

Learn UX

Keith Instone

- > March 2, 2022, 7:30 PM
- > dexterityux.com (related talks)

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ACM Student Chapter presents

LEARN UX

 acm
Chapter

 stratascale
An SHI Company

with *Keith Instone,*
Research Analyst @ Stratascale

MARCH 2ND | 7:30 PM

HAYES 111

Understand UX by
RECOGNIZING user impressions
PARTICIPATING in fun activities
LEARNING about UX within companies
EXPLORING fields of study

**FREE PIZZA &
SODA**

FOR MORE INFORMATION
EMAIL: SHAIKS@BGSU.EDU

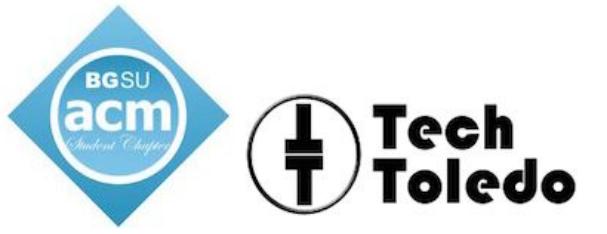
CELEBRATING 50 YEARS OF
1969-2019
DEPARTMENT OF
BGSU Computer Science
BOWLING GREEN STATE UNIVERSITY



User Insights for the Whole Team

Stop guessing what users need

Darren Kall, April 12, 6:30pm, BGSU



When and where



Date and time

Tue, April 12, 2016,
6:30 PM – 8:30 PM EDT



Location

Bowling Green State University
Overman Hall, Room 123 Bowling
Green, OH 43403

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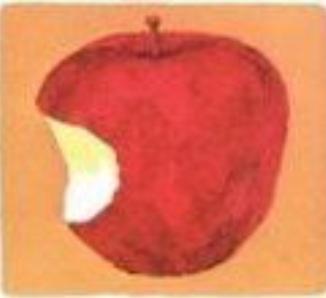


We will talk about user experience from 4 different perspectives.

- **Impressions** people get when interacting with technology
 - **Activities** we do to define, design, and deliver good experiences
 - **Management** of customer and employee experiences
 - **Disciplines** and fields of study that make up the “UX profession”
- .

EVERYONE POOPS

By Taro Gomi



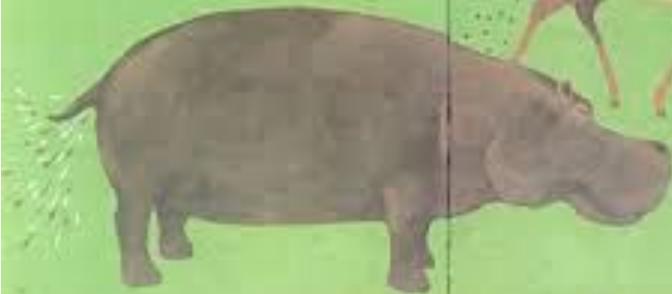
Some animals poop
and pay no attention



Others clean up
after themselves



Some stop to poop



Others do it
on the move





Everybody eats. People have eating experiences.

Cooking skills can be learned. Cooking is part art and part science.

Managing food industry organizations is big business. It depends on business models, culture, and more.

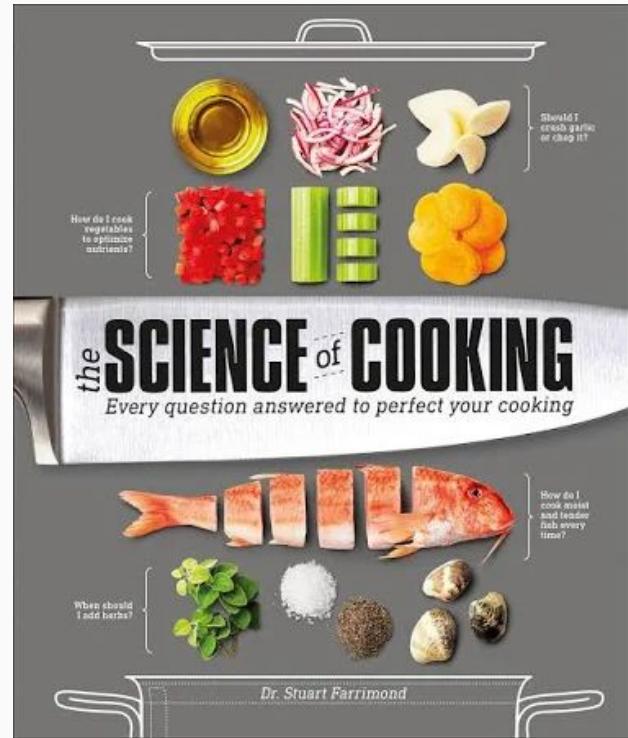
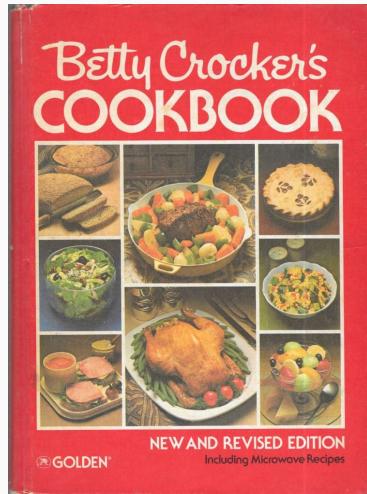
There are many paths to being a culinary professional. You can learn on the job, study on your own, or get a degree.

