

CSE440: Introduction to HCI

Methods for Design, Prototyping and Evaluating User Interaction

Lecture 16:
Recap and Exam Q&A

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What we will do today

Communicating your designs

Exam Recap

Q&A

Communicating your design

Presentations in this class

May 27 3e - Digital Mockup	May 28 3f - Workshop 10:00 - 11:20 OUG 136	May 29 Nigini's office hours 10:00 - 12:00 Allen Center 338	May 30 Exam 10:00 - 11:20 OUG 136	May 31 Section 10:30 - 11:20 MGH 058 11:30 - 12:20 MGH 058 1:30 - 2:20 MGH 058 2:30 - 3:20 MGH 058 3f - Getting the Design Right
Jun 3 3g - Presentation 4a - Initial Website	Jun 4 Presentations 10:30-11:50 OUG 136	Jun 5 4b - Initial Poster and Pitch	Jun 6 Presentations 10:30-11:50 OUG 136	Jun 7 Section 10:30 - 11:20 MGH 058 11:30 - 12:20 MGH 058 1:30 - 2:20 MGH 058 2:30 - 3:20 MGH 058 4c - Communication Critique [done in section] 4d - Final Poster & Website
Jun 10 Poster Session 10:30 - 12:30 CSE Atrium	Jun 11	Jun 12	Jun 13	Jun 14

Our expectations

Well-rehearsed presentation with appropriate preparation

Provide **visual aids** that help the audience to follow your story

Slides should be **legible** to people further away from the screens

Stick to the **time limit** (7-8 minutes) + 2 minutes for questions

Our expectations

The presentation should include:

A compelling problem

Low-fidelity Prototypes

What you did to test it...

... what you found

... how it affected your design

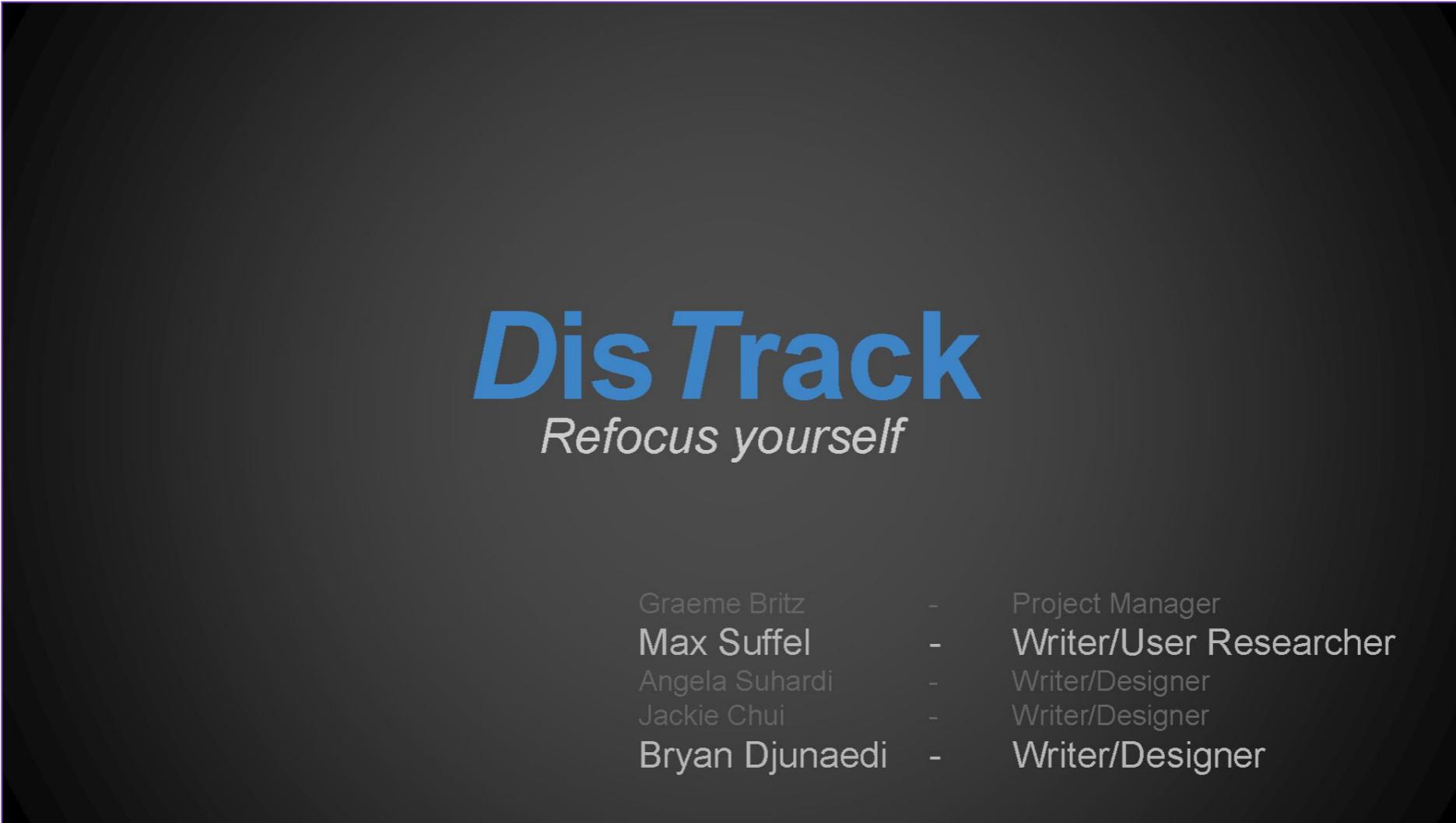
Broader lessons learned that might be helpful for others

