



CSE 593 - HCI

# Understanding Context of Use

Farnaz Jahanbakhsh

# Logistics

- Students enrolled from the waitlist will receive deadline extensions.
- Assignment 0 (Individual) due tomorrow, Wednesday at 5PM. Assignment 0 (Group) due next week.
- There is a required reading for next lecture. Read only Chapter 2!
- Quiz 2 assigned on Thursday and due Friday.

# Learning goals

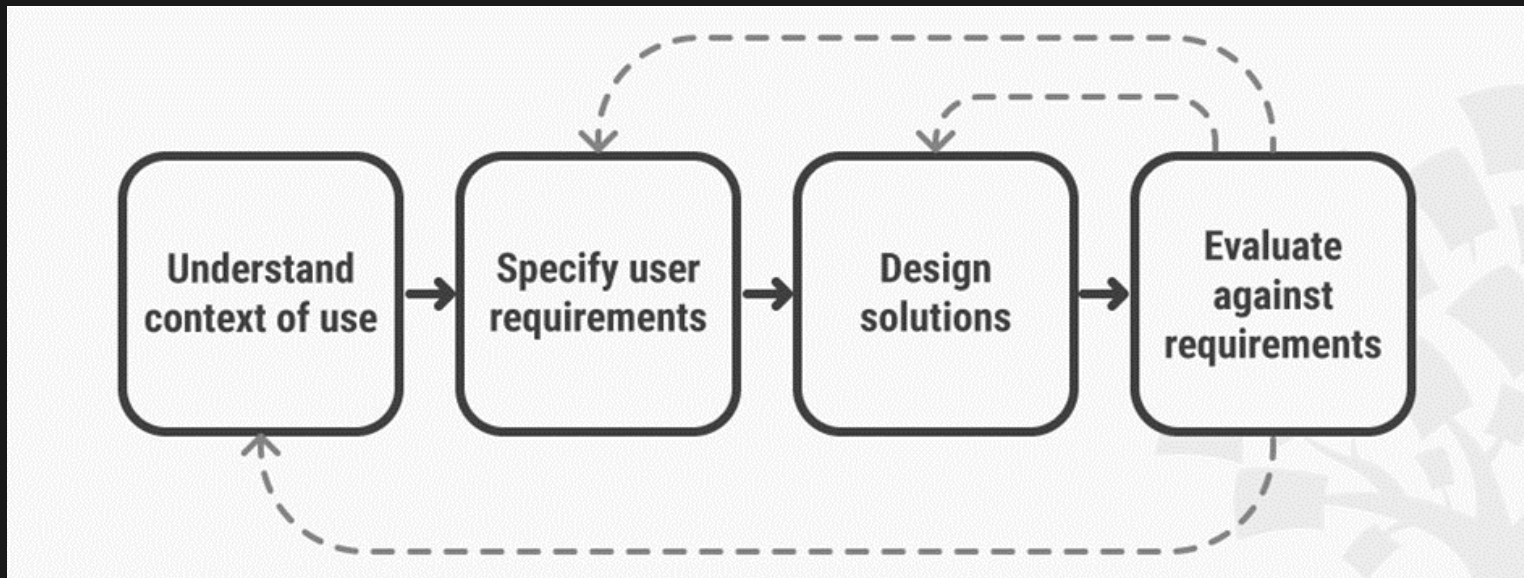
Define context of use.

Define factors that impact context of use.

