PLEASE ARRANGE YOURSELVES IN GROUPS OF THREE AND OPEN THE FOLLOWING LINK:

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ALEX WHITE

DESIGN & RESEARCH FUNDAMENTALS

For Developers!

HI, I'M ALEX!

- Senior UX Developer & Consultant @ Insight Digital Innovation
- Pupper dad
- “Full Stack UX” advocate

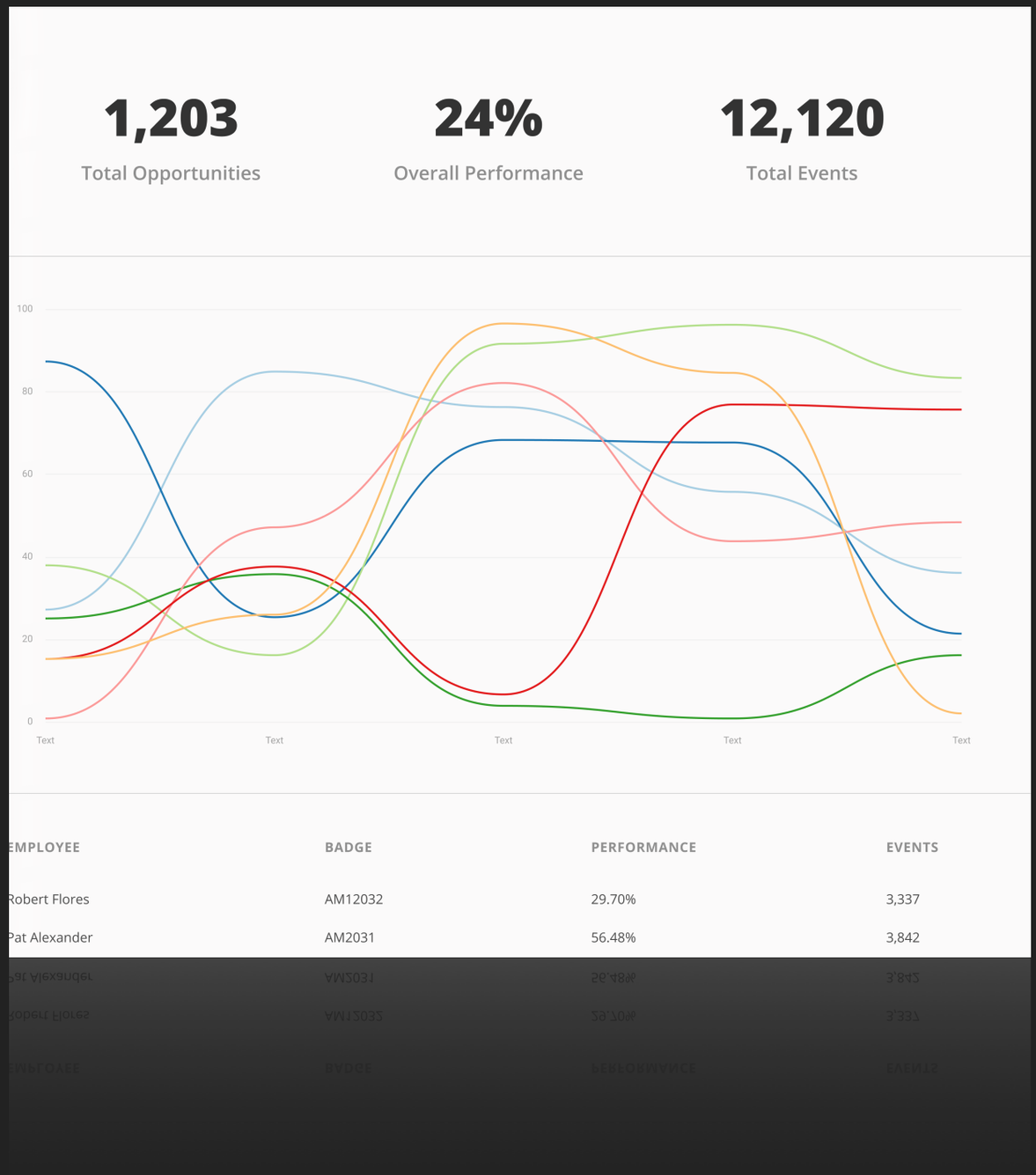
WHY FULL STACK UX?

