



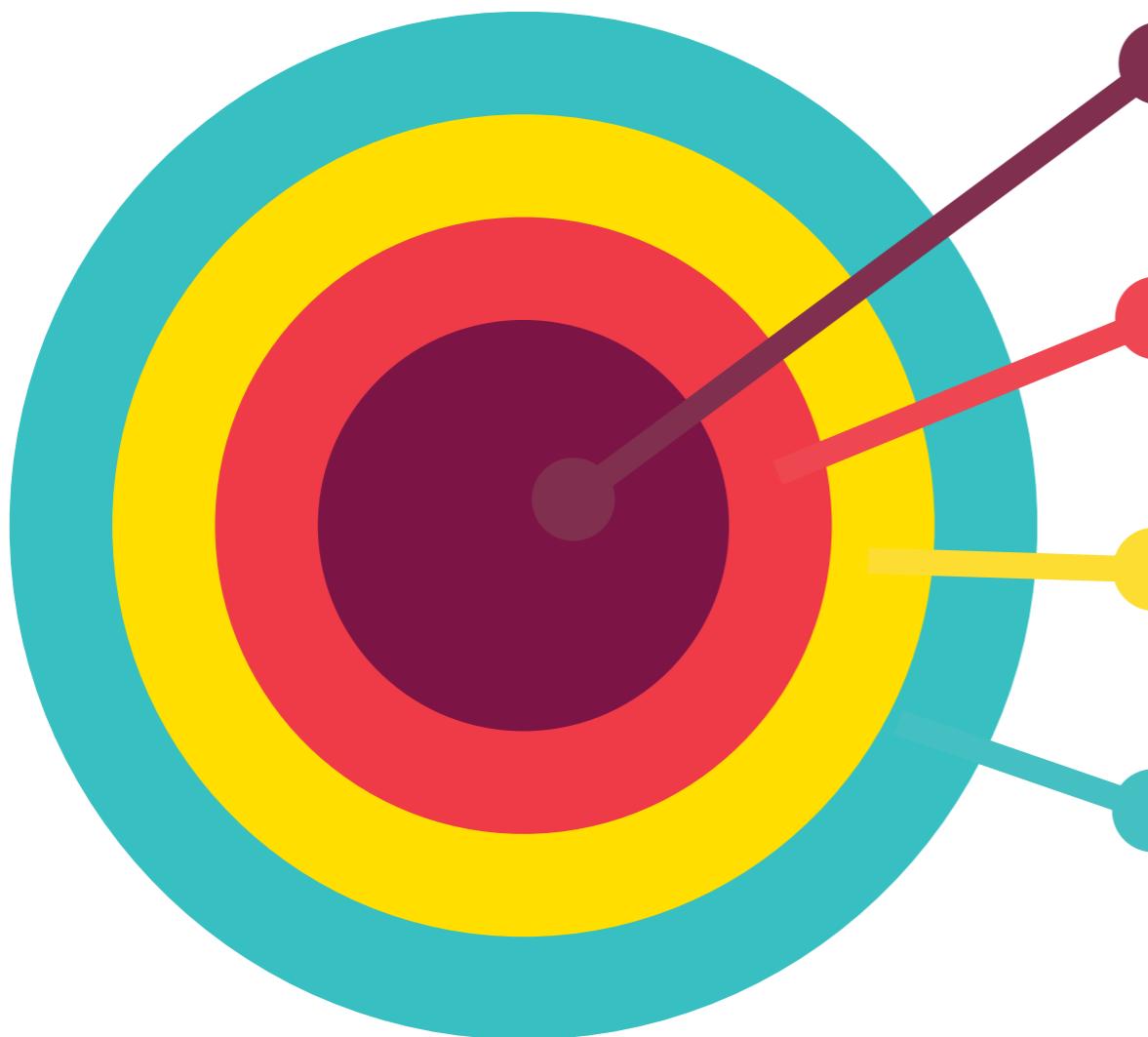
GENERAL ASSEMBLY

USABILITY

Insert Instructor Name
Title, Company

- How do we measure usability?
- Conducting a heuristic evaluation
- What is usability testing
- How to conduct a usability test
- Exercise
- Best practices

MEASURING USABILITY



UTILITY

This supposedly does what I need

USABLE

I am able to accomplish my task

DESIRABLE

I like using it

EMOTIONAL

I have a good feeling about this brand or product

USABILITY HEURISTICS

According to Jakob Nielsen, there are 5 qualities of usability:

- Learnability
- Efficiency
- Memorability
- Error Management
- Satisfaction

USABILITY HEURISTICS

- **L**earnability
- **E**fficiency
- **M**emorability
- **E**rror Management
- **S**atisfaction



With respect to your intended users...