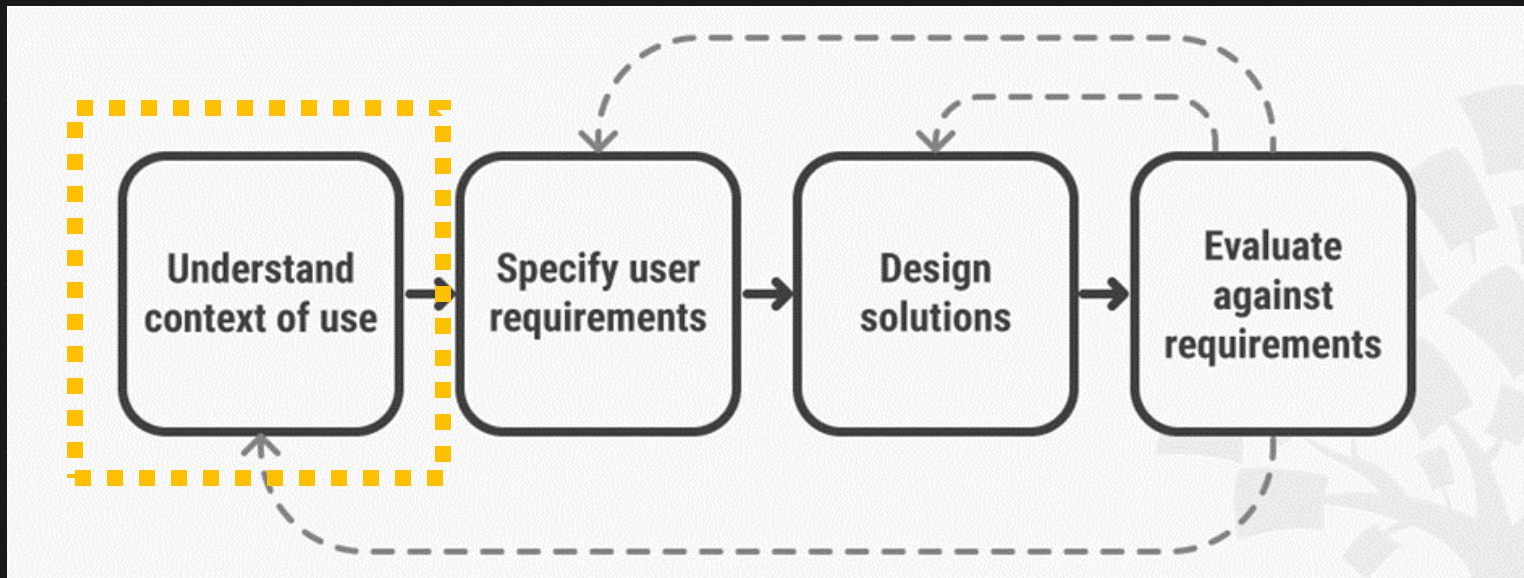
Define tasks and goals.

Learn about context of use from an example

# User-Centered Design Process



# User-Centered Design Process



# What is context of use?

What is context of use?

“Environment within which the interaction is situated.”

# What factors make up context of use?



# Please answer this question in Canvas

What are some of the factors that make up a context of use? Select all that apply.

- ☐ Human factors
- ☐ Technological factors
- ☐ Natural factors
- ☐ Socio-economic factors
- ☐ Cultural factors
- ☐ Political factors
- ☐ Other (be ready to tell us what they are)

You have 120 seconds...

**DONE!**

# Factors that make up context of use

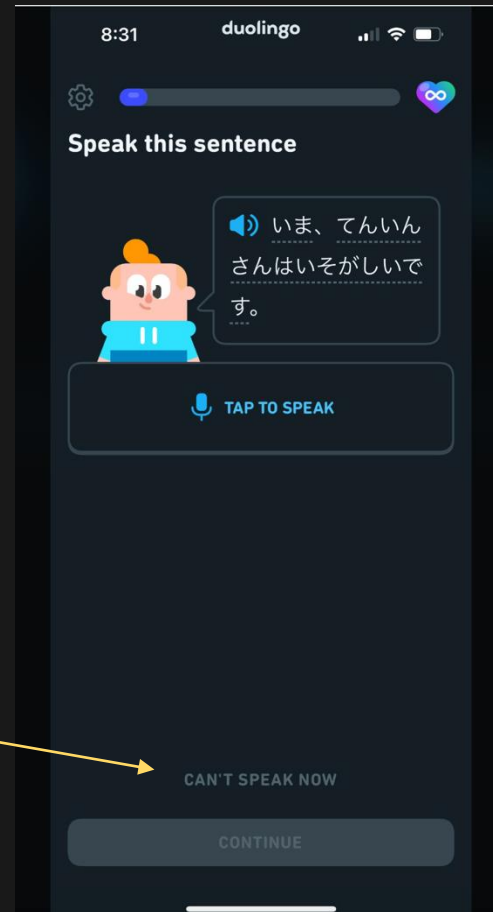
- Human factors (including human ability)