Final prototype and how it resulted from your test findings

Digital mockup and how it relates to the final paper prototype

Some examples

Introduce Yourselves



DisTrack
Refocus yourself

Graeme Britz	-	Project Manager
Max Suffel	-	Writer/User Researcher
Angela Suhardi	-	Writer/Designer
Jackie Chui	-	Writer/Designer
Bryan Djunaedi	-	Writer/Designer

Title, Image, Value Proposition



The recurring subscription management tool that lets you finally
take control of your recurring services and payments.

Jen Kang • Vivian Yu • Si Liu • Brendan Lee

Watch the Selling



We can help

Typography, Consistency

Finding

- **Reimbursement is a burden...**
 - More people, more difficult
- **Compiling shopping list**
 - mental note, notepad, or phone
- **Brand and price conscious**

Task

1. **Making list & budgeting**
2. **Choosing a store & transportation**
3. **Shopping**
4. **Purchasing**
5. **Storing groceries**
6. **Managing \$\$\$ & requesting reimbursement**

Too Much Information

Contextual Inquiry - Insights

Johnson (20, undergraduate, CSE 006 Lab)

- Perception ≠ Observation
- Distracted by people talking and noise
- More focused at CSE Labs than at home

Steve (25, graduate, Mercer Court)

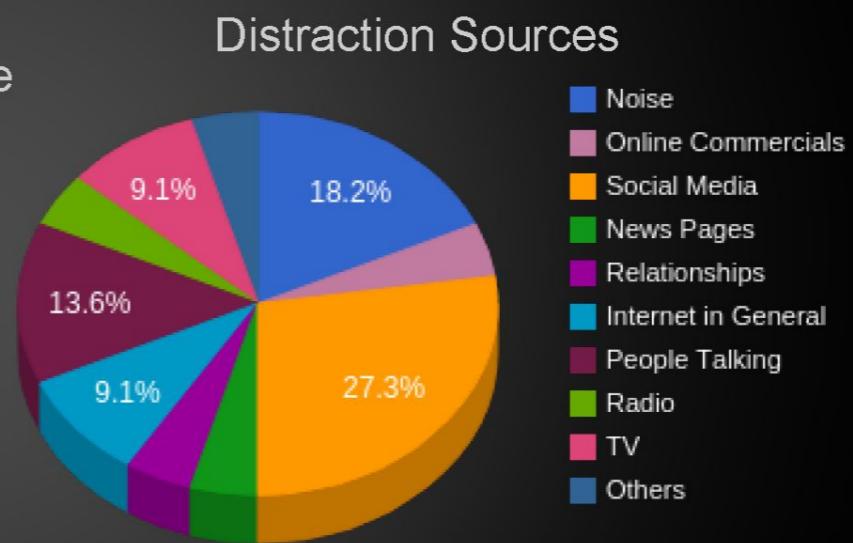
- Motivated by seeing people working
- Distracted by people and social media
- Takes breaks often

George (25, graduate, Odegaard Library)

- Turns notifications off while studying

Group (4 undergraduates, Yunnie Bubble Tea)