Everybody eats. People have eating experiences.



Menus and utensils
are interfaces, but
they are not the
whole experience

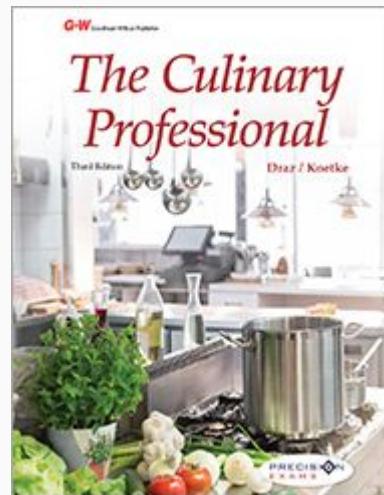
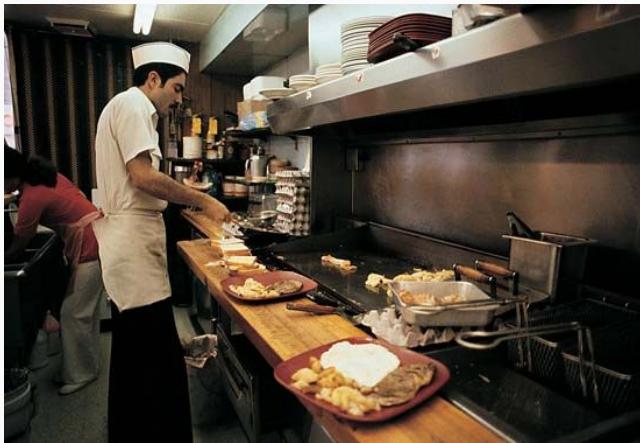
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User-centered design skills can be learned. Defining, designing and delivering good experiences is part art and part science.

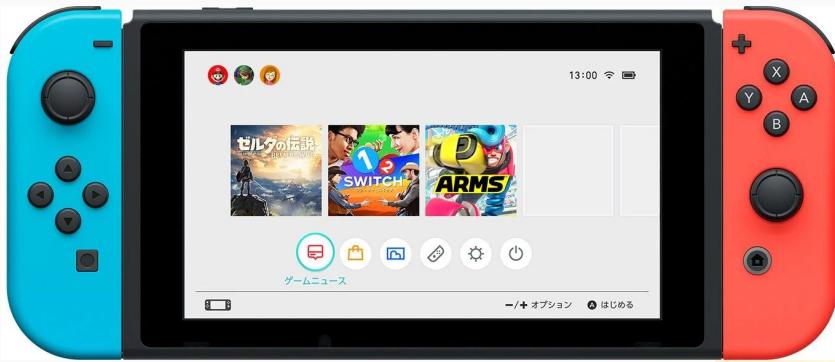
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Everybody uses technology. People have user experiences.



User interface: the buttons, controls & menus you interact with directly



New Study Ranks Animal Crossing: New Horizons As Most Relaxing Game, Surprising No One

Here are the top ten

Ryan Crookston | Fri 1st May 2020



User experience: the context, content, expectations, etc. that determine how you FEEL



UX as a Phenomenon: Impression

“I had a really bad experience trying to buy something from that web site.”