- Speak a common language with designers and researchers
- Help better guide the direction of a project
- Fill in gaps when UX specialists are not available
- Become a more effective developer

WHAT DOES FULL STACK UX LOOK LIKE IN PRACTICE?

CLIENT REDESIGN

- I was able to use my relationship with the client as a developer to suggest devoting time to UX
- I led a UX research initiative with interviews and usability studies with employees and customers
- I was able to successfully gauge what was possible and estimate timeframes when presenting designs



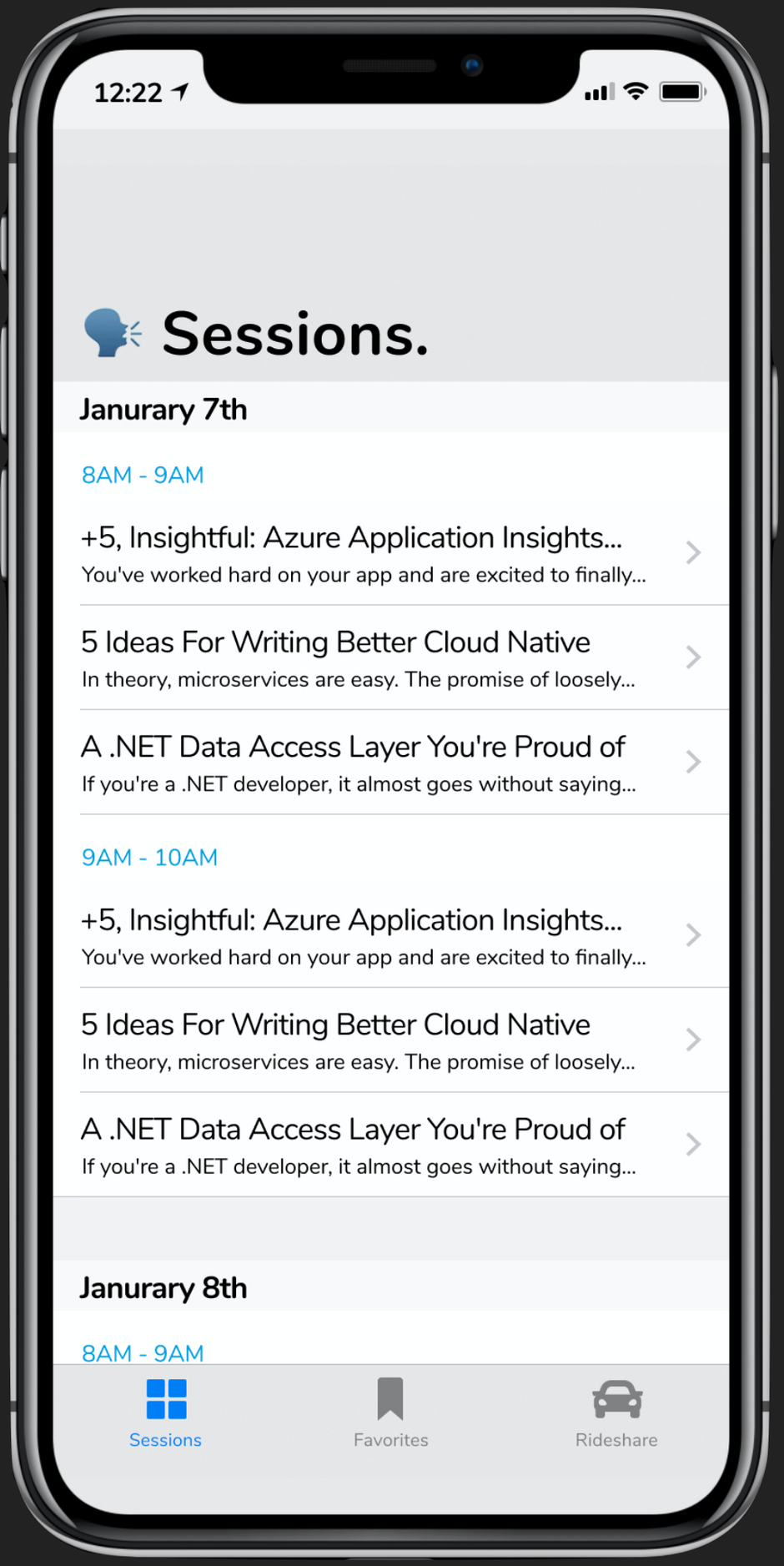
TODAY YOU WILL ALL BECOME FULL STACK UX DEVELOPERS!

