroom.

You found the answer online!

Your neighbor's music is too loud, so you find another spot.

You study by the fountain. Add 10c.

A bad group with a table across from you and 4 minutes.



Textbook

Find the first available spot.

Find a quiet spot.

START
Walking into the Campus Center

The printer won't work, so you find another print station.

The man with you.

The kid who...



Learning outcomes

- ➔ **Real experience are complex!**
- ➔ **Frame experience through user goals**
- ➔ **Start to identify opportunity spaces**



Aaron Ganci
@amganci

29 February
2016

Project Two [2 weeks]

Articulate



Aaron Ganci
@amganci

29 February
2016

Articulate an experience

- ➔ **Same groups + contexts**
- ➔ **Define an experience in a more permanent, actionable format**
- ➔ **Clearly define strengths and weaknesses of experience**
- ➔ **Use experience map as a medium**



Aaron Ganci
@amganci

29 February
2016



THIS IS SERVICE DESIGN THINKING.

Basics — Tools — Cases

Twenty-three authors from the global service design community invested their knowledge, experience and passion to create this award-winning book. It introduces service design thinking to beginners and students, and will be a valuable resource for consultants, marketers, innovators and design professionals.



Aaron Ganci
@amganci

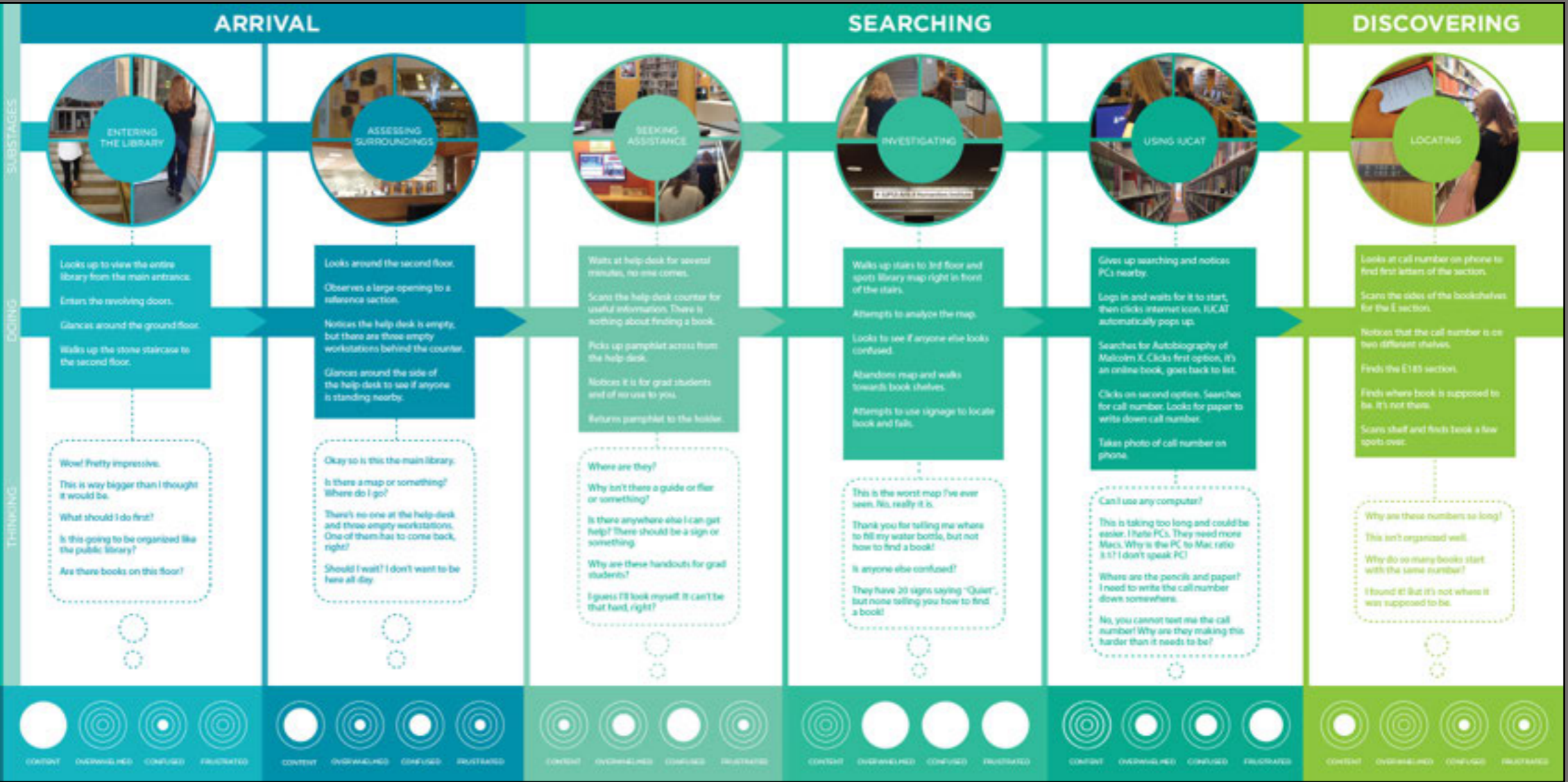
29 February
2016

FINDING A BOOK IN UNIVERSITY LIBRARY



Persona: Naomi

Freshman student at IUPUI
 First time user of IUPUI's University Library
 She has no prior knowledge of how the library works
 Thinks it may be set up like her local public library
 Looking for a book she needs for an upcoming class
 Assumes it will be a quick and easy process



Aaron Ganci
 @amganci

29 February
 2016



USING IUCAT

Gives up searching and notices PCs nearby.

Logs in and waits for it to start, then clicks internet icon. IUCAT automatically pops up.

Searches for Autobiography of Malcolm X. Clicks first option, it's an online book, goes back to list.

Clicks on second option. Searches for call number. Looks for paper to write down call number.

Takes photo of call number on



LOCATING

Looks at call number on phone to find first letters of the section.

Scans the sides of the bookshelves for the E section.