A user experience is an impression someone gets when
interacting with a system

- **Impression:** perceptions, feelings, attitudes, preferences, expectations, responses, behaviors, accomplishments
- **Someone:** customer, employee, citizen, patient, learner
- **Interacting:** goals, tasks, input, output, feedback
- **System:** products, services, spaces, brands, organizations

Summary



1. **User interfaces** are what you interact with directly.
2. Your **user experiences** are based on your accomplishments, expectations, preferences, feelings, and more.
3. **Contexts** have a big impact on experiences (“it depends”).

Even when playing the same game at the same time in the same place, other people's experiences will be different than yours.

Just because you are an expert at a game does not mean you will create a game others will enjoy. In fact, your expertise might make it harder to make a game for someone else...

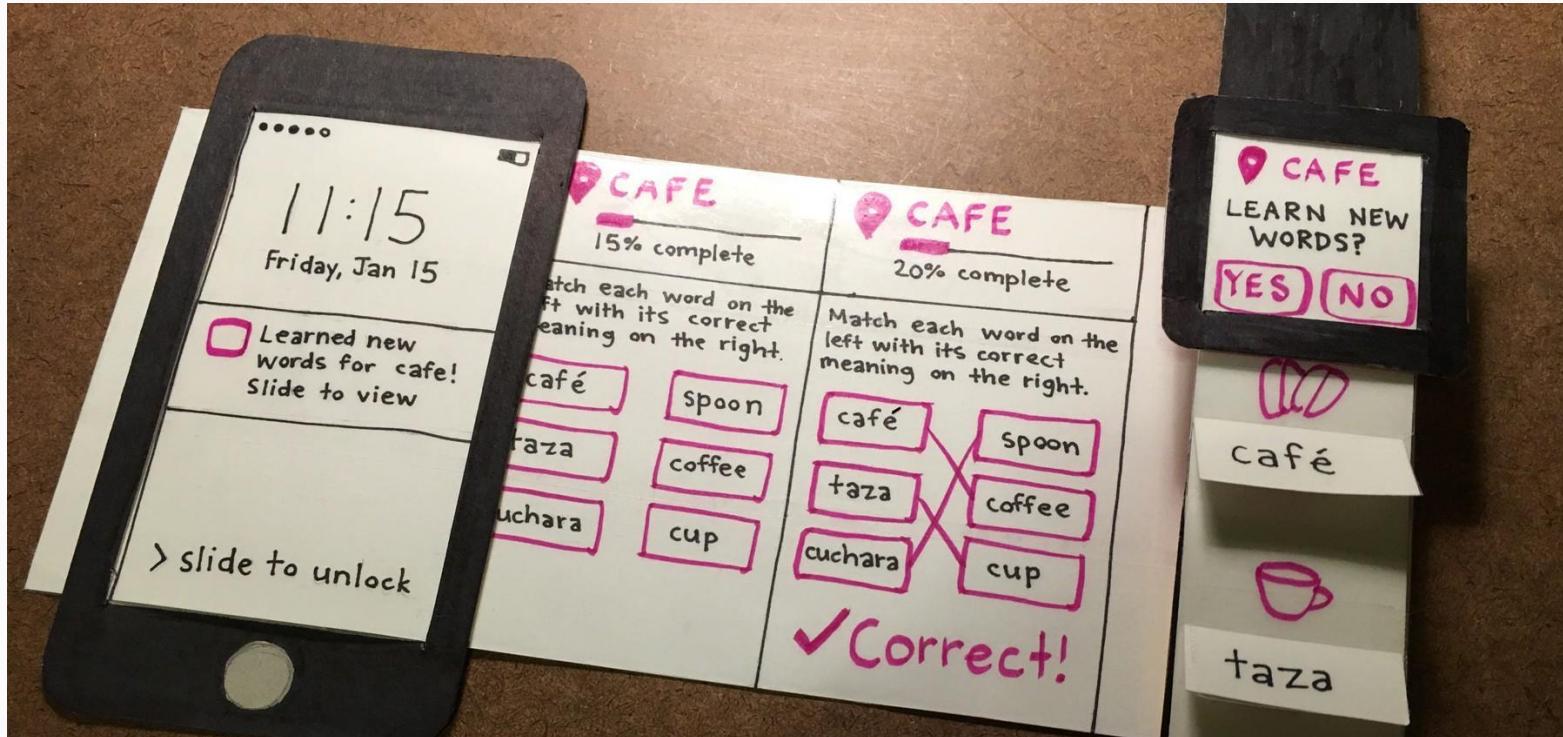
“THE UX” → “Our users’ experiences” ✕ (it depends...)

