

Usability Testing

Perancangan Interaksi - Information Systems - Telkom University - Genap 1920

- ✓ Interaction Design - Definition
- ✓ Desain
- ✓ UX vs IX
- ✓ Dimensi Interaction Design

AGENDA

Saus Heinz

- Heinz, sebuah perusahaan saus
- terkenal dengan produk saus tomatnya
- Botol saus tomat terbuat dari kaca dan umumnya sangat berat
- Saus tomat sangat sering dikonsumsi oleh keluarga Amerika
- Banyak cerita tentang orang tua selalu menuangkan saus tomat untuk anak-anaknya, karena anak2nya tidak bisa menuang sendiri



Saus Heinz

Botol saus Heinz sulit digunakan oleh anak-anak.

Mereka mendesain ulang botol dan konsumsi saus tumbuh 12%



Heinz Ketchup

Heinz mendesain ulang botol mereka berdasarkan data yang dikumpulkan selama penelitian pengguna.

Desain baru ini sukses karena telah memecahkan masalah user, tidak hanya untuk Heinz tetapi juga untuk orang tua. Dan untuk anak-anak juga.



Usability Testing

Suatu proses yang melibatkan pengguna sebagai peserta pengujian yang mewakili target audiens untuk mengevaluasi sejauh mana suatu produk memenuhi kriteria usability.

Usability Testing

Mengamati bagaimana orang menggunakan suatu sistem untuk mengevaluasi desain sebuah sistem.



atribut usability

- **learnability:** seberapa mudah menyelesaikan task untuk pertama kali?
- **efficiency:** setelah mempelajari konsep, berapa lama waktu yang dibutuhkan untuk menyelesaikan tugas?
- **memorability:** seberapa mudah mengerjakan tugas yang sama setelah tidak menggunakan sistem dalam beberapa waktu?
- **errors:** seberapa banyak, seberapa parah, seberapa mudah memulihkannya?
- **satisfaction:** seberapa menyenangkan penggunaan desain?

Kapan melakukan UT?

Kapan saja!

1.menguji di awal:

mengeksplorasi alternatif desain, sebelum membuat purwarupa (prototipe)

2.menguji menjelang rilis produk:

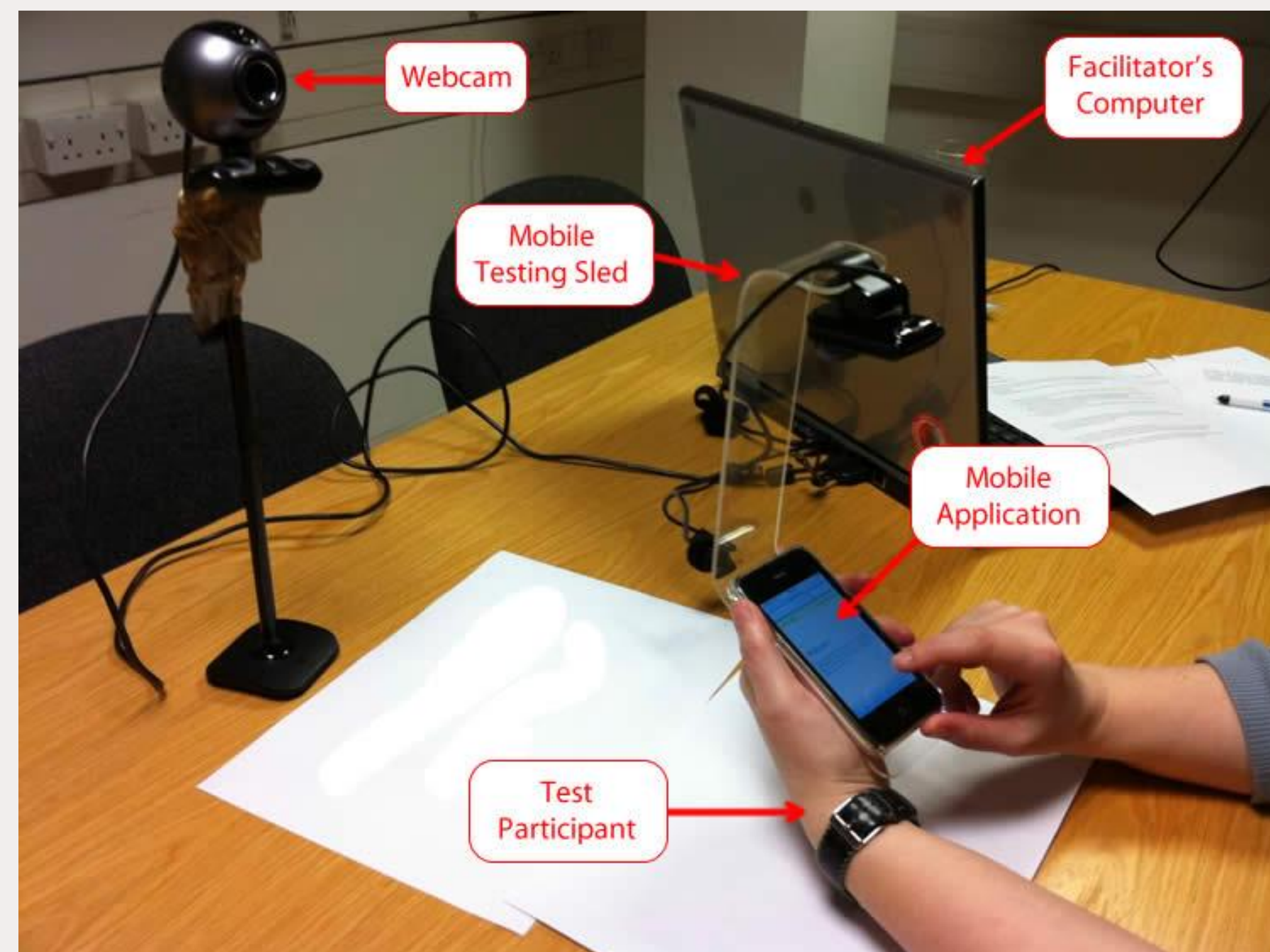
untuk menghindari kemungkinan kesalahan desain