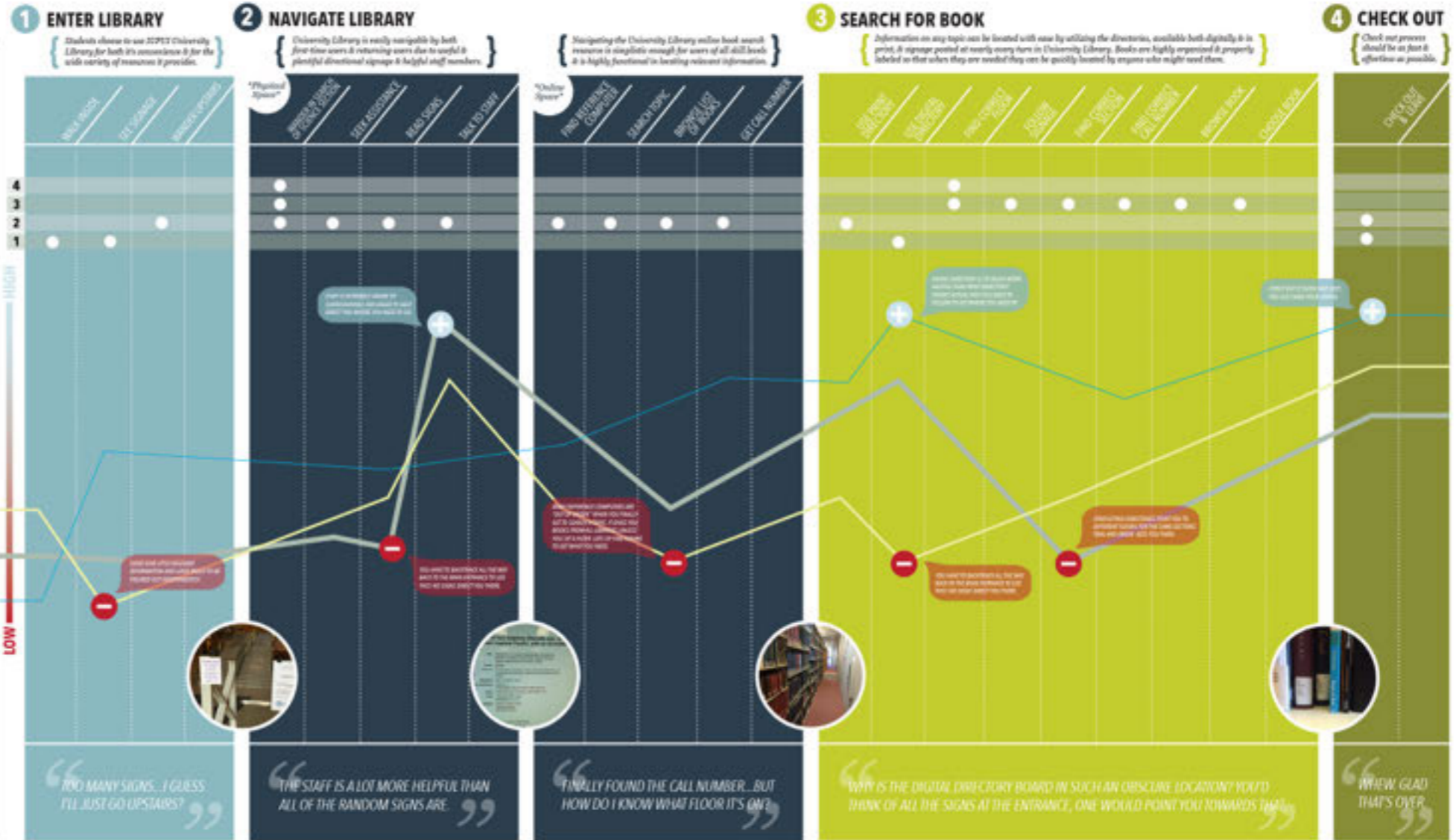
Notices that the call number is on two different shelves.

Finds the E185 section.

Finds where book is supposed to be. It's not there.

Scans shelf and finds book a few spots over.

UNIVERSITY LIBRARY // Finding a Book



Aaron Ganci
 @amganci

29 February
 2016



WALMART SHOPPING CART EXPERIENCE

Shopping Cart User Goal

The shopping cart user has shopping needs. The user is buying enough items to need the use of a cart.



- Carts should ...
- be easily accessible.
 - be well-functioning and clean.
 - be organized by employees.
 - make shopping easier.

General Principles

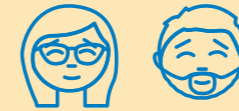


- Grocery stores should ...
- have intuitive navigation.
 - have a large selection.
 - be safe.

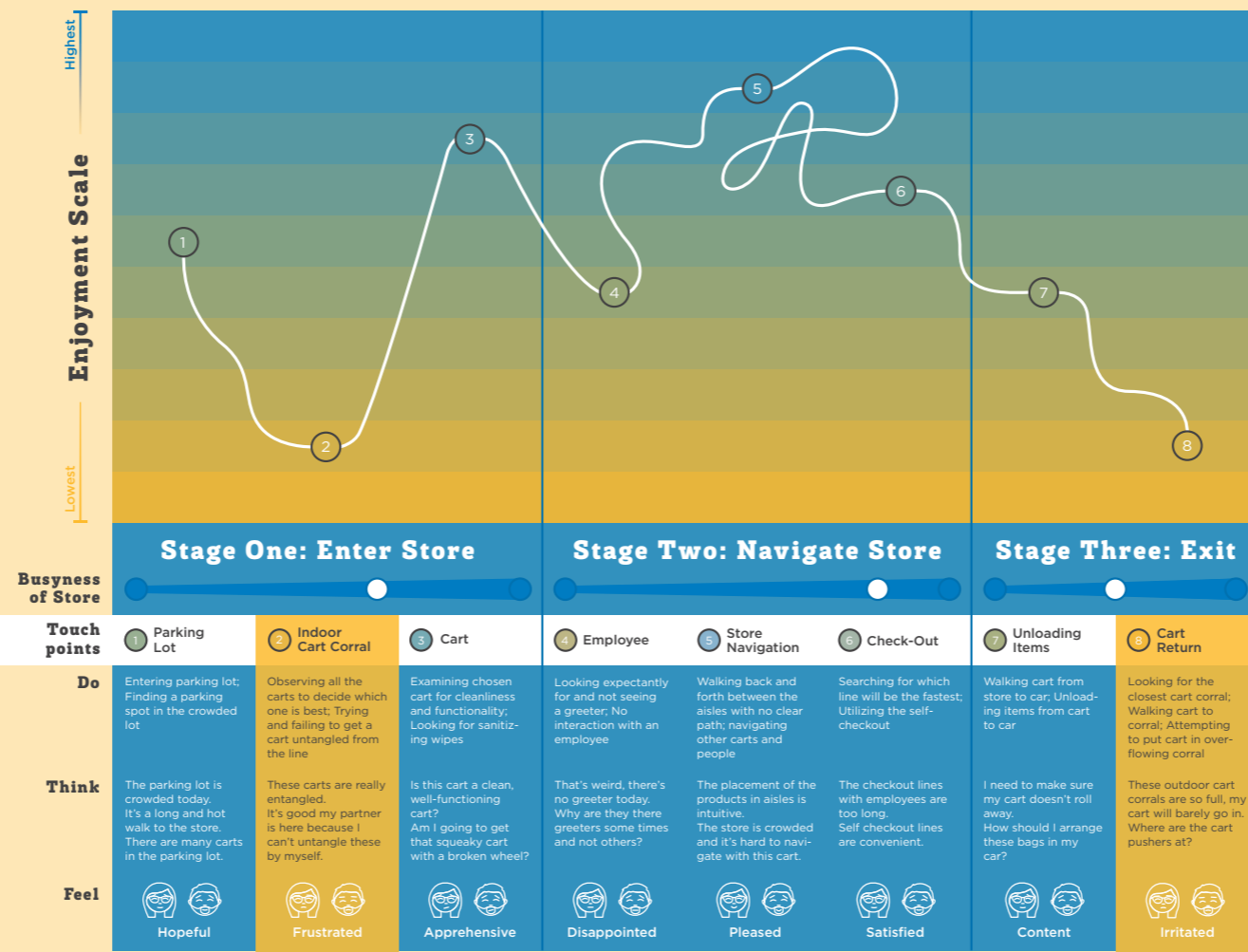


- Employees should be ...
- helpful.
 - well-trained.
 - adequately staffed.