WORKSHOP GOALS

- Be able to use design software to develop interactive prototypes
- Understand the different types of UX research and feel comfortable running a usability study
- Learn how to summarize findings and present to stakeholders

AGENDA

- Add a feature to an existing prototype as a class
- Split into groups and conduct a usability study
- Analyze study results and draft requirements for changes within groups
- Redesign feature within groups
- Conduct a second usability study
- Create and present a findings report (time allowing)



CODEMASH SCHEDULING APP

NEW FEATURE

RIDESHARE FOR CODEMASH

MEET OUR USER

Says

"How are you getting back to the hotel?"

"I want to join the party, but don't want to drive."

"Do you think ridesharing is safe?"

"What's the cheapest option for a ride?"

Thinks

Will the driver be friendly?

What if I'm late to the ride I booked?

I don't want to spend too much money on a ride.

Paul

Conference attendee
Very technical
Partakes in drinks

Compares prices with Uber & Lyft.

Asks friends for a ride.

Compares driver profiles.

Searches for rides going to his hotel.

Does

Unsure

Worried

Relieved

Feels

REQUIREMENTS

- An attendee must be able to browse rides and book a ride for a certain time to a certain hotel
- An attendee can view information on the driver and contact the driver before or after booking the ride
- An attendee can view an already booked ride and cancel the ride

WHAT TOOL WILL WE USE?

- Today we will be creating high-fidelity designs and prototypes
- Figma is a free to use professional design and prototyping tool
- A few alternatives that would work just as well:
  - Sketch
  - InVision Studio
  - Adobe XD

WHY NOT JUST CODE IT?

- With a high-fidelity prototype we can put an experience in front of users quickly
- It's much easier to iterate on a design prototype versus a coded product

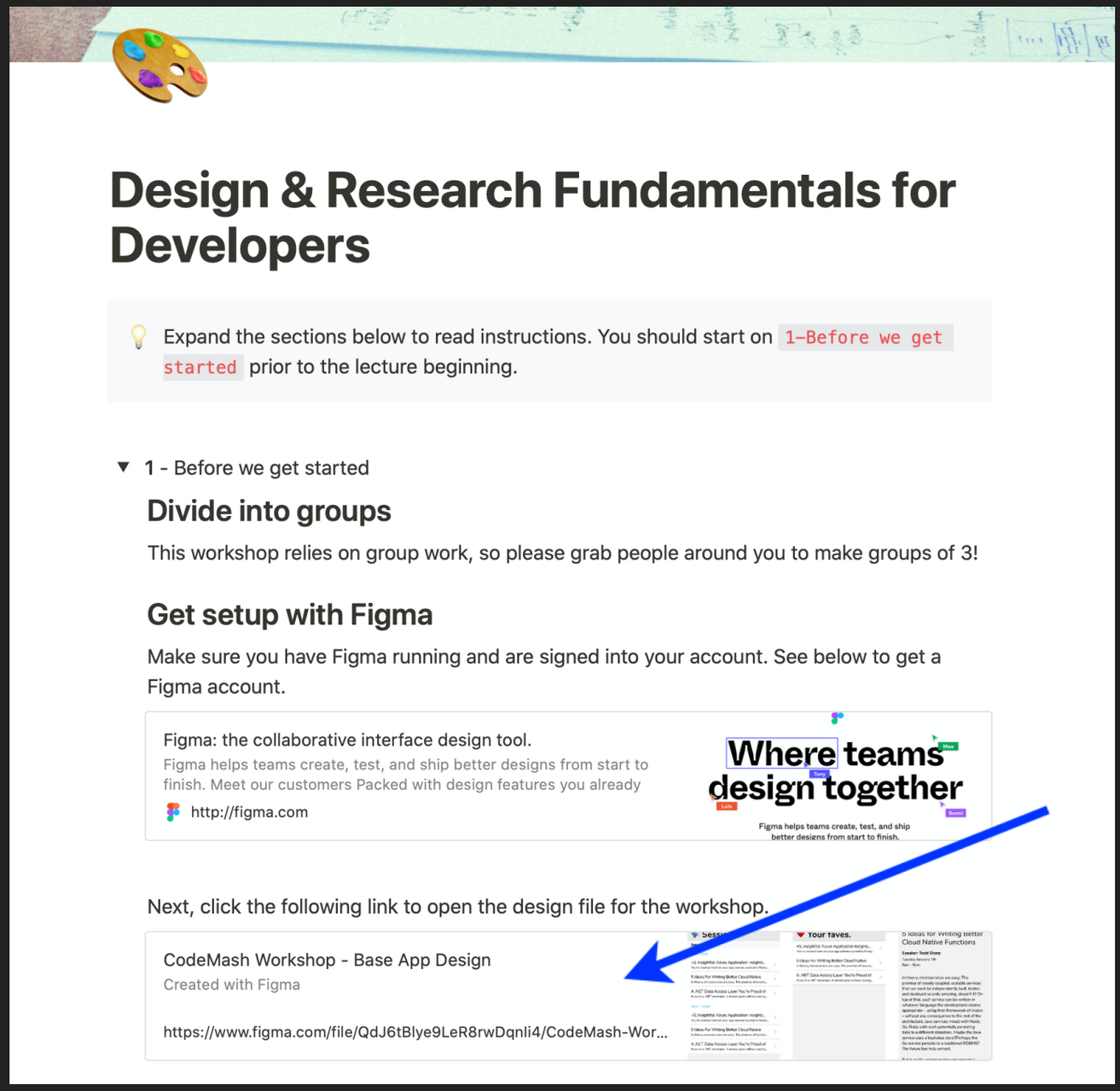
LET'S BUILD IT!