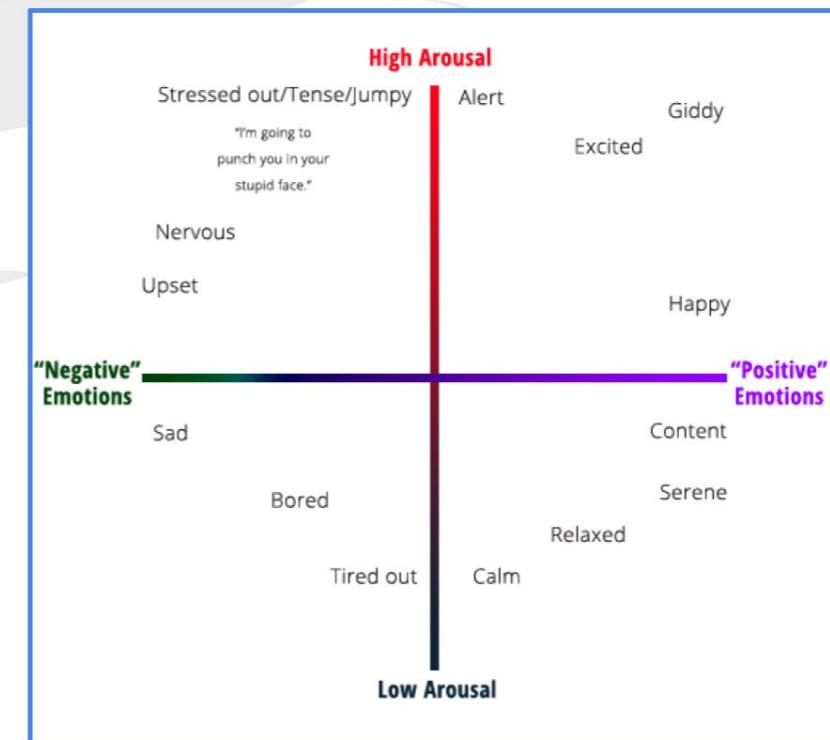
- Distracted by each other and apps
- Use headphones (music) to focus



Too Much Text, Too Much “People”

Our three inquiries showed us:

1. People valued the insights acquired from a mood journal.
2. People thought journaling was a hassle.
3. People were interested in what triggers their mood
4. People want to share information with a mental health professional



Too Much Text, Sentences too long

Design 1: Running separately

May add some motivation but does not provide the full experience of running with a companion

Design 2: Coordinating running events in advance

Tasks can be accomplished using Facebook events or other similar tools

Design 3: Spontaneous Running

Tasks are unique and they also address the concerns raised in our contextual inquiries. Our chosen design also provides us with an interesting opportunity to explore personal informatics

Pictures are great

Contextual Inquiry

- Dancers
 - Use of entire body
 - Diverse Injuries
- Observation
 - Warmup
 - Preventative Habits