Specific Persona



Elizabeth and Pat are a couple in their early 20's. They are feeling carefree and relaxed so they have free time to spend at the store.



Pain Points: Touchpoints 2 & 8

Indoor Cart Corral & Cart Return
Both touchpoints involve the cart corral and its organization. The carts in the indoor cart corral were entangled. The outdoor cart corral was so full, I could barely return my cart.

Call To Action

From the General Principles, customers expect carts to be easily accessible and organized. These principles are not satisfied in Walmart's cart experience, as seen in the pain points. Walmart should re-evaluate how they organize their carts and train their employees so these principles will be satisfied.



Lowest

2

Busyness of Store

Stage One: Enter Store

Stage Two: Enter Store

Touch points

1 Parking Lot

2 Indoor Cart Corral

3 Cart

4 Employee

5 Store Name

Do

Entering parking lot; Finding a parking spot in the crowded lot

Observing all the carts to decide which one is best; Trying and failing to get a cart untangled from the line

Examining chosen cart for cleanliness and functionality; Looking for sanitizing wipes

Looking expectantly for and not seeing a greeter; No interaction with an employee

Walking forth between aisles with path; navigating other cart people

Think

The parking lot is crowded today. It's a long and hot walk to the store. There are many carts in the parking lot.

These carts are really entangled. It's good my partner is here because I can't untangle these by myself.

Is this cart a clean, well-functioning cart? Am I going to get that squeaky cart with a broken wheel?

That's weird, there's no greeter today. Why are they there greeters some times and not others?

The placement of products is intuitive. The store layout and it's hard to navigate with

Feel



Hopeful



Frustrated



Apprehensive



Disappointed



Pleased



Learning outcomes

- ➔ **Define an experience in a 2D plane**
- ➔ **Combine qualitative and quantitative data to tell one story**
- ➔ **Describe how, when, and why artifacts/interfaces are used**



Aaron Ganci
@amganci

29 February
2016

Project Three [4 weeks]

Design



Aaron Ganci
@amganci

29 February
2016

Design an experience and its parts

- ➔ **New groups of 4**
- ➔ **Pre-defined sub-contexts
(eating lunch in our building)**
- ➔ **Observe existing experience and
prototype an improved one**
- ➔ **3 Phases of experience: Pre, During, Post**
- ➔ **Define the full experience and design its
individual pieces (artifacts)**



Aaron Ganci
@amganci

29 February
2016

cooper
www.cooper.com

4TH EDITION

A B O

THE ESSENTIALS OF INTERACTION DESIGN

U T F

THE COMPLETELY UPDATED CLASSIC ON CREATING DELIGHTFUL USER EXPERIENCES

A C E

Alan Cooper, Robert Reimann, David Cronin, Chris Noessel

WILEY



Aaron Ganci
@amganci

29 February
2016

SCHOOL LUNCH

COLLABORATE. CONNECT. CHOW DOWN



Aaron Ganci
@amganci

29 February
2016

SCHOOL LUNCH

COLLABORATE. CONNECT. CHOW DOWN



Roman Shades
19, Art History Major, Sophomore

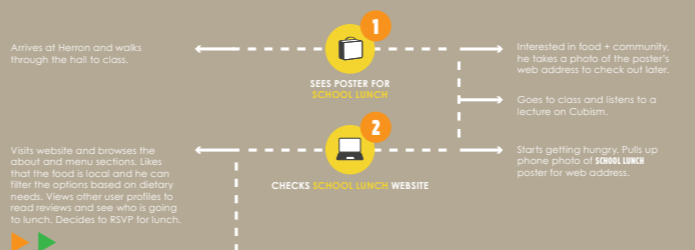
Roman is an adventurous and outgoing student who loves to have new and different experiences. He recently moved to Indy, and lives too far from campus to go home for lunch everyday. Roman works part time as a gallery assistant at Herron, and loves to be involved in the local artistic community. He has a severe peanut allergy, and so must be very aware of what he eats — preferring to know exactly where his food comes from.

SCHOOL LUNCH is a self-funded program run by hardworking students who are passionate about bringing together the artistic community. A rooftop greenhouse provides fresh fruits and vegetables year-round to the community kitchen located on the second floor of Herron. Once a week, the community kitchen is open for business, providing locally sourced and inexpensive meals to students on a budget. It also brings these multi-disciplinary students together more often in order to encourage cross-major collaboration and community building.

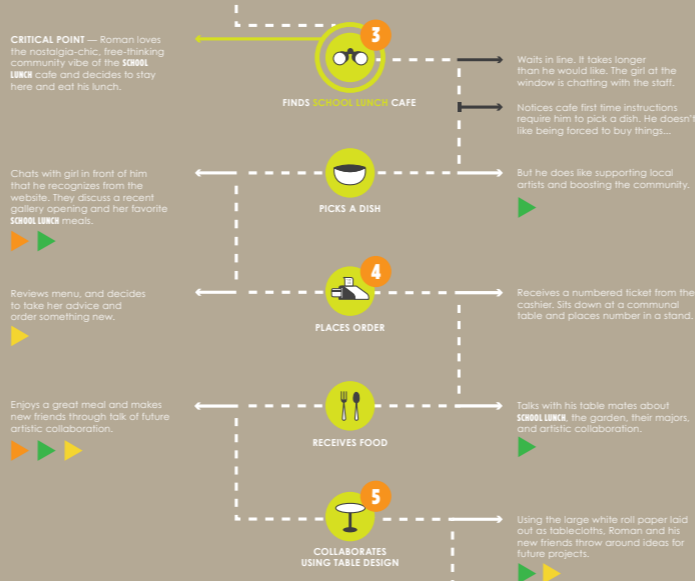
- Touchpoint
- Activity
- Frustration Point
- Artifact/Interface Available