1. HOW LEARNABLE IS IT?

- What is the user's knowledge level coming into the site?
- What information have they been primed with?
- Do you have too many features?
- Did you apply conventions from other sites your user is familiar with?
- Did you provide way to learn features that aren't obvious?

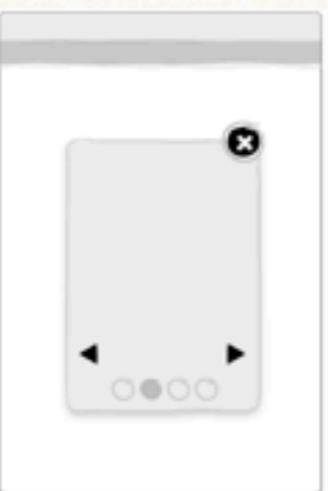
Mobile invitation patterns include:



Dialog



Tip



Tour



Demo



Transparency



Embedded



Persistent



Discoverable



dead space iPad



2. HOW EFFICIENT IS IT?

- Does the system reduce hesitation with clear language and feedback?
- Have you created special shortcuts for power users?
- Have you leveraged technology to reduce user effort?
- (Least importantly,) How many clicks does it take the user?

Keyboard shortcuts

Compose and Chat

- <Shift> + <Esc>** : Focus main window
- <Esc>** : Focus latest chat or compose

You don't have any saved drafts. **<Alt> + b** : Bold
 Saving a draft allows you to keep a message you aren't ready to send.
<Alt> + i : Italic
<Alt> + u : Underline

Formatting

- <Alt> + <Shift> + 7** : Bulleted list
- <Alt> + <Shift> + 8** : Numbered list
- <Alt> + <Shift> + 9** : Quote
- <Alt> + [** : Indent less
- <Alt> +]** : Indent more
- <Alt> + <Shift> + l** : Align left
- <Alt> + <Shift> + c** : Align center
- <Alt> + <Shift> + r** : Align right

Actions

- ,** : Move focus to toolbar
- x** : Select conversation
- a** : Rotate superstar
- y** : Remove label
- e** : Archive
- m** : Ignore conversation
- i** : Report as spam
- #** : Move to trash
- r** : Reply
- <Shift> + r** : Reply in a new window
- a** : Reply all
- <Shift> + a** : Reply all in a new window
- f** : Forward
- <Shift> + f** : Forward in a new window
- n** : Update conversation
- <Shift> + n** : Update conversation
-]** / **[** : Remove conversation from current view and go previous/next
-]** / **[** : Archive conversation and go previous/next
- z** : Undo last action
- <Shift> + i** : Mark as read
- <Shift> + u** : Mark as unread
- : Mark unread from the selected message
- + w** : Mark as important
- : Mark as not important
- g** / **p** : Make a phone call
- <Shift> + t** : Add conversation to Tasks

Last account activity: 8 minutes ago

Keyboard Shortcuts (see all)

Site wide shortcuts

- s** : Focus command bar
- ?** : Bring up this help dialog

Issues

j	Move selection down	c	Create issue
k	Move selection up	l	Create label
x	Toggle selection	u	Back to issues
o or enter	Open issue	/	Focus issues search
* + enter	Submit comment	r	Reply (quoting selected text)
* + shift + p	Preview comment		
* + shift + l	Go fullscreen		