3.setelah rilis:

menyelidiki masalah yang terjadi

Di mana melakukan UT?

1. Di dalam lab, atau
2. Di manapun user melakukan aktivitasnya



Apa yang diuji saat UT?

1. Konsep
2. Prototipe
3. Sistem
4. Fitur
5. Teks
6. Visual
7. dsb

TIDAK untuk menguji user



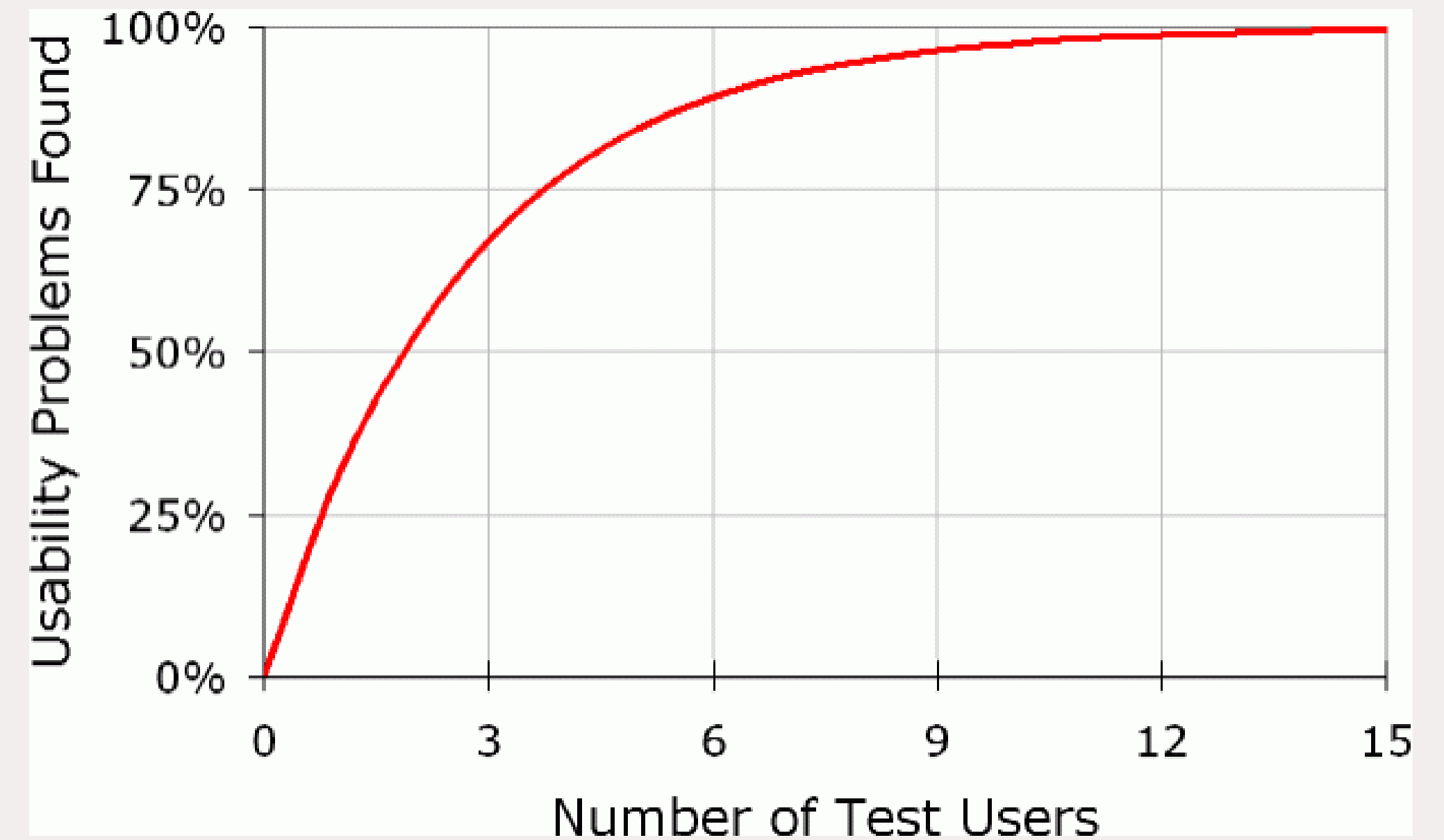
Merancang Usability Test



Usability Cafe

1. Memilih Partisipan

- Siapa pengguna sistem?
- Apakah Anda memerlukan pengguna beginner, intermediate, atau expert?
- Jumlah partisipan yang optimal: 5
- Rekrut dan jadwalkan



2. Memilih Evaluation Task

usability tasks example: Netflix

- “rate a few movies”
- “it’s a Friday night, and you’re looking for a movie to watch. What do you do?”
- “you’re about to watch `Batman 3’, but want to watch the first two, first. How do you do this?”
- “you want to watch Batman 1 through Netflix in your living room with your xbox. How do you set that up?”
- “what do you think about the site?”

3. Preparation

1. Documents

- a. User Task List
- b. Moderator Script
- c. Post-test questionnaire
- d. Observation Notes