# Factors that make up context of use

- Human factors (including human ability)
- Technological factors

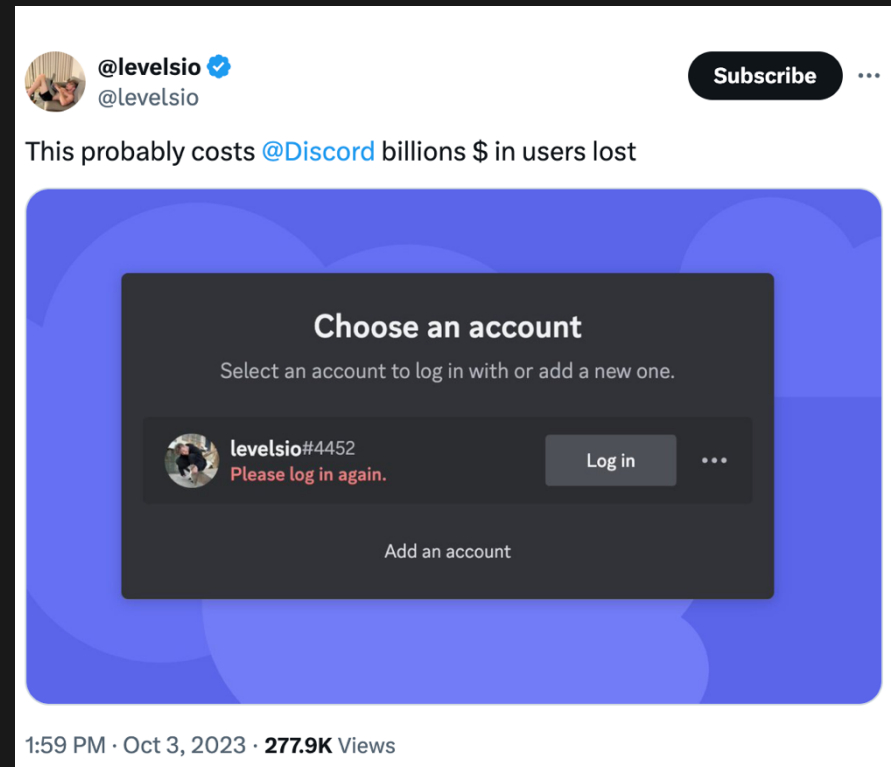
# Factors that make up context of use

- Human factors (including human ability)
- Technological factors
- Natural factors



# Factors that make up context of use

- Human factors (including human ability)
- Technological factors
- Natural factors
- Socio-economic factors



# Factors that make up context of use

- Human factors (including human ability)
- Technological factors
- Natural factors
- Socio-economic factors
- Cultural factors

# Factors that make up context of use

- Human factors (including human ability)
- Technological factors
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- Socio-economic factors
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- Political factors



# Factors that make up context of use

- Human factors (including human ability)
- Technological factors
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- Socio-economic factors
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- Political factors

**Supreme Court overturns Roe v. Wade, ending right to abortion upheld for decades**

UPDATED JUNE 24, 2022 · 10:43 AM ET ⓘ

HEARD ON [ALL THINGS CONSIDERED](#)

By [Nina Totenberg](#), [Sarah McCammon](#)



# Factors that make up context of use

- Human factors (including human ability)
- Technological factors
- Natural factors
- Socio-economic factors
- Cultural factors
- Political factors