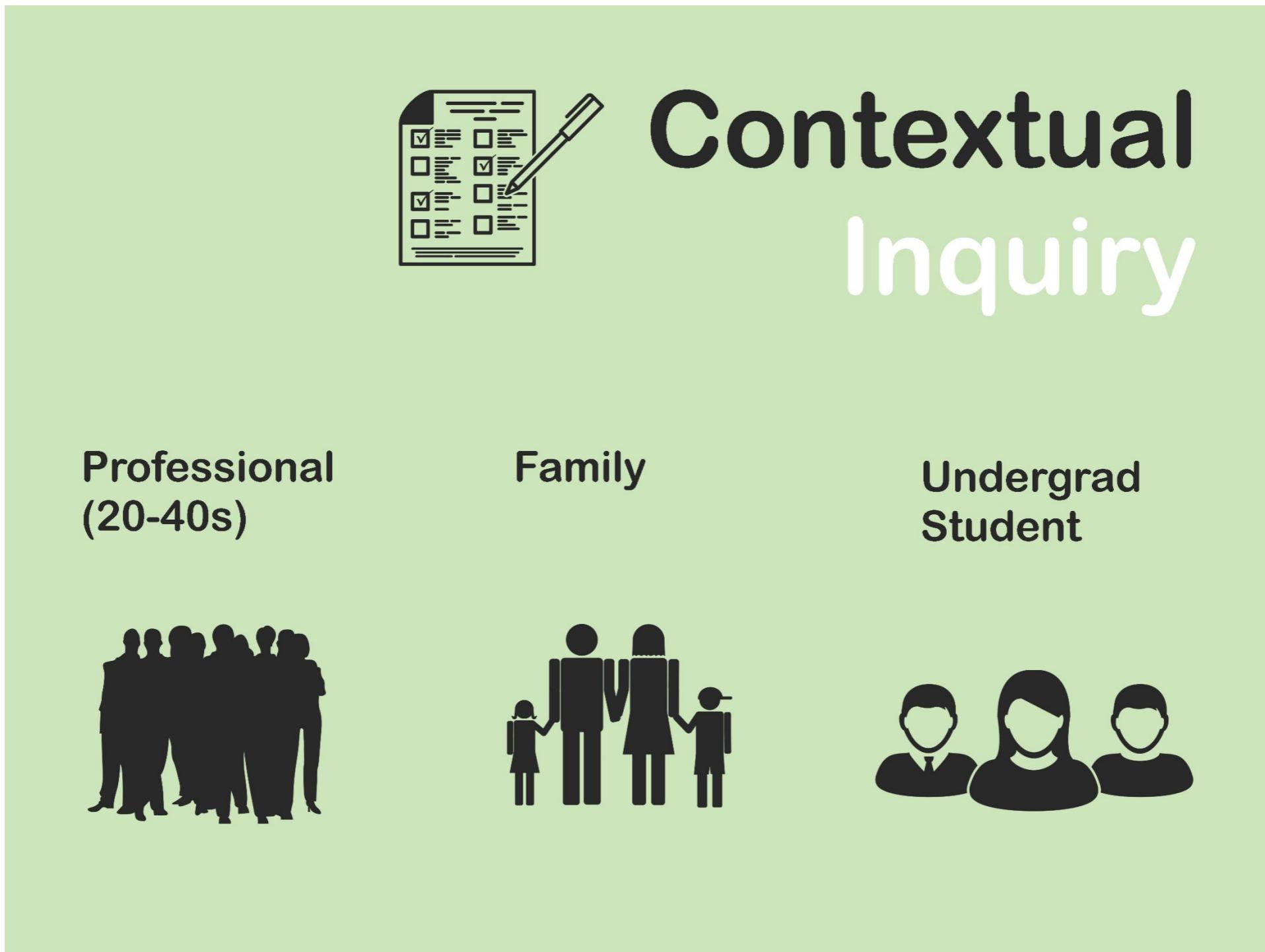
Pictures are great

The image shows a man with dark hair and a beard, wearing a dark hoodie over a plaid shirt, sitting at a desk and looking towards the camera. He is positioned on the right side of the frame. On the left, a large presentation slide is visible, titled 'Contextual Inquiry' in blue text. The slide features a blue sidebar with three bullet points:

- People do not want to be interrupted or distracted
- Most people do not have a liquid intake plan
- People often reach for soda, coffee, or other beverages when they feel thirsty

The background of the slide shows a blurred view of what appears to be a workshop or exhibition space with various displays and artifacts.

Pictures are great

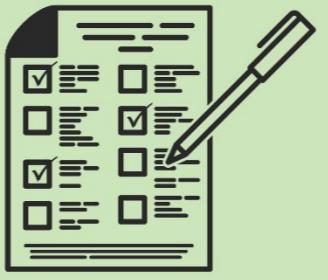


**Contextual
Inquiry**

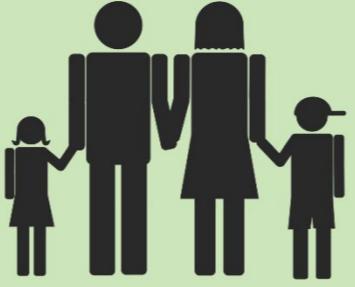
Professional
(20-40s)

Family

Undergrad
Student









In-Line References vs. Bibliography Slide

15% of Americans between the ages of 20 and 69 experience hearing loss that may have been caused by **noise at work or during leisure activities.**

Motivation of Participants



Very noisy work environment

Some control over exposure levels



Moderately noisy work environment

Lacks control of his noise exposure



Dartmouth student who is exposed to **noisy social environments** multiple days per week

Has control over exposure levels

Short Tasks

Tasks

- Record mood reflections
- Discover triggers and warning signs
- Discover wellness strategies
- Planning for health
- Quick mood check-ins
- Aid your health professional

Too Distracting



Speaking of Distractions

Whether correct or not, many things distract

Plural possessive

a posteriori

sensitive content

Write easy and simple!

Verb as Task



Adjust budget between different categories.

Consistency of Emphasis

Many people make **general** budgeting goals.

Large items are monitored.

Small items cumulative impact
not considered.

Challenging setting up budgets.