2. Tools

- a. Screen and voice recorder or a camera

Usability Testing Setup

1 Moderator

1 Note taker

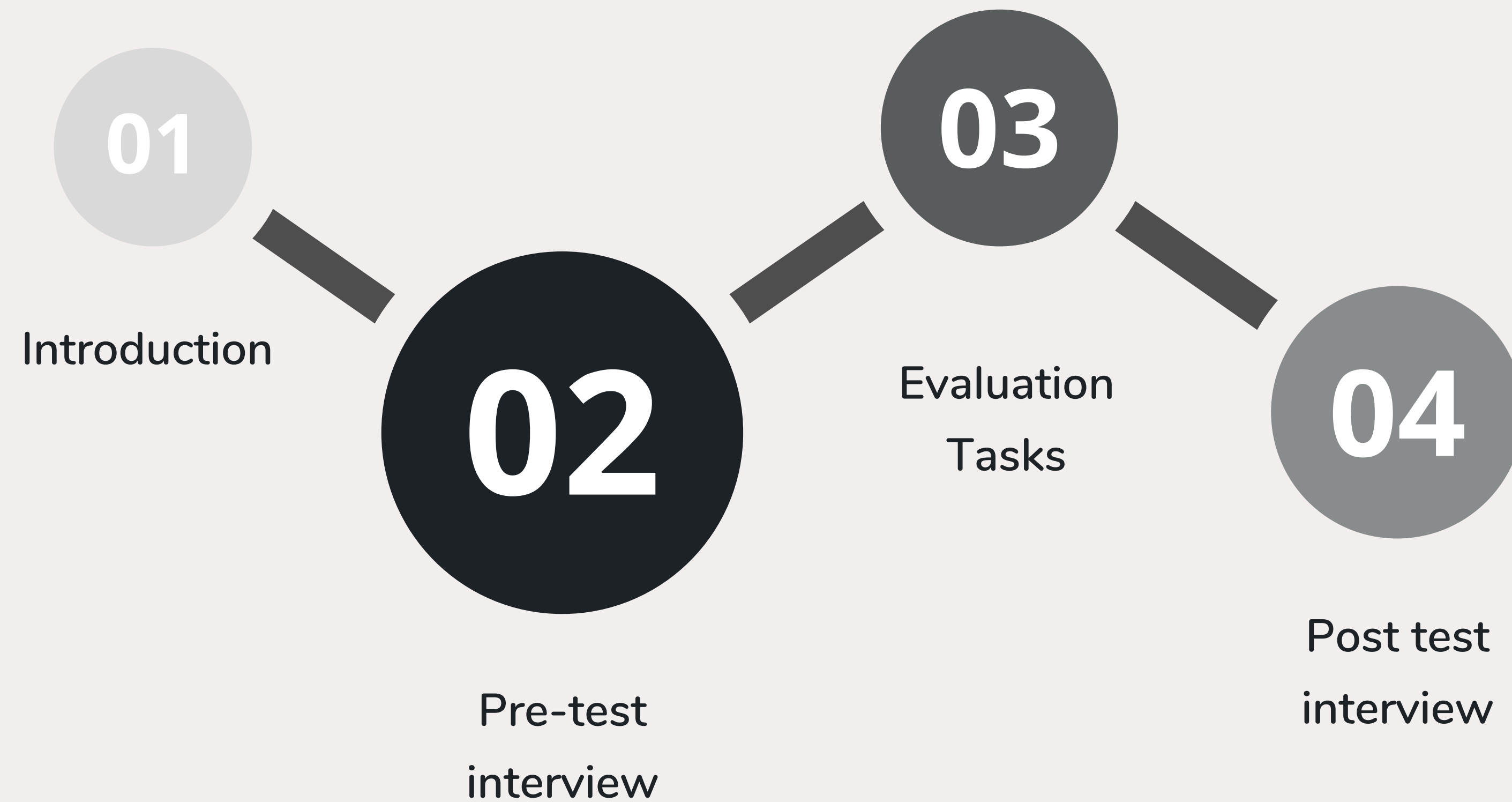


Moderator's Job

- Tanyakan apa yang ada di pikiran pengguna
- Jangan mencoba mempengaruhi pendapat mereka
- Ulangi apa yang Anda katakan
- Biarkan pengguna bicara
- Tetap netral

WHEN THIS HAPPENS:	SAY THIS:
You're not absolutely sure you know what the participant is thinking.	"What are you thinking?" "What are you looking at?" "What are you doing now?"
Something happens that seems to surprise them. For instance, they click on a link and say "Oh" or "Hmmm" when the new page appears.	"Is that what you expected to happen?"
The participant is trying to get you to give him a clue. ("Should I use the _____?")	"What would you do if you were at home?" (Wait for answer.) "Then why don't you go ahead and try that?" "What would you do if I wasn't here?" "I'd like you to do whatever you'd normally do."
The participant makes a comment, and you're not sure what triggered it.	"Was there something in particular that made you think that?"
The participant suggests concern that he's not giving you what you need.	"No, this is very helpful." "This is exactly what we need."