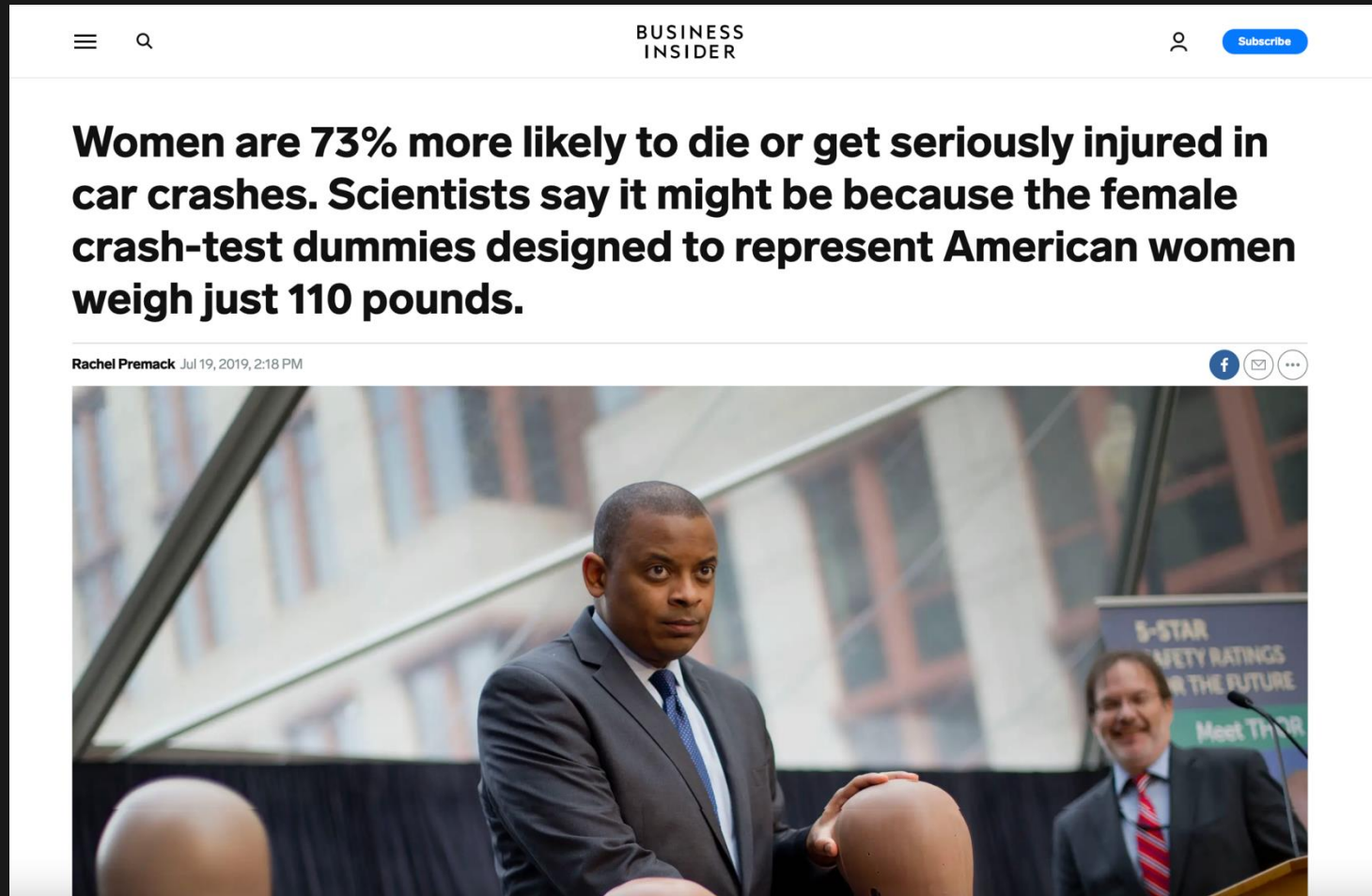
## How period tracking apps and data privacy fit into a post-Roe v. Wade climate

UPDATED JUNE 24, 2022 · 3:06 PM ET

By Rina Torchinsky



# When these factors are missed



# When these factors are missed

**Nextdoor  
reduced racial  
profiling by  
75% with good  
UI (re)design**

Welcome to the Nextdoor demo website! Questions? Contact us at [priority@nextdoor.com](mailto:priority@nextdoor.com).  
This is an example neighborhood.


Home  
Inbox  
Neighbors  
Map  
Events Calendar  
Recommendations **NEW**

LOCAL  
Alta Hill  
Local Agencies

CATEGORIES  
Classifieds  
Crime & Safety  
Documents  
Free Items  
General  
Lost & Found  
Recommendations

YOUR GROUPS  
Alta Hill Neighborhood Watch  
Alta Hill Parents  
Dog Owners  
Emergency City Contacts

### Describe a person

**ASK YOURSELF**  
What details can I add that will help distinguish this person from other similar people?  
 Describe clothing from head to toe. Police say this is the most helpful to neighbors (and helps avoid suspecting innocent people).