PLEASE FOLLOW ALONG IN YOUR OWN FIGMA FILE

You will use your Figma file later on!

1. Visit the following link on your laptop.

2. Click the Figma link in section “1 - Before we get started”



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HOW DO WE DETERMINE IF WE BUILT THE RIGHT THING?

UX RESEARCH!

QUANTITATIVE VERSUS QUALITATIVE DATA

QUANTITATIVE DATA

- Consists of measurable results
  - A/B testing
  - Card sorting
  - Eye tracking
- Can be easier to gather and analyze data
- Tendency for larger sample sizes

QUALITATIVE DATA

- Focus is on behavior, feelings and desires
  - User interview
  - Focus group
  - Usability study
- Can be more difficult to conduct due to dependency on conversation and observational findings
- Reveals how users interact with the product and the pain-points they experience

GENERATIVE VERSUS EVALUATIVE RESEARCH

GENERATIVE RESEARCH

- Seeks to discover what people want so we know what to build
  - Can be used to identify a new product or feature
- Without generative research we could easily build something nobody wants!

- Examples of generative research:
  - Quantitative methods
    - Surveys
  - Qualitative methods
    - User interviews
    - Focus groups

EVALUATIVE RESEARCH

- Focuses on confirming you built the right thing
- Examples of evaluative research:
  - Quantitative methods
    - A/B testing
    - Eye tracking
  - Qualitative methods
    - Usability study

TODAY YOU WILL BE CONDUCTING A USABILITY STUDY

Well two actually!

WHAT IS A USABILITY STUDY?

- Determines the “usability” of your product
- Identifies issues, false assumptions and misses with a product or prototype
- A user is led through multiple tasks to perform against a product or prototype
- Led by a “neutral” moderator

HOW DO YOU DECIDE WHAT TASKS THE USER WILL COMPLETE?

- Tasks should represent typical workflows the user would want to accomplish with the product
- Tasks should not hold the user's hand; you want to observe how the user solves the problem with your product
- Ensure the product can handle the tasks
  - Can the user access all the screens they need to?
  - Can the user undo things they've done?