- MOTIVATIONS MET**
- ▶ New and Different Experiences
 - ▶ Community Building & Artistic Collaboration
 - ▶ Awareness of Dietary Needs and Food Origins/Preparation

PRE-LUNCH



LUNCH TIME



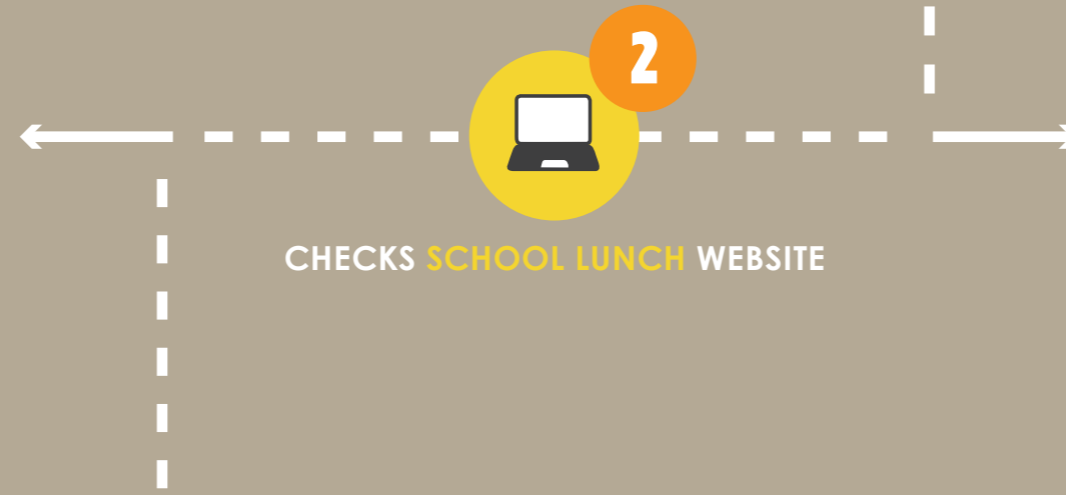
POST-LUNCH



Aaron Ganci
@amganci

29 February
2016

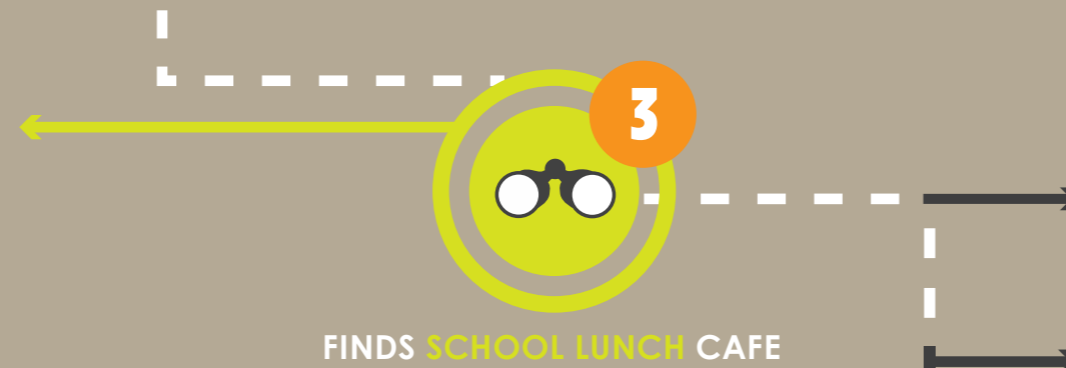
Visits website and browses the about and menu sections. Likes that the food is local and he can filter the options based on dietary needs. Views other user profiles to read reviews and see who is going to lunch. Decides to RSVP for lunch.



Goes to class and listens to a lecture on Cubism.
Starts getting hungry. Pulls up phone photo of **SCHOOL LUNCH** poster for web address.

LUNCH TIME

CRITICAL POINT — Roman loves the nostalgia-chic, free-thinking community vibe of the **SCHOOL LUNCH** cafe and decides to stay here and eat his lunch.



Waits in line. It takes longer than he would like. The girl at the window is chatting with the staff.

Notices cafe first time instructions require him to pick a dish. He doesn't like being forced to buy things...

Chats with girl in front of him that he recognizes from the website. They discuss a recent gallery opening and her favorite **SCHOOL LUNCH** meals.



But he does like supporting local artists and boosting the community.



Reviews menu, and decides to take her advice and order something new.



Receives a numbered ticket from the cashier. Sits down at a communal table and places number in a stand.



COLLABORATE CONNECT CHOW DOWN

Every Wednesday on the 2nd floor
www.schoollunch.com



HOME

ABOUT

MENU

HOW IT WORKS

USERS

GALLERY

LOGIN/SIGNUP

FILTER BY ▼

ALLERGEN



WHEAT

VEGAN



SHELLFISH

VEGETARIAN



FISH

GLUTEN-FREE



PEANUTS

PRICE



TREE NUTS

RATING



SOY



MILK



EGGS

A

VEGAN

VEGETARIAN

PEANUTS PRESENT

GLUTEN FREE



PESTO PANINI
★★★★★

\$6.99



COCONUT RICE WITH PEANUT SAUCE
★★★★★

\$8.99

B



THE ARTSY AVOCADO SALAD BOWL
★★★★★

\$9.99



SALVADOR SALMON BOWL
★★★★★

\$9.99



THAI CHILI CHICKEN
★★★★★

\$6.99



AVOCADO BLACK BEAN TACOS
★★★★★

\$7.99

C



A

B

C



HOME

ABOUT

MENU

HOW IT WORKS

USERS

GALLERY

LOGIN/SIGNUP

ALLERGEN x PEANUTS x

FILTER BY ▼

ALLERGEN

VEGAN

VEGETARIAN

GLUTEN-FREE

PRICE

RATING

D VEGETARIAN

E ALLERGEN

EGG SOY

GLUTEN-FREE



THE ARTSY AVOCADO SALAD BOWL

F A delicious salad of local beets, carrots, kale, brussel sprouts and chickpeas act as a bed for a single perfectly fried cage free egg. The salad comes with a miso dressing that is served on the side and is topped by pomegranate seeds and sliced avocado.