Threadlist selection

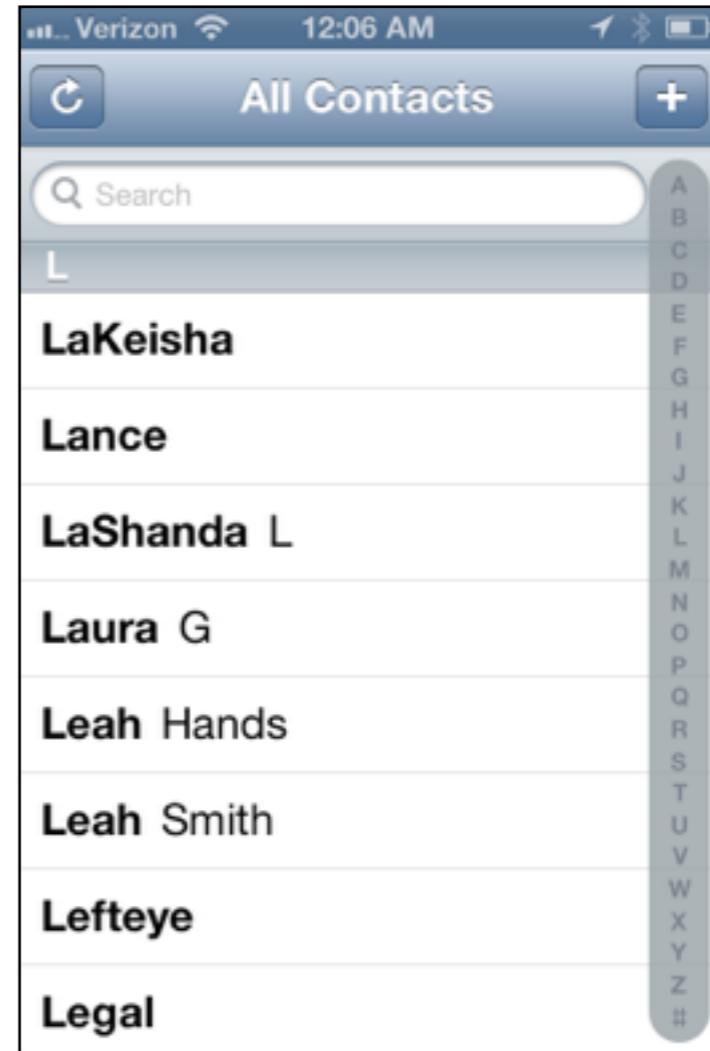
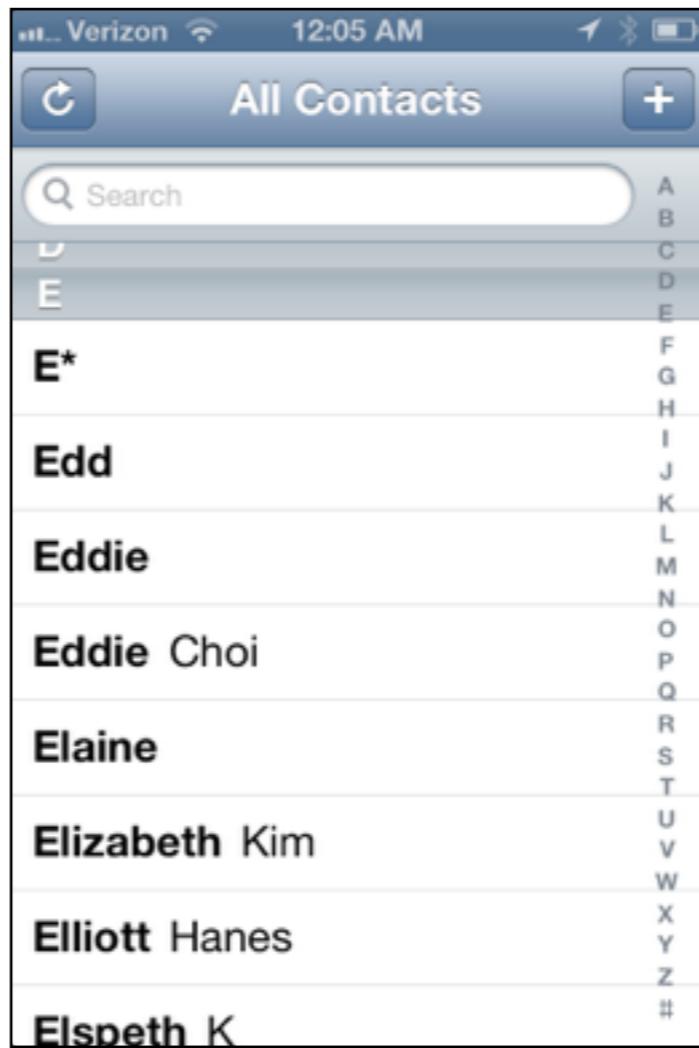
- : Select all conversations
- : Deselect all conversations
- : Select read conversations
- : Select unread conversations
- : Select starred conversations
- : Select unstarred conversations

Navigation

- : Back to threadlist
- : New/folder conversation
- : Open conversation; collapse/expand conversation
- : Read previous/next message
- : Go to next inbox section
- : Go to previous inbox section

Application

- d** : Compose
- d** : Compose in a tab (new compose only)
- /** : Search mail
- q** : Search chat contacts
- +** : Open "more actions" menu
- v** : Open "move to" menu
- l** : Open "label as" menu
- ? :** Open keyboard shortcut help



3. HOW MEMORABLE IS IT?

- Does the system call out changes since the user's last login?
- Are UI elements placed in conventional positions?
- Would a user be able to re-establish proficiency after not using the site for a while?