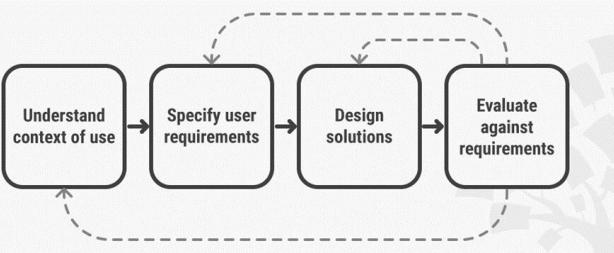
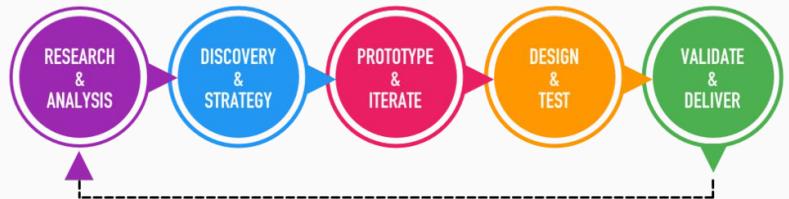
Replace “users” with specific phrases for different situations

- Customers, Potential customers, Current customers
- Employees, New hires, Invoice approvers
- Patients, Family members, Doctors
- Residents, Citizens
- Faculty, Students (roles) → Teachers, Learners (goals)
- Non-humans? Dogs, chickens

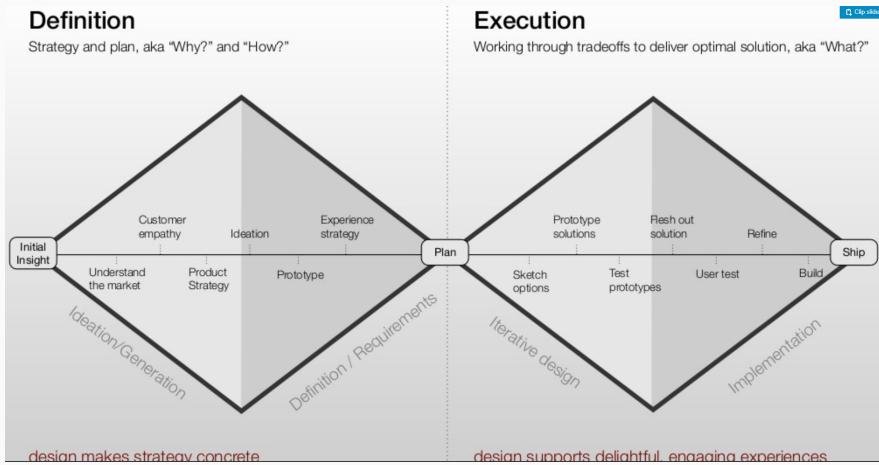
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Defining, designing and delivering good experiences is part art and part science.