When race is included, you must include at least 2 of the highlighted fields. [\(Why?\)](#)

**Hair:**

**Top:**

**Bottom:**

**Shoes:**


**Now give the other basics**

Age:

Build:

Race:

[Back](#) [Add this person](#)

 **Hand-me-down School Supplies**  
Bill Hale from Alta Hill

# What factors are relevant?

Do you text like Gen Z?



Do you text like Gen X?

;P -\-(ツ)-/- :-(<3 (^\_^)

Do you text like A MILLENNIAL?



Do you text like a Baby Boomer?



thank you.



ok.



Sneak peak into what comes later

There will be trade-offs between solutions along these factors.

Understanding context of use

Interaction is purposeful  
(more often than not)

# Understanding context of use

Interaction supports completion of **tasks** that users perform to accomplish their **goals**.

Understanding context of use

# Goals vs. Tasks



Please answer this question in Canvas.

Goals are different from tasks. Select all that apply (hint: there could be more than one correct answer).

- ☐ Goals are people's desired states.
- ☐ Goals are behaviors that people perform to accomplish their tasks.
- ☐ Tasks are people's desired states.
- ☐ Tasks are behaviors that people perform to accomplish their goals.

You have 120 seconds...

**DONE!**

What are goals?

“Goals represent  
desired states.”

What are tasks?

“Tasks represent behaviors that people attempt in order to reach their goals.”

# Example: texting a friend



## Example: texting a friend



What are their goals?

## Example: texting a friend



What tasks do they perform to reach those goals?

# Goals vs Tasks

Goals seem to be more  
immanent;  
tasks more transient.

Consider the following scenario

It is 7PM on a Tuesday. You are observing a person using their phone to hail an Uber on a busy Lower East Side street in New York City right next to a busy bus stop. Time of arrival for an Uber is 13 minutes. The person hurries to confirm the booking and quickly places the phone back in their backpack. They put their gloves back on. Their friend arrives shortly after and they greet. They chat for a little while, and an Uber car arrives. They greet the driver, then both enter and depart in it towards a restaurant.



# Please answer this question in Canvas

What are some of the possible (sub)goals that the user might have?  
Select all that apply.

- ☐ Find transportation
- ☐ Have dinner with a friend
- ☐ Use the Uber app to hail a car
- ☐ Stay warm
- ☐ Put their phone in their backpack
- ☐ Press on the Uber icon on their phone
- ☐ Enter an Uber

You have 120 seconds...

DONE!

# Please answer this question in Canvas

Who are Uber's end-users in this scenario? Select all that apply.

- ☐ The Uber driver
- ☐ The person who hailed an Uber
- ☐ The friend of the person who hailed an Uber
- ☐ The owner of the restaurant where the two friends are going.
- ☐ People waiting at the bus stop.

You have 120 seconds...

**DONE!**

# Please answer this question in Canvas

Who are different stakeholders in this scenario? Select all that apply.

- ☐ The Uber driver
- ☐ The person who hailed an Uber
- ☐ The friend of the person who hailed an Uber
- ☐ The owner of the restaurant where the two friends are going.
- ☐ People waiting at the bus stop.

You have 120 seconds...

**DONE!**

# Please answer this question in Canvas

What are some of the types of factors that influence the user's choice to call an Uber? Select all that apply.

- ☐ Human factors
- ☐ Technological factors
- ☐ Natural factors
- ☐ Socio-economic factors
- ☐ Cultural factors
- ☐ Political factors
- ☐ Other (be ready to tell us what they are)

You have 120 seconds...

**DONE!**

Please answer this question in Canvas

What are some of the types of factors that influence availability of Uber services in the city? Select all that apply.

- ☐ Human factors
- ☐ Technological factors
- ☐ Natural factors
- ☐ Socio-economic factors
- ☐ Cultural factors
- ☐ Political factors
- ☐ Other (be ready to tell us what they are)

You have 120 seconds...

**DONE!**

Understanding context of use

Interactive  
computer technology  
is not “neutral”



Questions, comments, and/or concerns?

Farnaz Jahanbakhsh

farnaz@umich.edu

<https://people.csail.mit.edu/farnazj/>