The participant asks you to explain how something works or is supposed to work (e.g., "Do these support requests get answered overnight?").	"What do you think?" "How do you think it would work?" "I can't answer that right now, because we need to know what you would do when you don't have somebody around to answer questions for you. But if you still want to know when we're done, I'll be glad to answer it then."
The participant seems to have wandered away from the task.	"What are you trying to do now?"

Usability Test Process



Introduction

1. Ucapkan terimakasih kepada pengguna yang bersedia ikut dalam penelitian ini
2. Jelaskan tentang penelitian ini
3. Jelaskan singkat tentang sistem
4. Minta pengguna untuk mengatakan apa yang mereka pikirkan
5. Tekankan bahwa Anda menguji sistem, bukan pengguna
6. Tanyakan apakah mereka memiliki pertanyaan

Pre-test Interview

1. Tanyakan nama, pekerjaan, dsb
2. Sudah berapa lama Anda di bidang ini?
3. Berapa lama Anda bekerja dengan sistem ini?
4. Apa saja berbagai kasus yang Anda gunakan sistem ini, seperti operasi, pemeriksaan, latihan ...
5. Seberapa sering Anda menggunakan sistem?
- 6...

Tasks

1. Skenario 1

Bayangkan bahwa hari ini adalah hari Sabtu. Anda sedang malas keluar dan ingin menghabiskan waktu di rumah dengan bersantai. Seorang teman merekomendasikan untuk menonton drama Korea di Viki.