UCD: iterative, understanding users at every step



Double diamond: define & execute, diverge & converge

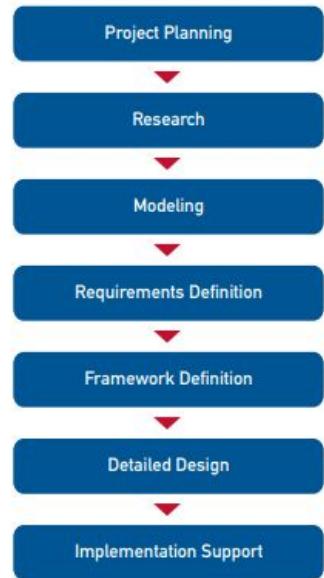


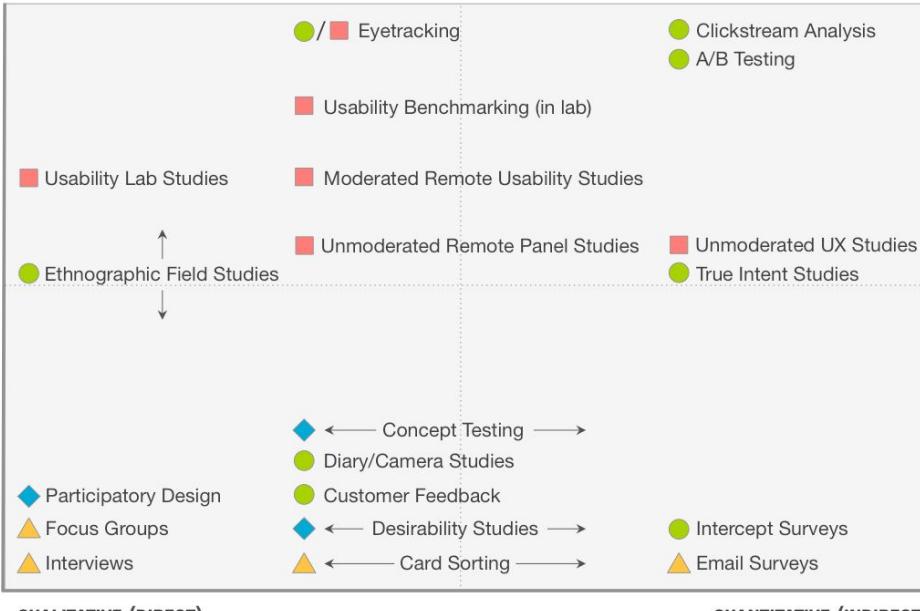
Figure 1.3. An overview of the Goal-Directed process.

Goal-directed

Example user-centered design processes

A LANDSCAPE OF USER RESEARCH METHODS

BEHAVIORAL



ATTITUDINAL

KEY FOR CONTEXT OF PRODUCT USE DURING DATA COLLECTION

- Natural use of product
- ▲ De-contextualized / not using product
- Scripted (often lab-based) use of product
- ◆ Combination / hybrid

© 2014
Christian Rohrer



Requirements Methods

Current topics

- Affinity Diagramming
- Claims Analysis
- Competitor Analysis
- Future Workshop
- Persona
- Quality Function Deployment (QFD)
- Stakeholder Interview
- Scenario of Use
- Use Case
- Usability Benchmark

How does heuristic evaluation compare to usability testing?

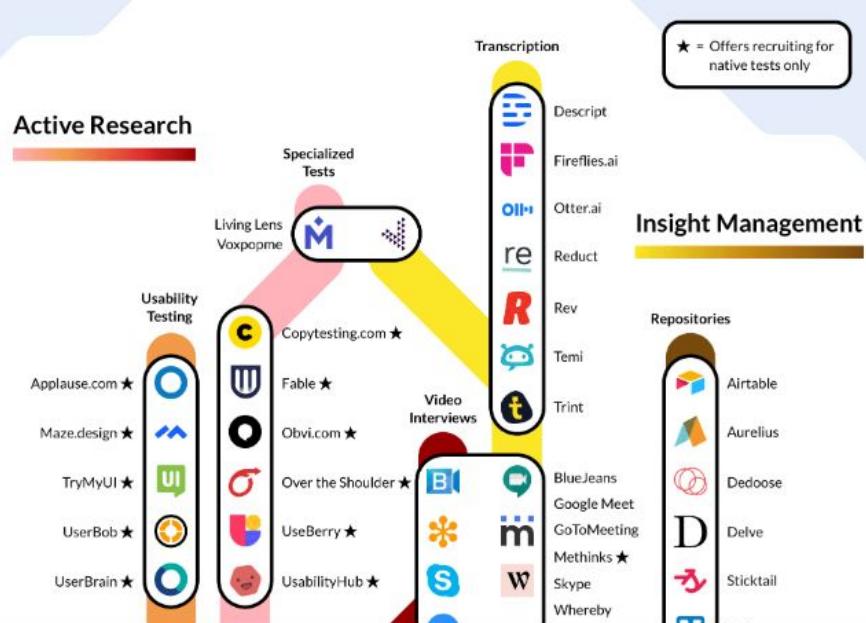
Heuristic evaluation was codified around 1990, at a time when it was expensive to get access to users. It was common for people to have to be trained to use the technology being evaluated before they could sit down in a usability lab to perform some tasks. The whole concept of even having an interface for end-users was pretty new. Conventions were just settling into place.

Usability testing has been around since at least the 1980s, but began to be widely practiced about the same time Nielsen and Molich published their heuristic evaluation method. While usability testing probably needs some updating as a method, the basic process still works well. It is pretty

Methodology: knowing when (& when not) to apply a specific technique for a specific project based on goals, budget, time, ...