TODAY'S USABILITY STUDY TASKS

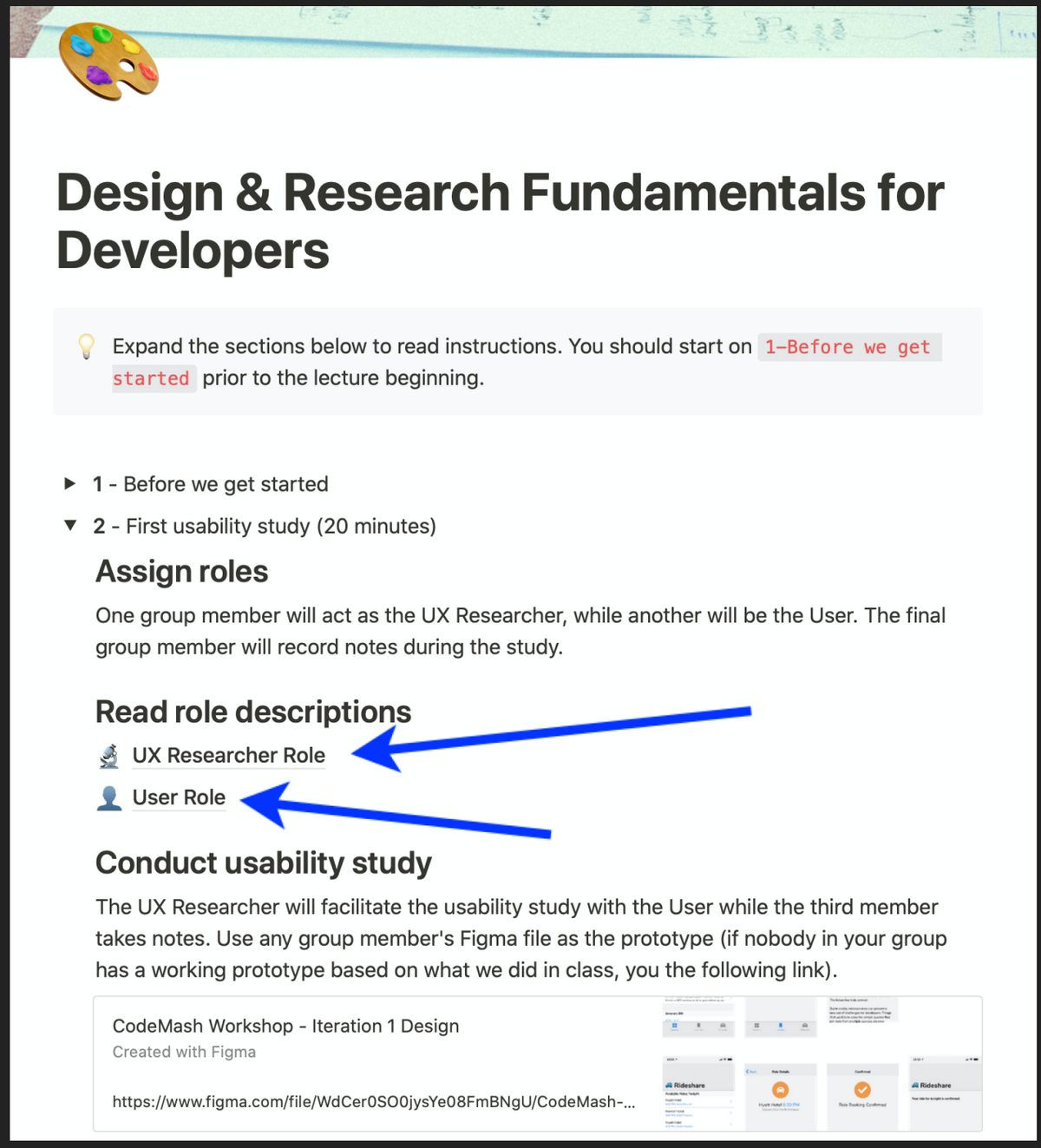
- Utilizing the CodeMash Scheduling App, book a ride to the Great Wolf Lodge hotel for tonight at 7:30PM.
- Change your 7:30PM ride to one departing at a later time.

FIRST USABILITY STUDY – 20 MINUTES

- In your groups of three, assign the following roles:
  - User
  - UX Researcher
  - Note taker
- All group members should review their role descriptions before starting the study
  - Use a prototype from one of the group members

1. Visit the following link on your laptop.

2. Expand section “2 - First usability study”



Design & Research Fundamentals for Developers

💡 Expand the sections below to read instructions. You should start on `1-Before we get started` prior to the lecture beginning.