\$8.99

Contains: Beets, carrots, brussel sprouts, kale, eggs, soy, chickpeas, avocado, spinach, miso, olive oil, salt, parsley and pomegranate seeds

Faved By



D



E



F



G



MacBook

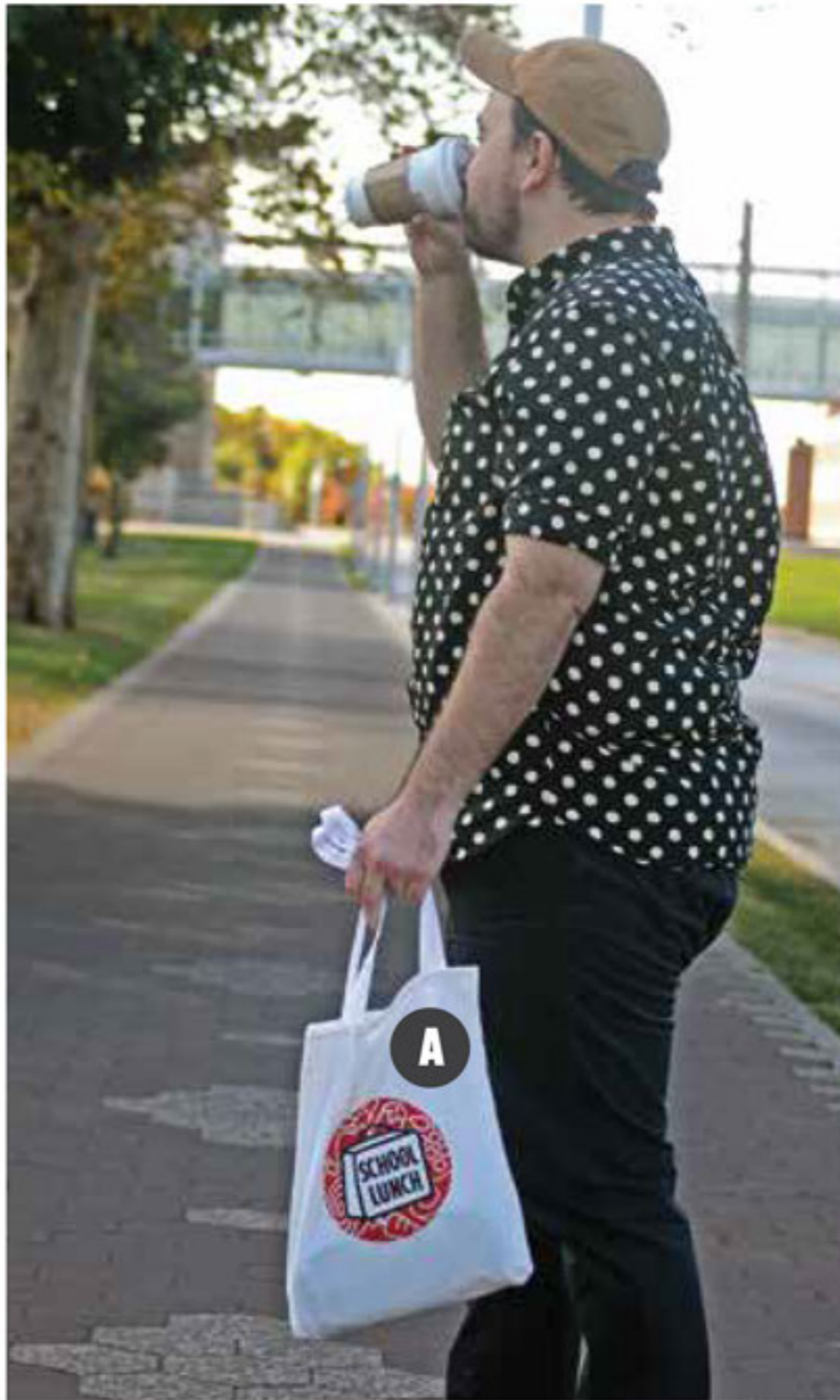


7 TO-GO CONTAINER

Throughout his lunch, Roman spends so much time collaborating with his new friends that he isn't able to finish all of his food. He asks a staff member for a to-go box, folds the container, and secures his leftovers inside.

A Wax-coated deli paper inside each container provides a no-spill barrier for all kinds of leftover food items. Be worry free while carrying it alongside sketchbooks, refined artworks, and important homework assignments.

B A hand printed graphic pattern on the box secured with a SCHOOL LUNCH logo sticker brings a personal touch and sense of craft to each lunch experience.





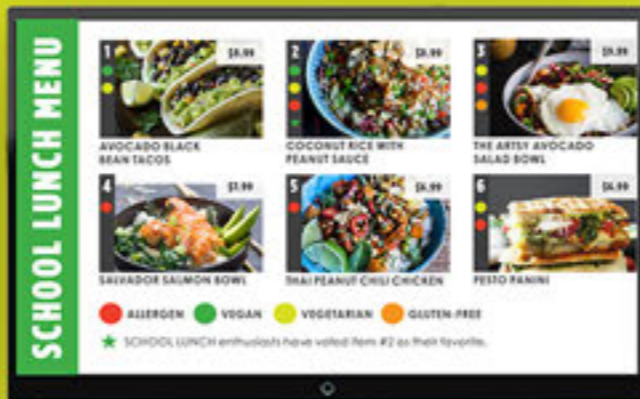
PICK DISH

Start here by picking a dish made by a fellow Heron student.

B



A



C

ORDER HERE

D



E



BAG IT



SCHOOL LUNCH

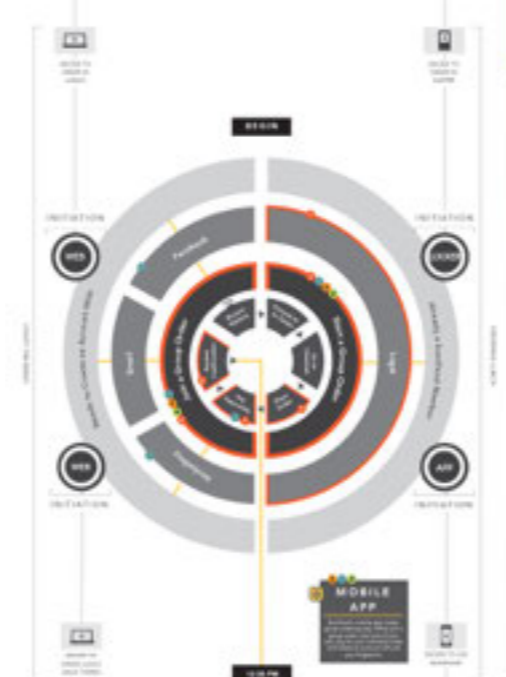


buzzfood

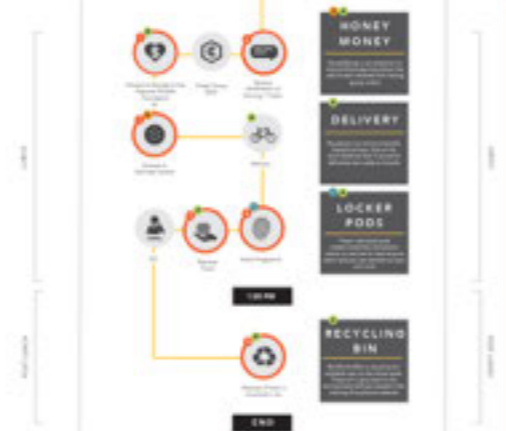


Aaron Ganci
@amganci

29 February
2016



- ### TOUCH POINTS
- 1 LOGIN TO ACCOUNT INTERFACE
 - 2 START OR JOIN A GROUP ORDER
 - 3 PLACE ORDER
 - 4 PAY FOR ORDER (OPTIONAL)
 - 5 RECEIVE ORDER (USER INTERFACE)
 - 6 RECEIVE ONE MONEY TREE
 - 7 SCAN QR CODE OR RECEIPT FOR CASHBACK ON NEXT ORDER
 - 8 RECEIVE CODE FOR CASHBACK
 - 9 RECEIVE FOOD FROM CASHBACK
 - 10 RECYCLE TRASH IN DESIGNATED BIN