The 2020 UX Research Tools Map

USER INTERVIEWS



UXTOOLS.co

Design	Prototyping	Handoff	Design Systems	Versioning	Monitoring	
Name	Usage	Platform	Free	Cost	Programs	
Zepelin	Based on the 2018 Design Tools Survey	Mac, Windows	Yes	\$180	Sketch, Figma, Ps, XD	
InVision		Cloud	No	\$180	Sketch	
Figma		Cloud, Mac, Windows	Yes	\$144	Sketch, Figma	
Adobe XD		Mac, Windows	Yes	\$120	XD	
Sketch Measure		Mac	Yes		Sketch	

2019 Design Tools Survey Results

Not sure which tools to use? 3,000 designers come together to share their toolkits in this annual survey.

Design Tools

Prototyping Tools

Handoff Tools

Design System Tools

Versioning Tools

Monitoring Tools



UXers have LOTS of methods for understanding human behavior, plus synthesizing, communicating & getting buy-in

- Personas & customer journeys are “popular” ones
 - Often being taught & done poorly, outdated
- Qualitative & quantitative user research
- Attitudes vs. behaviors
- Design workshops & visualizations
- Invest in design → Less need for training

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It depends on business models, culture, and more.

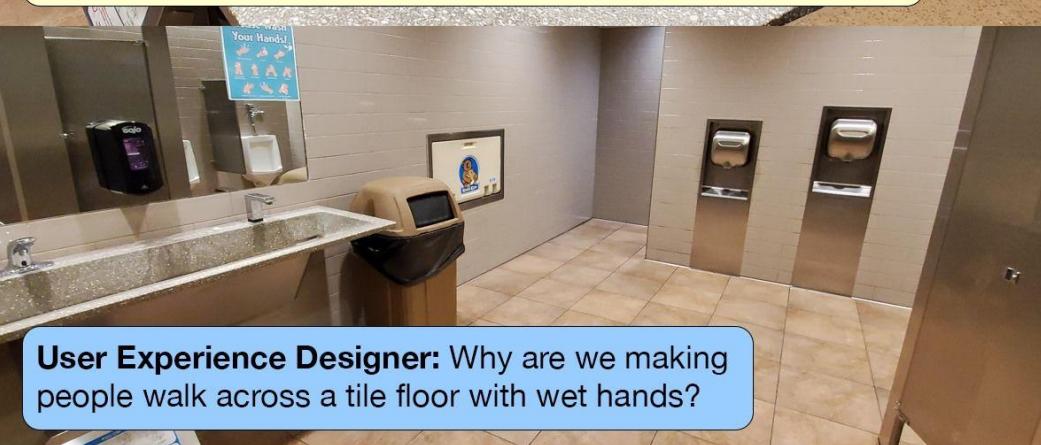


Design disciplines explained.



Visual Designer: Why don't the faucets match?

User Interface Designer: How do I control the temperature?



User Experience Designer: Why are we making people walk across a tile floor with wet hands?

UX as Team



“Is UX done yet? We need to start coding!”

Common roles on a UX team

- Visual designer
- User interface designer
- Interaction designer
- Product designer
- Information architect
- Content strategist
- User researcher
- Experience architect
- Prototype developer
- Usability specialist
- Accessibility specialist
- (UX) Writer
- Project manager
- Manager

Other team names

- Design
- Product design
- Service design
- Digital design
- Experience design
- Customer experience
- Employee experience
- Experience strategy
- <Business unit> design (if distributed)
- Usability
- DesignOps
- ResearchOps

Common “owners of UX” & “homes for UX teams”

- CEO, CTO, CIO, CMO, CDO, CXO
- Vice President, Director, Manager
- Engineering
- Product
- IT
- Marketing
- HR
- Innovation
- Customer service
- Communications
- <Business unit>



How do organizations manage experiences?
It depends on so many things, unfortunately

- Separate or together: Strategy, research, design, content, engineering
- User focus (customers, employees, both)
- Central service / agency vs. Distributed / embedded
- Projects (start & end) vs. Products (ongoing)
- UX maturity: Hostile, Skunkworks, Managed, Integrated

There are many paths to being a UX professional.
You can learn on the job, study on your own, or get a degree.