Complicated input leads to **less use.**

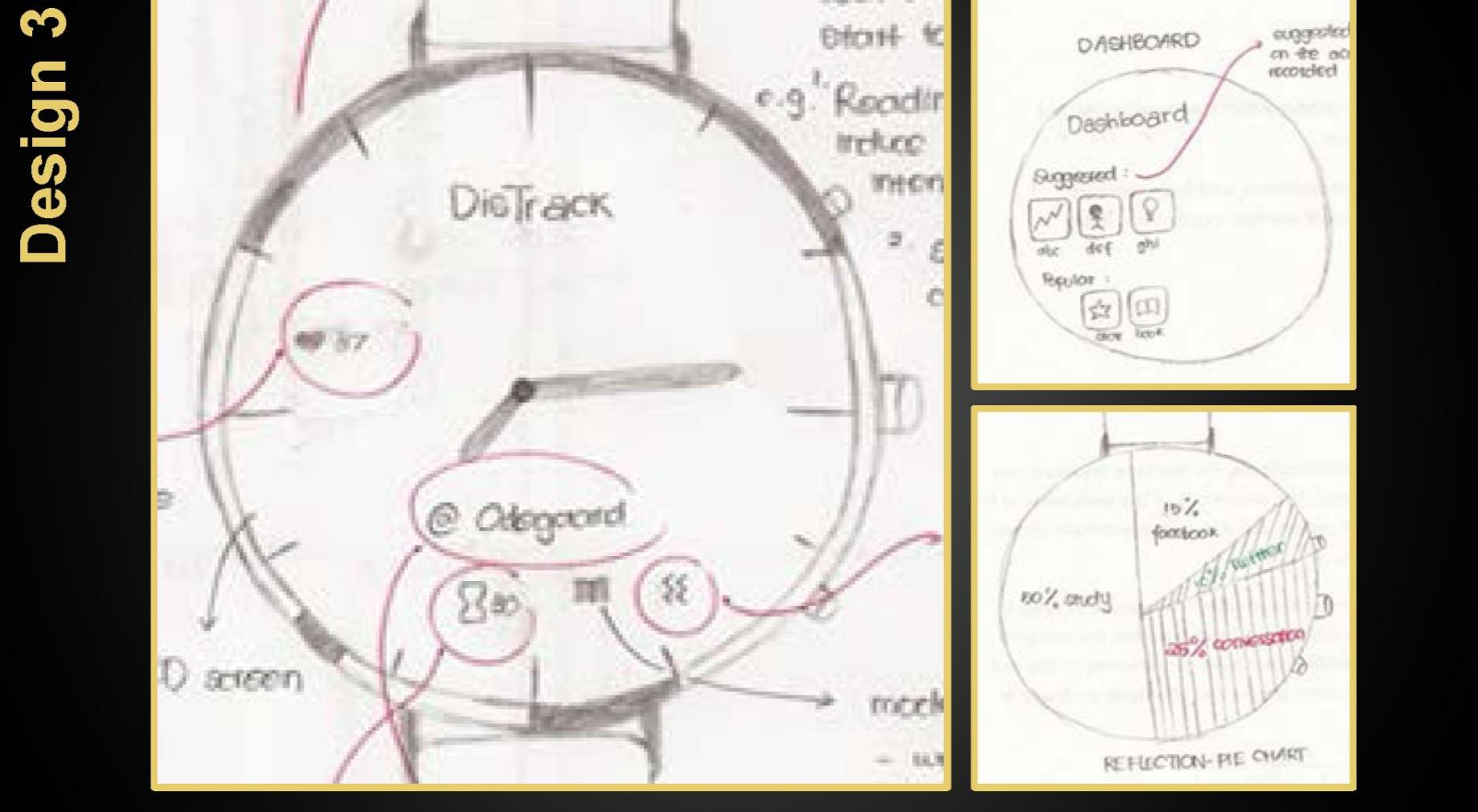
Naming Designs

Design 1

Pre-shopping

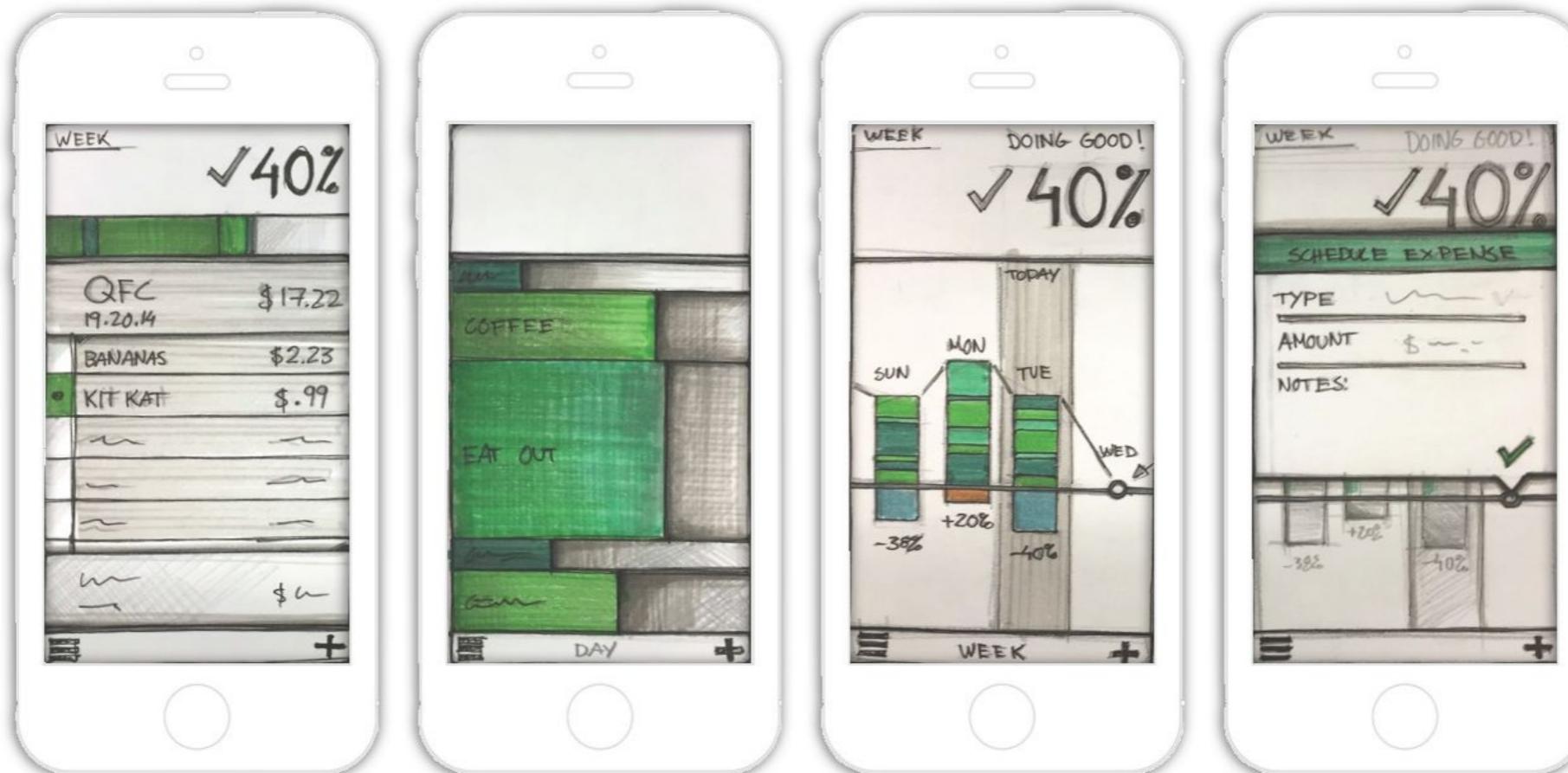


Legibility of Sketches



Legibility of Sketches

Design 1

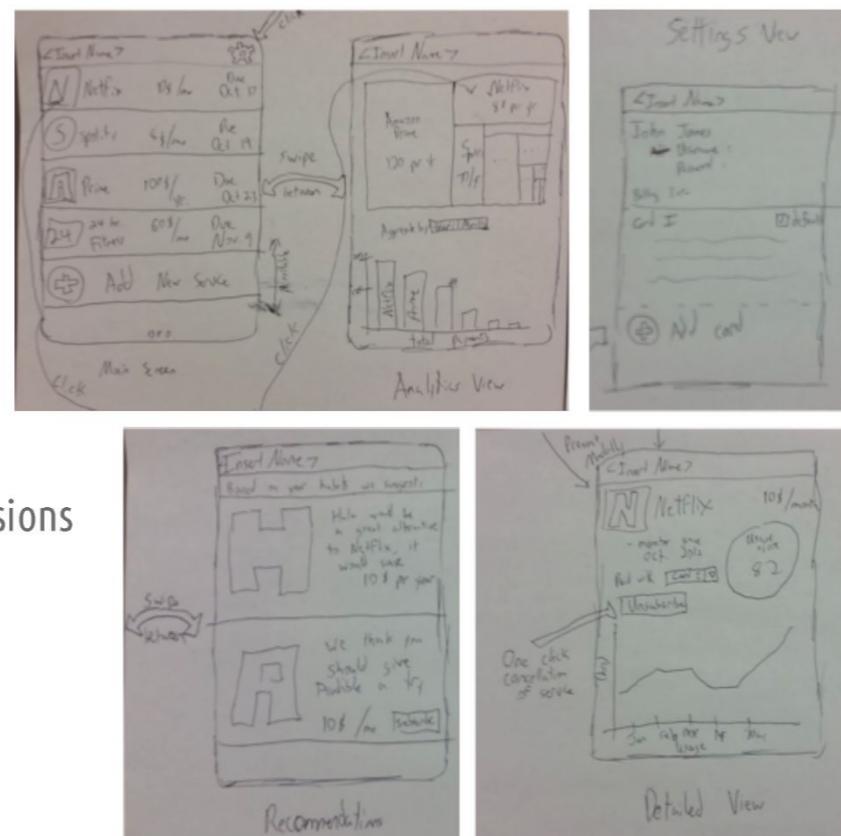


Low Contrast Images and Text

Updated Sketch

Two Tasks

- Recurring subscription management
- Insight and informed decisions



Finishing Slide



What makes a good poster?



POLISCOPE

THE NEWS YOU WANT, IN ONE PLACE

JANET GAO
KIM LE
KIYANA SALKELD
IAN TURNER

OVERVIEW

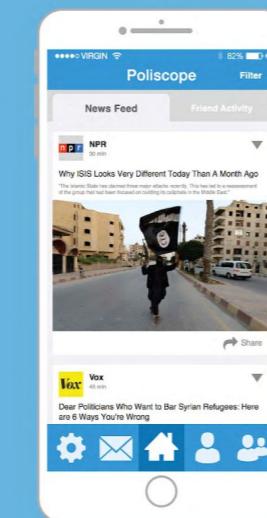
Gaining a well rounded perspective on a news story or political issue often necessitates sifting through multiple news outlets, which is a laborious and tedious process.

TARGET AUDIENCE

Our intended target audience is comprised of college students who are interested in reading the news, but view this activity as being extremely time intensive. These individuals want to stay abreast of the news in the most efficient manner possible.