- ### MOTIVATIONS
- FOOD EXPERIENCE**
 - Discover new food items
 - Convenience
 - Variety of food items
 - Quality of food items
 - Price
 - CONVENIENCE**
 - Easy to use interface
 - Fast delivery times
 - Variety of food items
 - Price
 - PRICE**
 - Affordable prices
 - Variety of food items
 - Price



LUNCH

POST LUNCH



HONEY MONEY

HoneyMoney is an extension to the buzzfood app that allows the user to earn rewards from having group orders



DELIVERY

Buzzfood is an environmentally fueled business. Due to the short distance that is served all deliveries are made on bicycle



LOCKER PODS

These individual pods create a seamless transaction where no one has to track anyone down and you can retrieve on your own time



RECYCLING BIN

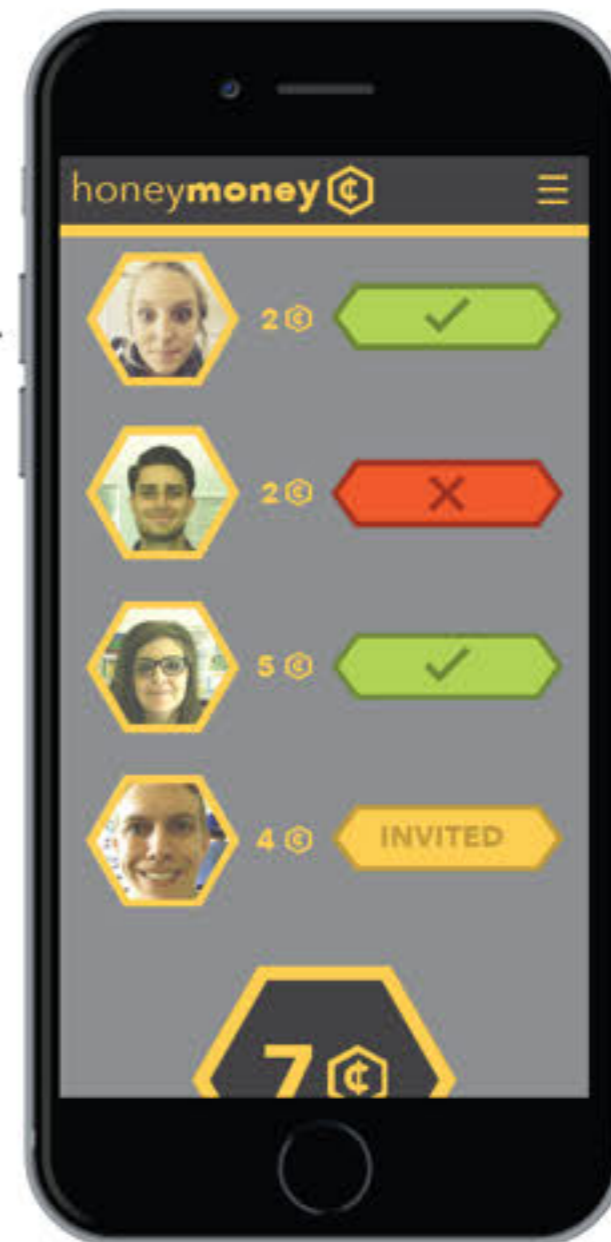
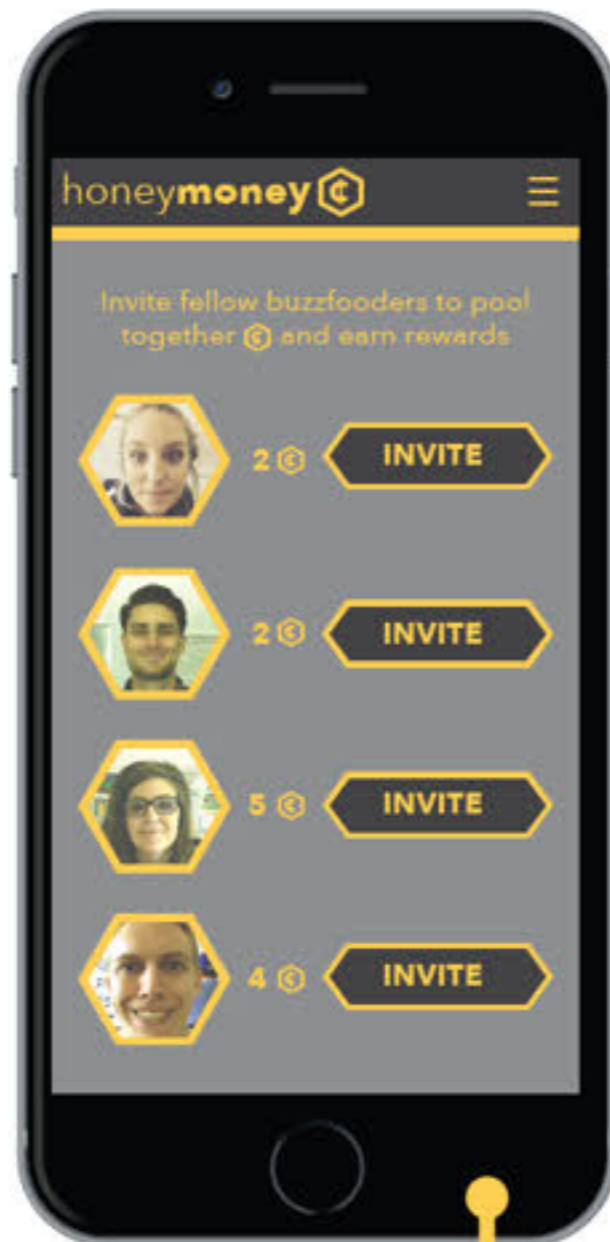
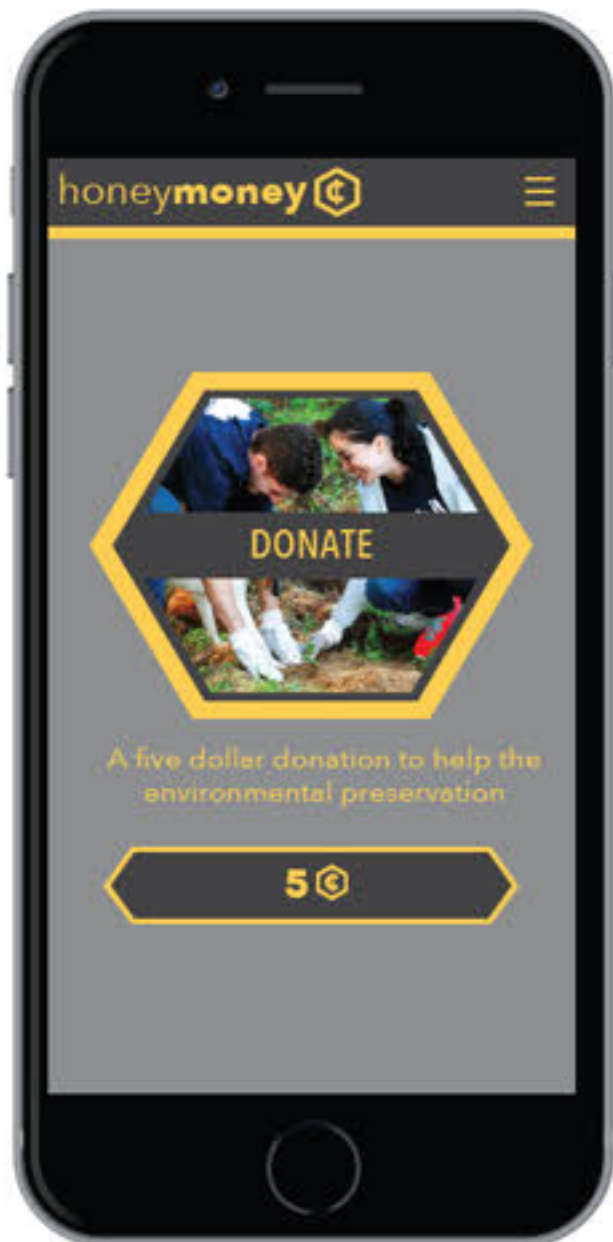
Buzzfood offers a recycling bin available next to the locker pods. These bin's give back to the environment and are reused in the making of buzzfood materials