MASSAGE THERAPISTS
LICENSING REQUIREMENTS

At least **18** years old

High school **graduate or equivalent**

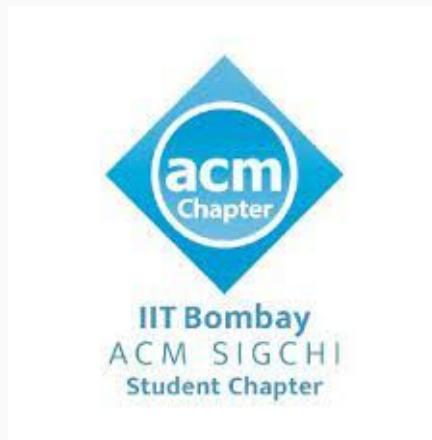
Diploma from a school with a board-approved curriculum or an active out-of-state license for the last five years

Pass **MBLEx (Massage and Bodywork Licensing Examination)**

Complete application and **pay \$150** fee (biennial renewal \$100)

Undergo **FBI & BCI criminal records check**

No “Licensing” for UX jobs



Google

★★★★★ 4.8 (58K) | 737K Students

Google UX Design

coursera

DREXEL UNIVERSITY
College of Computing & Informatics

ACADEMICS ADMISSIONS STUDENT EXPERIENCE RESEARCH PARTNERSHIPS ABOUT

HOME > ACADEMICS > GRADUATE PROGRAMS > HUMAN-COMPUTER INTERACTION AND USER EXPERIENCE > MSI HUMAN-COMPUTER INTERACTION/UX MAJOR

**MS IN INFORMATION - HUMAN-COMPUTER
INTERACTION (HCI) & USER EXPERIENCE
(UX) MAJOR**

State of UX careers & education



NN/G Career Report

35% UX-related university degree

65% Other training (can choose >1)

- 59% Online courses
- 42% Certificate
- 16% Bootcamp
- 21% None (“on the job”)

UXPA Salary Survey

- 8% Doctorate
- 47% Master’s
- 38% Bachelor’s
- 5% Associate’s or less

GROWTH

- Top 10 in-demand “hard skills” ([LinkedIn](#))
- Design teams growing by 21% ([InVision](#))
- #24 Best Job in America ([Glassdoor](#))

UX Communities (centered on Ohio)



UX Professionals

Knowledge, Ethics, Academia



UX Practitioners

Jobs, Conferences, Mentoring



MWUX 2020



UX Aficionados

Awareness, Meetups, Related careers





CS 3240 - Usability Engineering

Credits: 3

Description: User interface design and human-computer interaction. Understanding the user. Design and prototyping of highly usable interfaces. Design notations, dialog styles, screen layouts, and usability testing. Event-driven programming language for rapid prototyping.

Prerequisite(s): [CS 2020](#).

When Offered: Spring.



CS 6650 : HUMAN ISSUES IN COMPUTING

Semester Hours: 3.0

Behavioral aspects of computing, including topics such as programming style, language features, computer-aided instruction, computer science expertise, training, computing for universal access. Usability engineering. Research methodology.

Prerequisite: Admission to MS in CS program, or consent of department.

BGSU: VCT & ART



VCT 3500 - User Experience

Description: This course examines the field of User Experience (UX) research and design. Students will learn how analysis and assessment, idea generation, prototype building, and methods of production are applied in the UX industry.

Students will engage in UX research, including conducting interviews, generating documentation, and analyzing systems using principles of human-centered design. They will create and evaluate prototypes of various degrees of fidelity and engage in creative problem-solving and innovation through fast-paced activities and collaborative projects.

ARTD 3055 User Experience/User Interface Design

Credit Hours: 3 Studio Hours: 5

Continued exploration and application of design principles and techniques, with specific focus on the digital realm of virtual interactivity, from web, mobile, kiosk and user experience design.

Specific introduction to, exploration and application of: design thinking, information architecture theory, user interface design principles, pixel-based typography, and experimental, sequential and interactive modes of communication.



UX as Field of Study

“What do I need to learn in school in order to get a UX job?”

A field of study focused on how people behave in technology-enabled contexts and how to creatively address human needs

Human-Computer Interaction	Carnegie Mellon > Computer Science > HCI Institute <i>Humanities, Social Sciences, Business, Fine Arts, Technology, Software Engineering</i> Akron > Computer Science > HCI class
Library & Info Science	Kent State > Information (iSchool) > User Experience Design
Graphic & Visual Communication Design	Tri-C > Visual Communication & Design > Concentration in Web and Interactive Media Ohio State > Design > (Industrial Design Visual Communication Design) Miami > Creative Arts > MFA in Experience Design
Cognitive Psychology	Ohio U > Psychology > Specialization in Cognitive Psychology Ohio State > Center for Cognitive and Brain Sciences <i>Psychology, Computer Engineering, Industrial Engineering, ...</i>
Business Management	Case Western > Weatherhead > PhD in Management (Design & Innovation)
Rhetoric & Writing	Michigan State > Writing, Rhetoric, and American Cultures > Experience Architecture
Other	Ohio State > New Media & Communication Technology > HCI track