Safari File Edit View History Bookmarks Develop Window Help

87% 5:30 PM Sun Aug 5 2:50:55 PM 14

http://movies.netflix.com/WiHome

Google

G F T A C R N B M S H P UX W More Google WSJ 960 Gridder

Netflix

jackie snow | Your Account | Help

Movies, TV shows, actors, directors, genres

NETFLIX Watch Instantly • Just for Kids • Your Queue Taste Profile • DVDs •

Recently Watched Top 10 for jackie

Popular on Netflix

the Office LOUIE MEMENTO PORTLANDIA BOB'S BURGERS BEING JOHN MALKOVICH

Dark Foreign Thrillers

Your taste preferences created this row.

Dark Foreign Movies.

Domain Names | The Works X

www.godaddy.com

Log In to My Account or Create Account

24/7 Support: (480) 505-8877 Support
Hablamos Español

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.co Now just \$9.99 | Bulk search | All domain pricing | Risk-free domain transfers

Show the world you mean business.

30%

4. ARE ERRORS HANDLED ELEGANTLY?

- Have you anticipated errors that users may make?
- Have you considered pre-emptive error management?
- Are you forgiving of users' mistakes?
- Are error messages clear?

register for the beta

USERNAME

hcornetto8

This name is not available

E-MAIL ADDRESS

This field is required.

ARE YOU A BLOGGER?

YES

BLOG URL

This field is required.

Request my account



The screenshot shows a Photoshop.com error page with a black header bar featuring the Photoshop logo and a red square icon with a white letter "A". The main content area has a light gray background and contains the following text in multiple languages:

Sorry, but your requested operation failed.
Please try again. If the problem persists, please check our [help page](#). Thanks!

Der angeforderte Vorgang ist fehlgeschlagen.
Versuchen Sie es erneut. Wenn das Problem fortbesteht, sehen Sie sich unsere [Hilfeseite](#) an.

要求した操作は実行できませんでした。
もう一度やり直してください。問題が解決しない場合は、[ヘルプページ](#)をご覧ください。

Desculpe, mas a sua operação solicitada falhou.
Por favor tente novamente. Se o problema persistir, por favor verifique a nossa [página de ajuda](#). Obrigado!

5. DO USERS LEAVE SATISFIED?

- Is the visual design appealing?
- Is the technical execution good?
- Is the product different from others in its category?
- Are there pleasant surprises?

HEURISTIC EVALUATION

KEY OBJECTIVE(S)

Evaluate the usability of two sites using heuristics

AGENDA

10 mins

1. Go to Medium.com and sign up for an account, recording your thoughts on LEMErS throughout the process

10 mins

2. Go to Tumblr.com and sign up for an account, recording your thoughts on LEMErS throughout the process

DELIVERABLE

Notes on LEMErS

RESOURCES

Pen and paper (or a laptop)

Congrats, that was a heuristic evaluation.

PROS OF HEURISTIC EVALUATION

- Leverages well-established rules of thumb
- Relatively quick to complete
- Takes very few resources
- Sounds like fancy consultant-speak (and it is)

CONS OF HEURISTIC EVALUATION

- Doesn't capture the user's perspective
- Results vary based on who is evaluating the site
- Subject to evaluator bias
- Does not identify unknown user needs
- Only as good as the heuristics used

NIELSEN'S HEURISTICS

1. Visibility of system status
2. Match between system and the real world
3. User control and freedom
4. Consistency and standards
5. Error prevention
6. Recognition rather than recall
7. Flexibility and efficiency of use
8. Aesthetic and minimalist design
9. Help users recognize, diagnose, and recover from errors
10. Help and documentation

SHNEIDERMAN'S EIGHT GOLDEN RULES

1. Strive for consistency
2. Enable frequent users to use shortcuts
3. Offer informative feedback
4. Design dialog to yield closure
5. Offer simple error handling
6. Permit easy reversal of actions
7. Support internal locus of control
8. Reduce short-term memory load