LUNCH

POST LUNCH

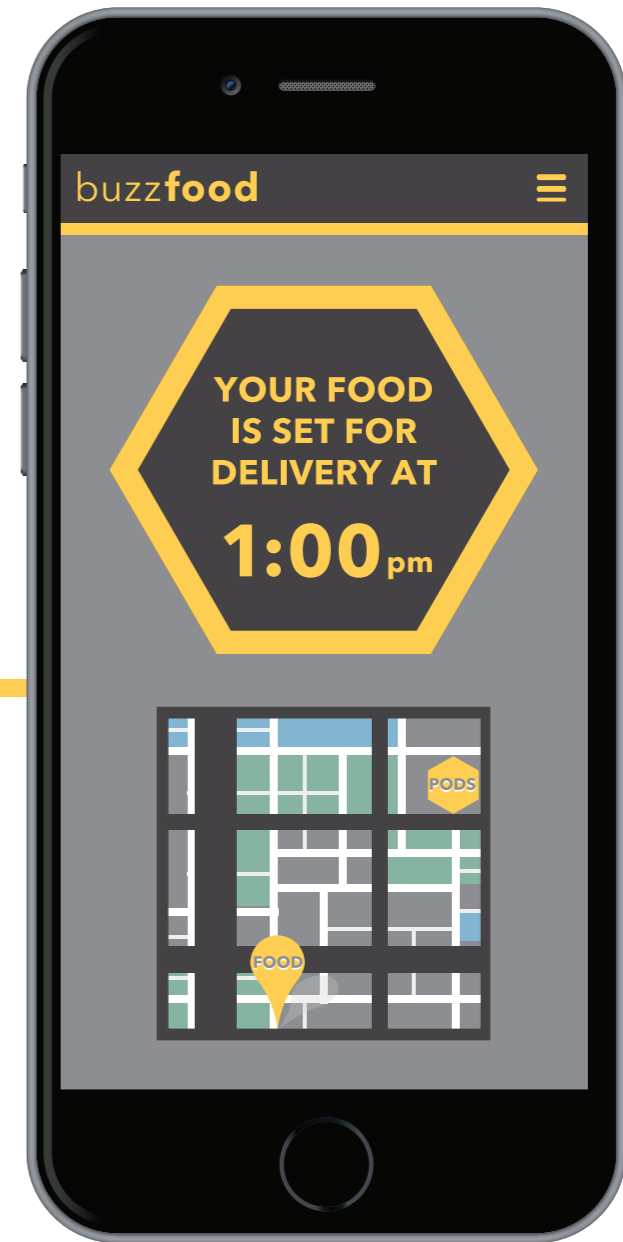
1:00 PM

END



POOL

This is a system in which a group of individuals can pool together their honey money to collectively earn a prize as a group. The prizes can be collected whether you are hungry and are about to place or group order or if you aren't going to order any food at all.



The post order tab of the app provides a reminder of the scheduled delivery time of the order. Located right below is a map that uses a real-time GPS tracker to display the current location of the food. Push notifications can also be turned on in the settings tab.



SAUCER



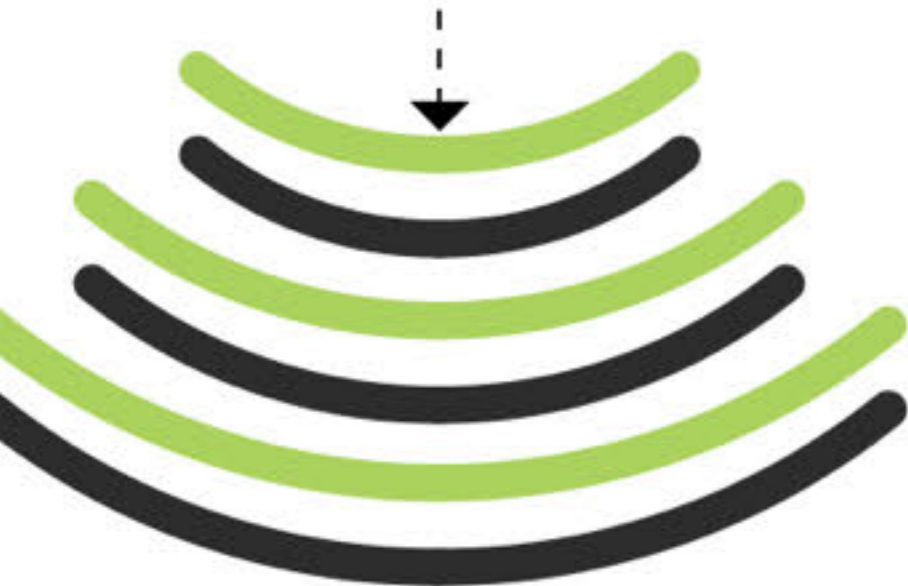
Aaron Ganci
@amganci

29 February
2016

INCOMING PACK



MICHAEL'S EXCITEMENT OVER ENGAGING AN UNUSUAL TECHNOLOGY CONTINUES TO BUILD AS HIS FOOD IS BEING DELIVERED QUICKER THAN HE IS USED TO.