UX is multi-disciplinary

Good: Rapid evolution, broad & deep

Bad: Fractured

Ugly: Getting 1st job in UX

- Core (1980s) from CS + Psychology (Human-computer interaction)
 - Information Science (1999), Graphic Design (2003)
 - Humanities, Business, Industrial design, ...
- Growing pains
 - Qualifications vs. Inclusion
 - Art vs. Science
 - Business vs. Social



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Thanks!

Related stuff at dexterityux.com

Keith Instone, instone@dexterityux.com



Appendix

How to get started on a career in UX



- > Join [IxDA Cincinnati](#) / [Columbus](#), [UX Akron](#), [UXPA Cleveland](#)
 - National/international counterparts, plus AIGA (graphic design), IDSA (industrial design), HFES (human factors), STC (technical communication) depending on your interests
- > Read Books: [Rosenfeld Media](#), [O'Reilly](#) (tech focus), [Morgan Kaufmann](#) (textbooks); try Libby!
- > Peruse Magazines: [ACM Interactions](#), [UXPA Magazine](#), [UX Matters](#)
- > Listen to but question the thought leaders: [Nielsen/Norman Group](#), [UIE](#), [DeltaCX](#)
- > Be wary of: Medium articles (some good, some terrible), Bootcamps (that over-promise)
- > Consider Ohio Higher Ed: Kent State MS in UX Design, Design programs, mix & match (e.g., BGSU)
- > Career changers: Start “doing UX” within your current job responsibilities (e.g., journey map of “customers”)
- > Net: a combination of learning on your own (books, videos), continuing education (conferences), networking/mentoring, and formal education (degrees or certificates)



UX as Skill Set

“Everyone needs to get better at UX if we want to be agile and innovative.”

A skill set, a collection of abilities, such as empathy, divergent thinking, and sketching, which can be applied to any professional or creative endeavor

Listed for UXers (and other roles)

- Empathy, team player
- Solution driven, delivery focus
- People, relationships
- Passion, energy
- Communication, listening
- Creativity
- Technology understanding

Common for UXers

- Sketching
- Storytelling
- Critiquing
- Presenting
- Facilitating

<https://medium.com/amplify-design/shapes-of-ux-designer-ad047bddac7f>

https://articles.uie.com/indispensable_skills/

UX as organizational Mindset



“UX is easy, just follow the Golden Rule.”

A mindset of caring about your users' needs and doing your best to serve them

Organizations view the **amount of work, issues, and challenges** in defining, designing, and delivering good user experiences in many different ways.

- > **Easy:** Just don't treat them like “stupid users” (PICNIC, PEBKAC, ID10T, Layer 8)
- > **Basic:** Some general purpose skills will do the trick
- > **Mechanical:** With the right tools, anything is possible
- > **Repeatable:** Follow a (any) process, it just requires practice to get it right
- > **Manageable:** Administer and direct your teams to success
- > **Strategic:** If the people at the top know what they are doing, we'll be fine
- > **Scientific:** We cannot just make it up, there is knowledge to acquire and proven approaches
- > **Professional:** Bring in the pros who have devoted their careers to it (like we do with HR, finance, ...)
- > **Cultural:** “Culture eats strategy for breakfast”
- > **Industrial:** Our company cannot solve the important challenges alone



UX as Profession

“I am a good interaction designer, but I want user researcher to be my next UX job.”

A profession, with careers, occupations, and jobs such as user researcher, information architect, user interface designer, and usability engineer

National Society of Professional Engineers

Profession “requirements”? How do we stack up?

- Full-time occupations
- Training and certificates
- University programs: degrees, labs, research
- Body (bodies) of knowledge
- International, national, local associations
- Standards and standards bodies
- Ethics
- Licensing
- Recognition by governments to self-manage or be regulated

- Graduate from an engineering program approved by state's licensure board
- Fundamentals of Engineering exam = “engineer in training”
- Four years of qualifying engineering experience
- Qualify for state's licensure requirement: Prepare for, take, pass the Practice of Engineering exam
- Maintain and improve skills through continuing education