MEASURING USABILITY

USABILITY HEURISTICS

Domenick Propati's 6 qualities of usability:

- Follow Standards and Guidelines
- Intuitive
- Consistent
- Flexible
- Comfortable
- Correct

...AND MORE

1. Gerhardt-Powals' cognitive engineering principles
2. Weinschenk and Barker classification
3. W3C Web Content Accessibility Guidelines
4. Tog's First Principles of Interaction Design
5. Abby the IA's Information Architecture Heuristics

Q&A

WHAT IS USABILITY TESTING?

“Watching people try to use what you’re creating/designing/building (or something you’ve already createddesignedbuilt), with the intention of (a) making it easier for people to use or (b) proving that it is easy to use.”

STEVE KRUG

STRUCTURED OBSERVATION

A method for observing how users perceive something, that is:

- Structured
- Focused
- Repeatable
- Efficient

WHY DO WE DO IT?

- To get the user's perspective
- It's a cheap and easy way to get feedback
- It can indicate WHY problems are happening
- To gain insights into user's motivations and satisfaction

HOW'S IT DONE?

PREPARING

- Plan some specific areas of the site or app that you want to test
- Write scenarios and tasks
- Prepare a script to introduce the test to the participant
- Make sure the prototype is working as expected

“You want to book a romantic holiday for you and your partner for Valentine’s day. Take a look on the site and book a holiday that takes your fancy.”

(SAMPLE SCENARIO AND TASK)

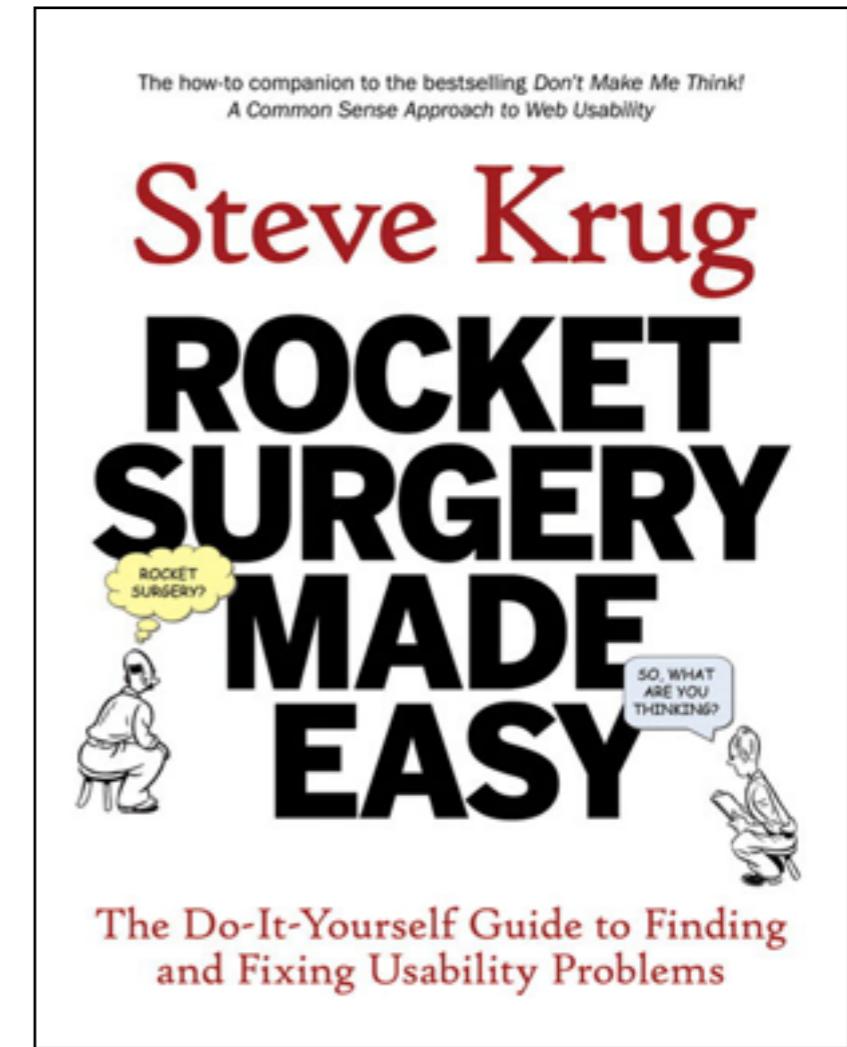
RECRUITING

- Define your target audience
- Recruit representative test participants
- Compensate participants

CONDUCTING

- › Steve Krug will show you:
- › www.youtube.com/watch?v=QckIzHC99Xc

Buy this book!