SOLUTION

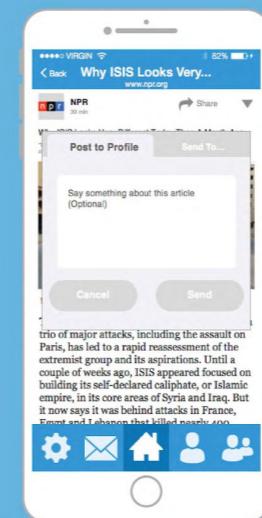
Our proposed solution is a smartphone application that will aggregate personally relevant news stories from multiple outlets into a single location. Additionally, users will be able to keep track of the news their friends are interested in.



View news stories aggregated based on topics and news outlets you follow



See the news stories that your friends are reading and sharing



Read articles, and share them with your friends as well

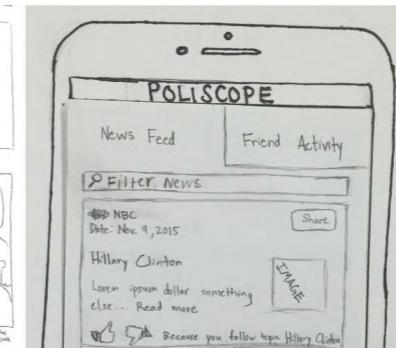
PROCESS



Sketches quickly communicate ideas



Storyboards provide context



Paper prototypes allow design to change in response to usability testing

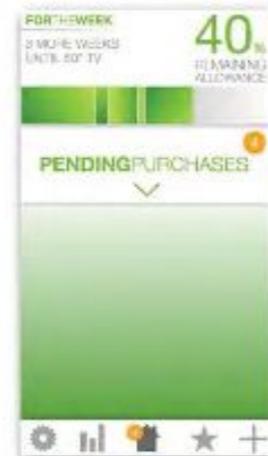
KA•CHING

CONTROL WHERE YOUR MONEY GOES

ACACIO DOMAR
WANLIN LI
ANDREA MARTIN
ELISE NEROUTSOS

PROBLEM

Spending on small discretionary items adds up resulting in people not being able to spend on larger items that they actually want.



Review application summary and purchase notifications.



Designate single items or whole purchases as discretionary.

SOLUTION

A mobile application that solely tracks discretionary spending, highlights a concrete goal to save towards, and helps visualize the impact of smaller purchases.

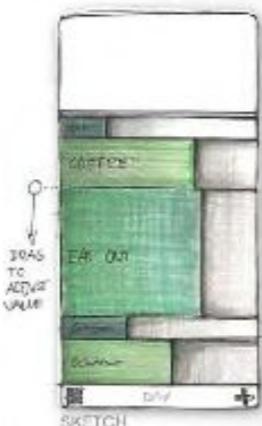


Add goals and monitor progress towards goal completion.



Reflect and improve on spending habits.

PROCESS



What to expect at the poster session

Set up your poster by 10:45am.

Three judges will give out three prizes.

Convince them that your design is solid and tackles a real issue!

Have a 1-minute pitch prepared.

Do you need to be there?

Yes. All of your group members should be there.

You can switch off “guarding” your poster and answering questions so that you can also look at other posters.

Invite friends!!!

Exam Recap

Have you done all that??? :O

Framing the problem

- User research
- Competitive analysis
- Data analysis and summary

Exploring the solution space

- Brainstorming
- Ideation through sketching

Finding a good solution

- Scoping
- Consideration of constraints
- Scenarios, storyboards, personas
- Design rationale

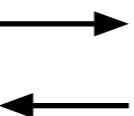
Refining the solution

- wireframes
- lo-fi prototypes
- early evaluations
- mockups/mid-fi prototypes
- additional evaluations

Iteration: Step 1

Framing the problem

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- Competitive analysis
- Data analysis and summary



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Refining the solution

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Iteration: Step 2

Framing the problem

- User research
- Competitive analysis
- Data analysis and summary

Exploring the solution space

- Brainstorming
- Ideation through sketching

Finding a good solution

- Scoping
- Consideration of constraints
- Scenarios, storyboards, personas
- Design rationale

Refining the solution

- wireframes
- lo-fi prototypes
- early evaluations
- mockups/mid-fi prototypes
- additional evaluations

Iteration: Step 3

Framing the problem

- User research
- Competitive analysis
- Data analysis and summary



Exploring the solution space

- Brainstorming
- Ideation through sketching



Finding a good solution

- Scoping
- Consideration of constraints
- Scenarios, storyboards, personas
- Design rationale

Refining the solution

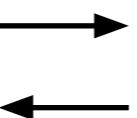
- wireframes
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- additional evaluations



Iteration: Step 4

Framing the problem

- User research
- Competitive analysis
- Data analysis and summary



Exploring the solution space

- Brainstorming
- Ideation through sketching

Finding a good solution

- Scoping
- Consideration of constraints
- Scenarios, storyboards, personas
- Design rationale



Refining the solution

- wireframes
- lo-fi prototypes
- early evaluations
- mockups/mid-fi prototypes
- additional evaluations

You have also learned a lot of theory!