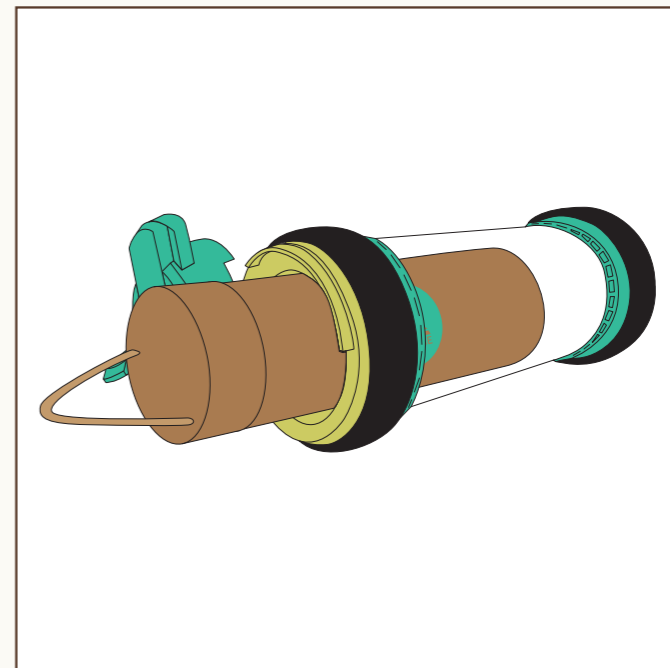
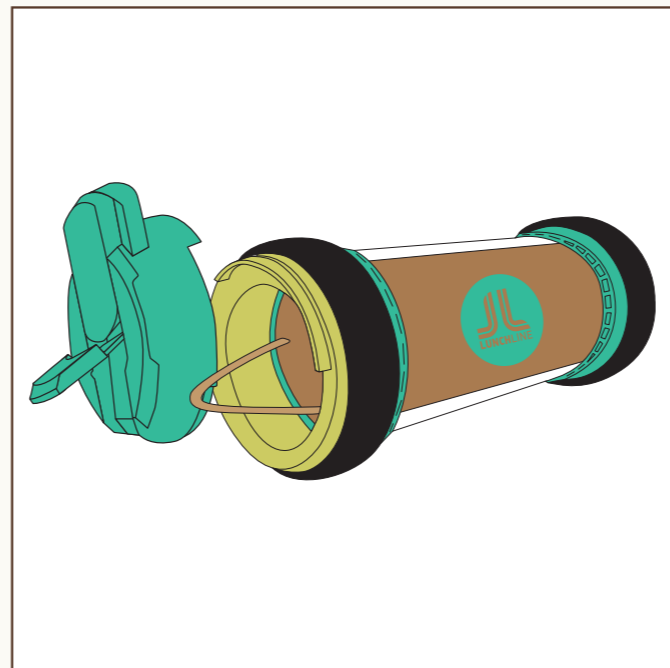
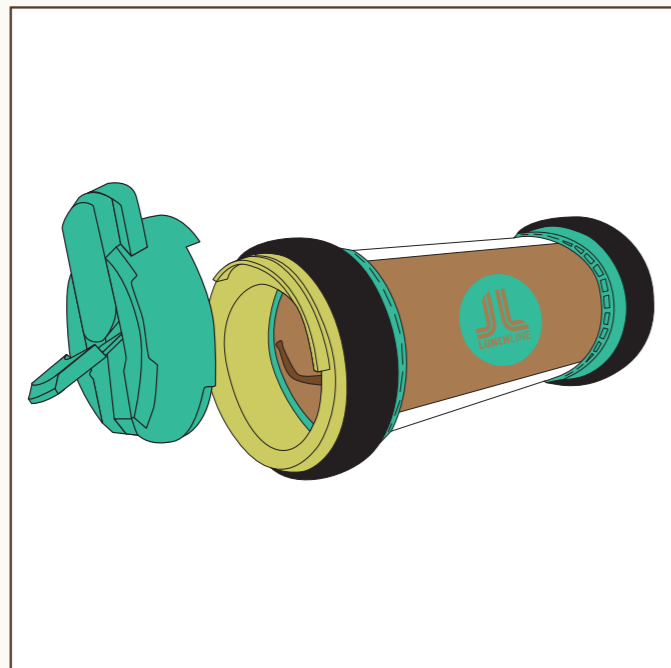
ARRIVAL



Aaron Ganci
@amganci

29 February
2016

PICK-UP



Pulling out the package from the cannister.

THANK YOU!

EST. TIME: 7 MINUTES

Did you know that we source all of our food locally? It's not only better for the environment, it's good for our local business and better for your health.

PAID TOTAL: \$15.03

Learning outcomes

- ➔ **The digital interface is usually only one piece to the bigger experience**
- ➔ **The I/O of your UI is critical to the flow of the experience**
- ➔ **Respect for teammates: planning a good experience takes a lot of different expertise**



Aaron Ganci
@amganci

29 February
2016

Big Takeaway

**Looking at the
big picture helps
them think about
more innovative
solutions.**



Aaron Ganci
@amganci

29 February
2016

Big Takeaway

The quickness of the project lends itself well to lessons about rapid prototyping.



Aaron Ganci
@amganci

29 February
2016

Big Takeaway

Have frequent reflection points about the importance of this learning.



Aaron Ganci
@amganci

29 February
2016

Big Takeaway

**They start to see
the artifact as a tool
to improve lives.**



Aaron Ganci
@amganci

29 February
2016

Creating a Feeling of Collaborative Culture Among Solo Working Entrepreneurs

The Frequency of Tangible Memories: Utilizing RFID in the Development of Consumer Goods

Embodied Interaction: Mediating our Digital Environment through Physical Communication

Bridging the Gap: A study of how families communicate and stay connected across long distances

Matching Applicants Personality with Workplace Culture



Aaron Ganci
@amganci

29 February
2016

THANK YOU

ganci.co/ixd16



Aaron Ganci
Assistant Professor of Visual Communication Design
Herron School of Art and Design
Indiana University–Purdue University Indianapolis (IUPUI)