DEBRIEFING AND ANALYZING

- Record the session (tell the participant you are recording)
- Take notes, but don't let it get in way
- Watch or listen to the recording with your team
- Look for trends
- Read between the lines

APPROACHES TO USABILITY TESTING

OVERVIEW OF APPROACHES

- In-lab Testing
- Remote Testing
- Guerrilla Testing
- Lean UX

APPROACHES TO USABILITY TESTING

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TWITTER'S USABILITY LAB



REMOTE TESTING

The image displays a composite view of a user interface and a video player interface.

Left Side (User Interface): A screenshot of a Mozilla Firefox browser window showing the David Kind website. The page features a large "Join now" button and a "SIGN UP WITH FACEBOOK" button. Below these are fields for Email, Password, and Confirm Password, along with Male/Female gender selection buttons. At the bottom are "SIGN UP" and "Already a member?" buttons, and a note about joining the mailing list.

Right Side (Video Player): A screenshot of a video player interface for a user test. It shows a video frame of the David Kind website with a play bar at the bottom. To the right of the video frame is a sidebar titled "davidkind.com" with a description: "male. lots of criticism on the design. generally negative. Tested by DownTownTester (12/17/13 · #974076A)". The sidebar includes four buttons: "Annotations" (blue), "Clips" (light blue), "Tasks" (green), and "Answers" (light green). Below this is a section titled "Introduction" with a description: "You're considering purchasing new prescription eyeglasses and were told about David Kind from a trusted source (friend, blog you follow, etc)." Under "Tasks", there are three numbered steps:

- 1 ► 0:00 – 2:29 Go to the homepage and look at it for just five seconds. What do you remember?
- 2 ► 2:29 – 8:58 Spend some more time with the homepage. What is your perception of the brand? Who do you consider to be competitors?
- 3 ► 8:58 – 10:31 Poke around a bit. What are the product offerings? What can you do on this Website?