1. Tugas:

Bagaimana Anda memulai sesuai dengan rekomendasi teman anda?

Tasks

1. Make the task realistic

User goal: Browse product offerings and purchase an item.

Poor task: Purchase a pair of orange Nike running shoes.

Better task: Buy a pair of shoes for less than \$40.

1. Make the task actionable

User goal: Find movie and show times.

Poor task: You want to see a movie Sunday afternoon. Go to www.fandango.com and tell me where you'd click next.

Better task: Use www.fandango.com to find a movie you'd be interested in seeing on Sunday afternoon.

1. Avoid giving clues and describing steps

User goal: Look up grades.

Poor task: You want to see the results of your midterm exams. Go to the website, sign in, and tell me where you would click to get your transcript.

Better task: Look up the results of your midterm exams.

Post-Test Interview

1. Do you feel that the system is usable?
2. What things annoy you about the system?
3. What are the difficulties did you find while using the system?
4. What do you think are the strengths of the system?
5. In your opinion how could the system be improved?
6. Is there any function in the system that you do not use? Do you think it should be removed?
7. Is there anything that we have not asked, that are of importance?

Asking Questions

1. Open-ended questions

“Show me how ...” -> you ask them to demonstrate a task

“Tell me about ...” -> you ask them

1. Don't ask participants about solutions

“To design the best UX, pay attention to what users do, not what they say. Users do not know what they want.”

Asking Questions

3. No Leading questions

- a. “I saw you were having difficulty with the navigation. What happened?”
- b. “Why did you have difficulty with the navigation?”
- c. “What was easy or difficult about getting to the content you wanted?”

Think Aloud Technique

Ask user to verbalize what they are thinking

example:

This is what I expect will happen if I click here

This page or resulting action is not what I expected

This text/instruction/image/etc. is confusing

This is easy/difficult

This is what I think this text/instruction/image/etc. means

I like/dislike this

This is not what I need — I need XX instead

<https://www.nngroup.com/articles/thinking-aloud-demo-video/>

The System Usability Scale

When a SUS is used, participants are asked to score the following 10 items with one of five responses that range from Strongly Agree to Strongly disagree:

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

The questionnaire and scoring are outlined in the [System Usability Scale \(SUS\) Template](#).



How to Write Usability Test Report

Report Structure

1. Executive Summary / Abstrak
2. Table of Contents/Daftar Isi
3. Researchers/Profil Peneliti
4. Introduction/Pendahuluan
5. Participants/Partisipan
6. Methodology/Metodologi -- Think Aloud Protocol
7. Scenario and Tasks
8. Result/ Hasil
 - a. Task Completion
 - b. Errors
 - c. Key Takeaways
 - d. Post Test Answers
9. Recommendations (Discussion) / Diskusi & Rekomendasi
10. Conclusion/Kesimpulan
11. Appendix/Lampiran

Report Structure

- Executive Summary
 - Explain briefly the goal, process, result and finding of the usability test (half page)
- Method (Plan)

Describe the nature of the research, how it was set up, participant characteristics, and the data collection methods used.

 - a. Goals
 - b. Participants
 - c. Methodology
 - d. Scenario & Tasks

Report Structure

- Results
 - Present summaries of data and stories gathered from the test
 - Task completion
 - Error
- Findings and Recommendations (Discussion)
 - Write problems found in the interface and give a severity rate
 - Write suggestions/recommendation based on findings

Report Structure

- Appendix
 - a. Test Script
 - b. Pre-test question
 - c. Task list
 - d. Post-test question
 - e. Photos of every session
 - f. Observer notes

Tugas Usability Testing

1. Bobot penilaian 20%
2. Dikerjakan dalam kelompok
3. Instruksi
 - a. Buatlah pengujian usability satu aplikasi atau web yang sudah ada (existing)!
 - b. Cari 5 partisipan sesuai dengan pengguna aplikasi tersebut!
Contoh: Jika pengguna adalah driver ojek, berarti partisipan harus driver ojek
 - c. Buatlah tugas/task yang harus dilakukan user, pre-test dan post-test questionnaire
 - d. Rekam sesi UT
 - e. Susun hasil pengujian dalam bentuk usability testing report dan video
 - f. Gunakan template usability testing
4. Deadline 28 Februari 2020, submit lewat Google Classroom



Thanks!

Any questions?