▶ **1** - Before we get started

▼ **2** - First usability study (20 minutes)

Assign roles

One group member will act as the UX Researcher, while another will be the User. The final group member will record notes during the study.

Read role descriptions

🔬 UX Researcher Role

👤 User Role

Conduct usability study

The UX Researcher will facilitate the usability study with the User while the third member takes notes. Use any group member's Figma file as the prototype (if nobody in your group has a working prototype based on what we did in class, you the following link).

CodeMash Workshop - Iteration 1 Design
Created with Figma

https://www.figma.com/file/WdCer0SO0jysYe08FmBNgU/CodeMash-...

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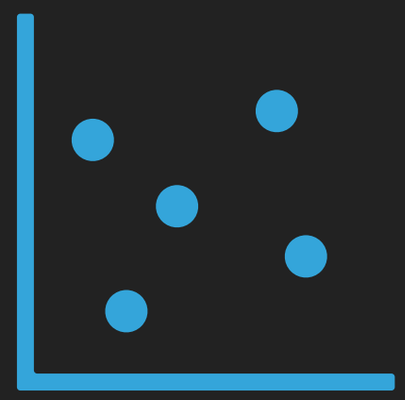
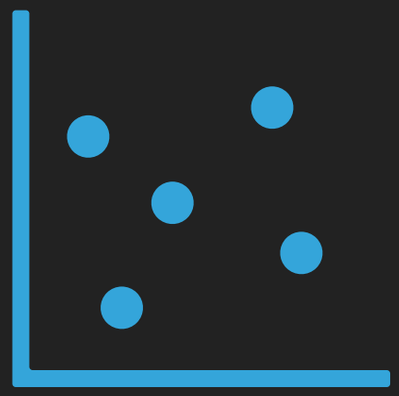
ACTING ON RESEARCH FINDINGS



IDENTIFY TRENDS IN RESPONSES

COMPILE FINDINGS INTO A REPORT



IDENTIFY TRENDS IN RESPONSES

- “Users had trouble locating a specific hotel in the rides list”
- “Users wanted more information about drivers”
- “Users expected to be able to edit a ride”

COMPILE FINDINGS INTO A REPORT

- Discuss the method used to obtain results as well as the sample size and sourcing
- Detail difficulties or frustrations felt by users
- Provide suggestions on how to alleviate frustrations

ANALYZE USABILITY STUDY RESULTS – 10 MINUTES

- Within your groups, come up with a short findings report
  - Try to list 3 issues with the prototype, and come up with easy ways to remedy these issues
- Turn these remedies into requirements that you can work on in the next section

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YOU SHOULD NOW HAVE 3 REQUIREMENTS TO WORK ON!

- If your group was unable to come up with 3 requirements, think of adopting some of the following:
  - Users need a way to quickly browse rides by hotel and departure time. Results should be grouped and filterable
  - A user should be able to contact their driver after booking a ride to suggest a different departure time
  - Users feel uncomfortable riding with a stranger, the results page should show more information about the driver.

SKETCH A SOLUTION – 20 MINUTES

- Work together within your groups and sketch out the screens of the app with appropriate changes made to meet your new requirements
- This should be done on paper, not in Figma
- You should have one final sketch that everyone agrees on, you may need to sketch out multiple screens
- Paper and pens are available at the front!

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MODIFY THE PROTOTYPE – 1 HOUR

- Now that your group has a sketch of all the changes needed to meet your new requirements, it's time to implement the changes in Figma
- Each group member should implement the changes in their own Figma file, but you should help each other if someone gets stuck!
- Modify the designs to reflect your sketches, and update the interactive prototype so the usability tasks can still be completed

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SECOND USABILITY STUDY – 15 MINUTES

- Keep the same roles you had last time
- **Swap users with another group!**
- Use the most complete prototype among your group

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DID YOUR CHANGES HELP?