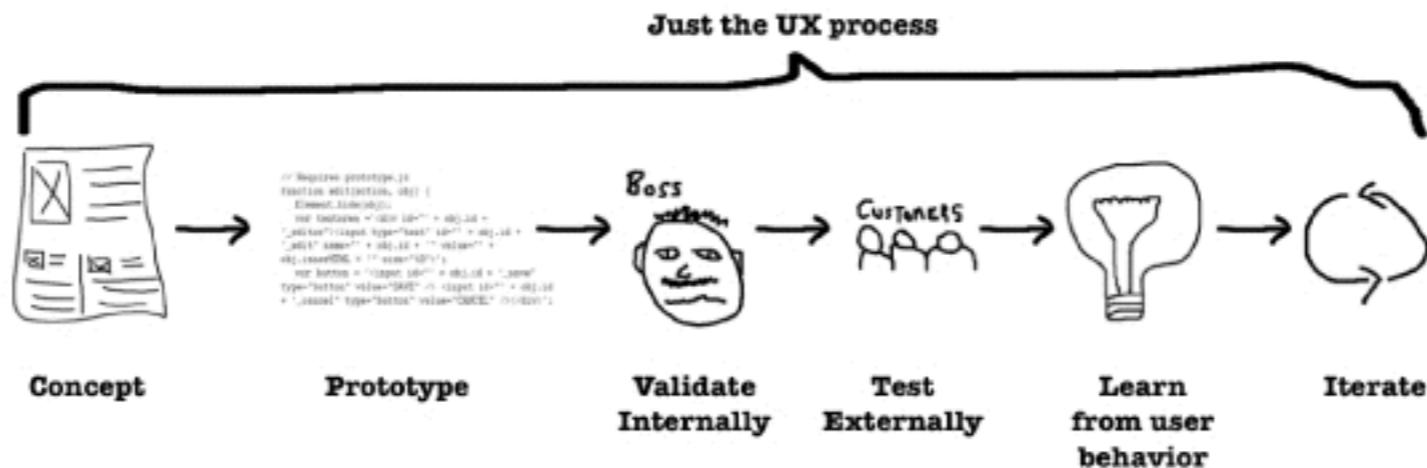
APPROACHES TO USABILITY TESTING

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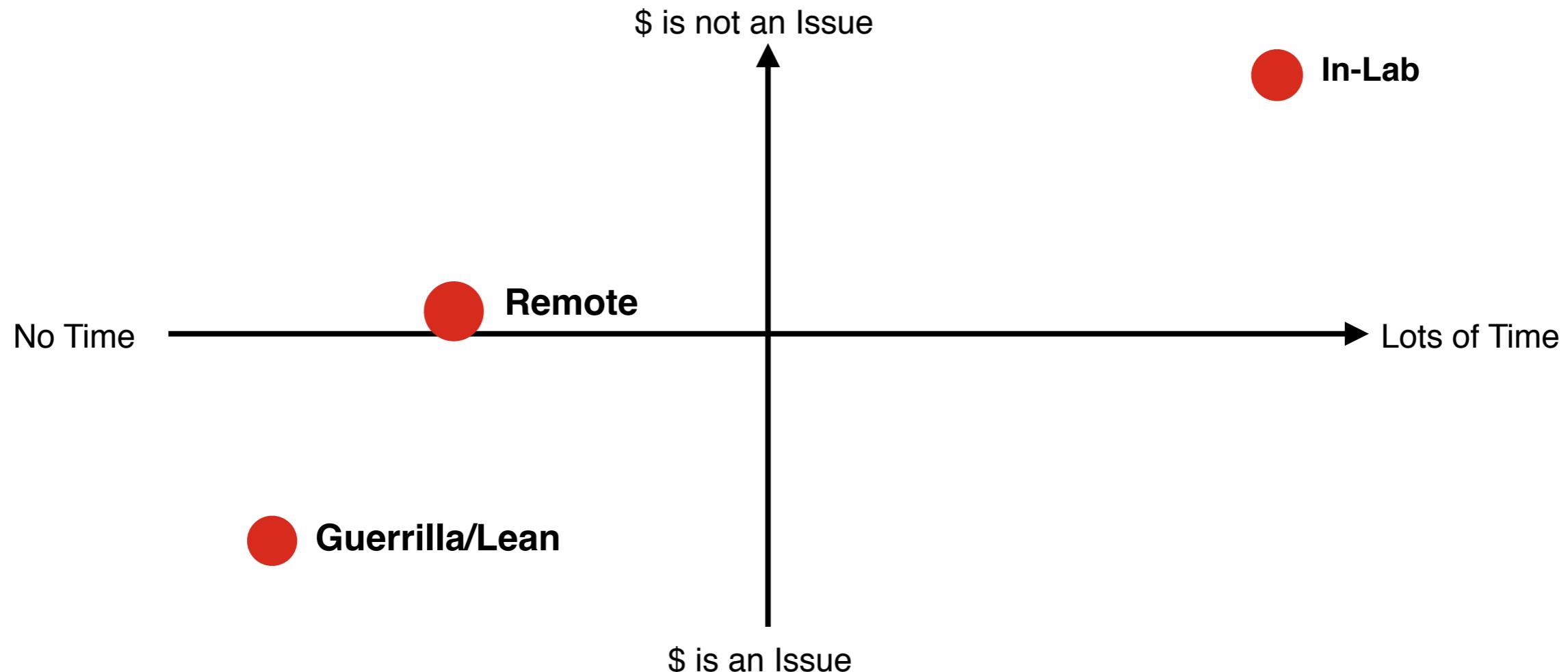
GUERRILLA TESTING



LEAN UX



WHEN TO USE EACH APPROACH



BEST PRACTICES

TEST EARLY AND OFTEN

- Plan to test at regular intervals (once a week is a good goal)
- Test whenever you have something new
- Test with prototypes

WHERE DO YOU TEST?

- In context (if possible)
- Neutral territory (public spaces, cafés)
- Your office (conference room, hallway)
- Remotely ([usertesting.com](https://www.usertesting.com))

PARTICIPANTS

- Aim for 3–5 participants
 - 80% of usability issues are found with 5 participants
- One participant is better than none
- Recruit from your target audience

ACT LIKE A THERAPIST

- Ask them what they are thinking
- Check whether it matches their expectations
- Probe for frustration and satisfaction
- Keep them talking
- Don't interfere
- Make sure they are always comfortable