History of HCI

Design for diversity

Methods for user research, creativity, and design

Models on Interaction and Human Perception

Design patterns and principles

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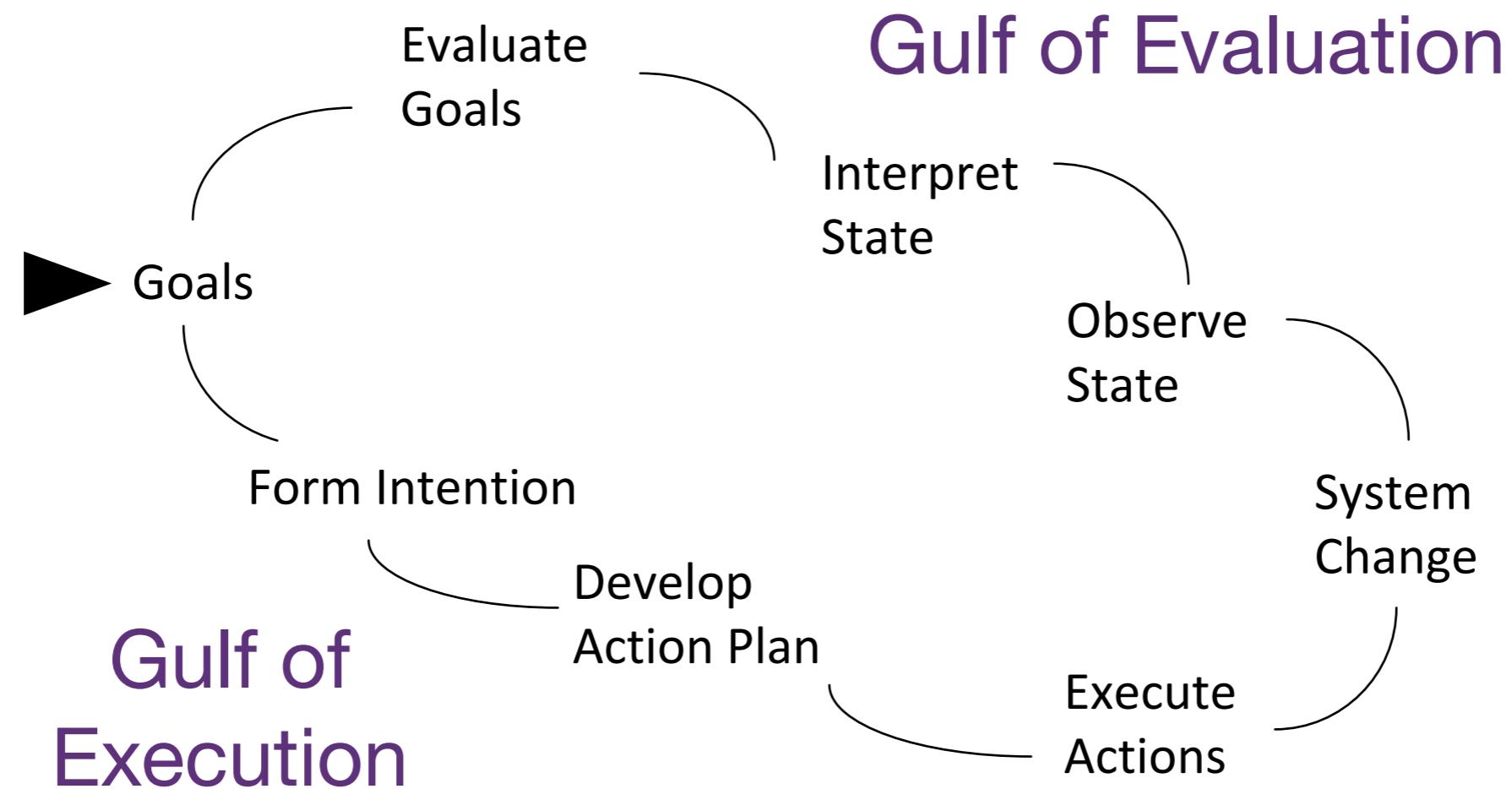
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Norman's Execution-Evaluation Cycle



You have also learned a lot of theory!

History of HCI

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Addendum: Interface Implementation

Why do we use tools?

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Why do we use tools?

What is the Model-View-Controller?

Addendum: Interface Implementation

Why do we use tools?

What is the Model-View-Controller?

What has UI design learned from animation?

Remember Both Sides of this Course

This course emphasized both
Getting the Right Design
Getting the Design Right

Many people fall into a trap of the latter
Not everybody was even trained in the former

Be mindful of your methods
Understand your actual goal

Ask me something!