CREATE A FINDINGS REPORT – 10 MINUTES

- Users should return to their original group
- Analyze your notes and create a findings report based on the last usability test
- Outline the tasks the user completed
- Mention any issues the user ran into and give suggestions to resolve the issues

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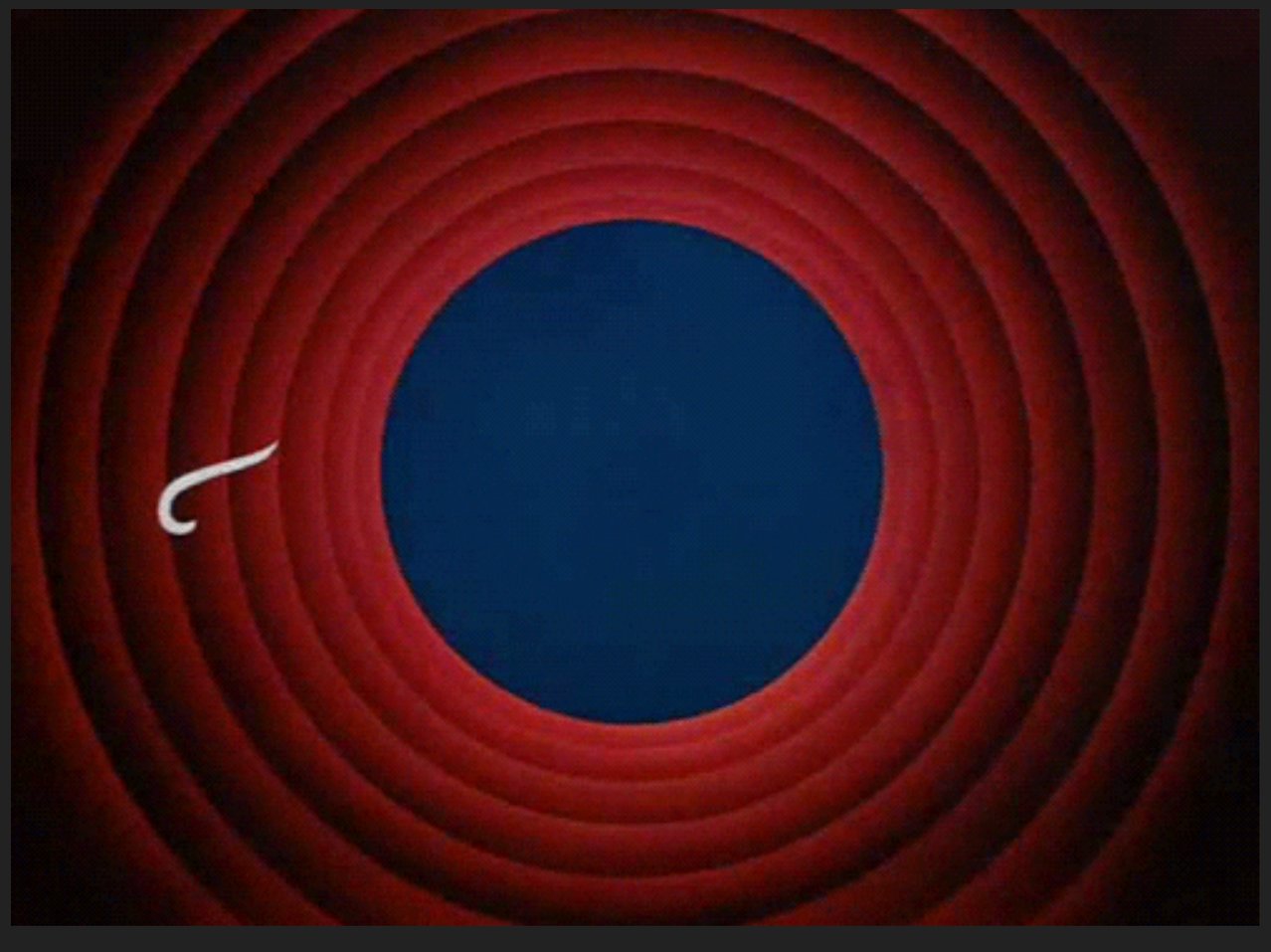
PRESENT YOUR FINDINGS REPORT – 2 MINUTES/GROUP

- Mention the changes you made to the prototype and what they were meant to address
- Talk about any issues uncovered in the second usability study and give suggestions your group has for further improvements



THANK YOU!

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https://MeetThe.dev

KEEP IN TOUCH!