

# User Testing

Tips on how to run test sessions  
and interpret results.

**Drupal Camp NJ 2018**



# About Me



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# Agenda

WHAT is user testing?

WHY should we test?

WHO is testing your product?

WHO should facilitate test sessions?

WHEN should you test?

How much does testing COST?

Case Study and Demo

Running Test Sessions

Interpreting the Results



**WHAT is user  
testing?**

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# What's the difference?

User Testing

Usability Testing

UX Testing

User Experience Testing





# Definition

**Usability testing** is a technique used in user-centered interaction design to evaluate a product by testing it on users.

Usability testing focuses on measuring a human-made product's capacity to **meet its intended purpose**.



# Examples

Products that commonly benefit from usability testing are foods, consumer products, websites or web applications, computer interfaces, documents, and devices.

**Usability testing measures the usability or ease of use.**



**WHY should  
we test?**

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# Cost & Time Savings



It is easier and quicker to make changes to a prototype....

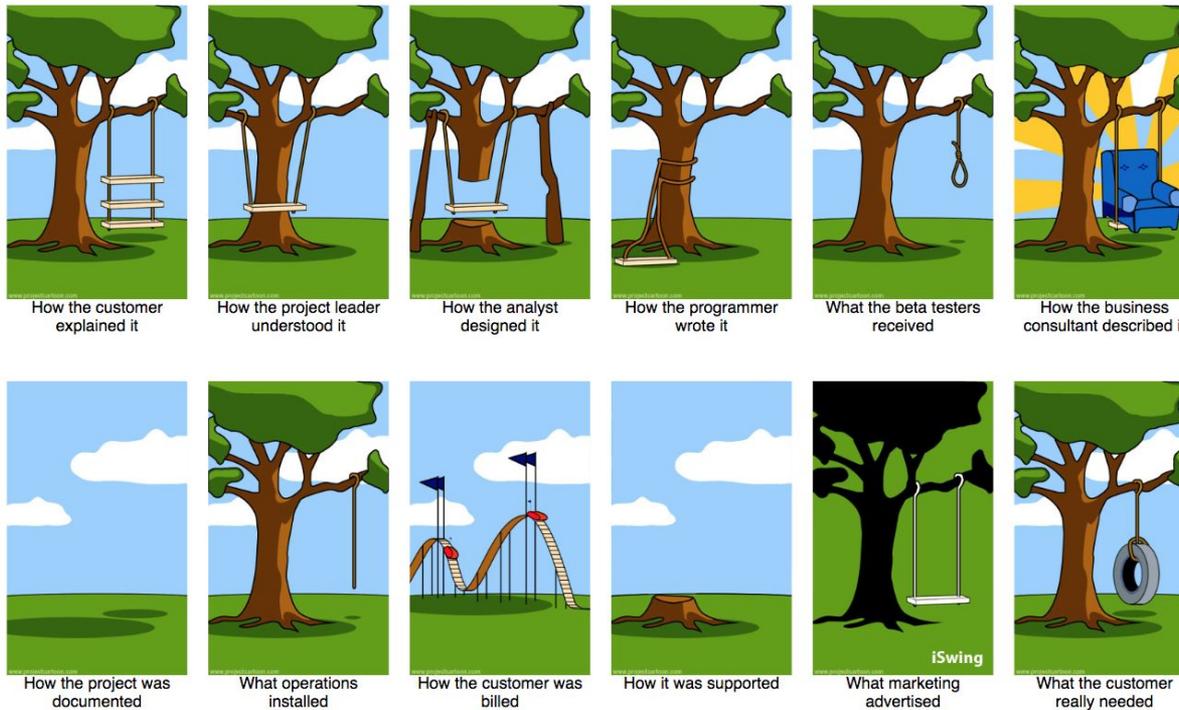


# Cost & Time Savings

...than it is to make changes after the building is complete!



# Ensure User Needs Are Met



How Projects Really Work -  
<http://www.projectcartoon.com>



**WHO is  
testing your  
product?**

# Thoughts on User Testing



Dilbert.com © 2012 Scott Adams, Inc

***YOU*** ARE **NOT** YOUR USER!

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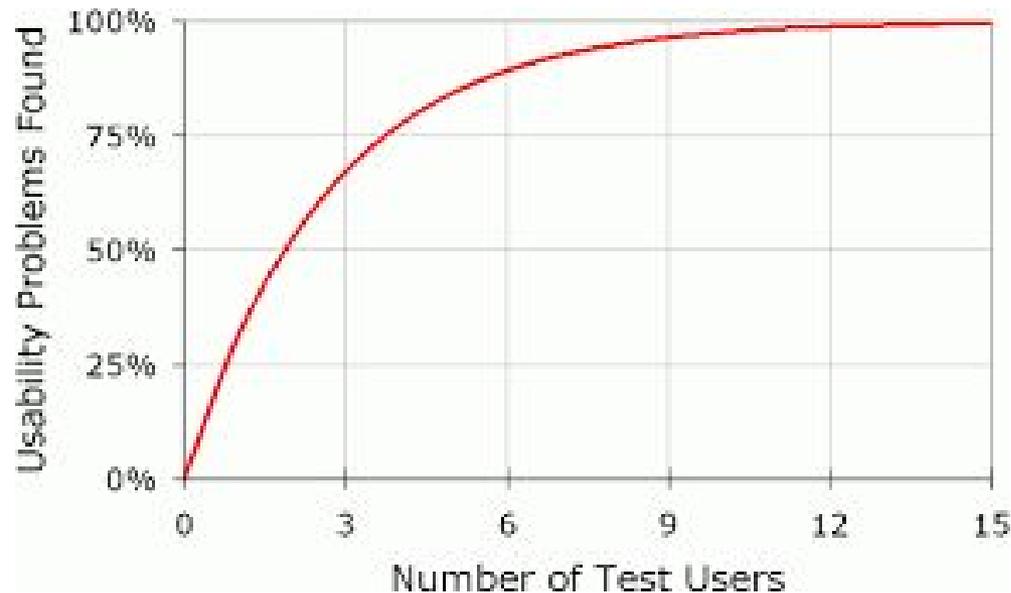


## Target Audience / Test Users

- Identify your target audience (i.e. User Personas)
- Recruit representative users
- Ask them to perform tasks on your design/prototype
- Let the users do the talking!

# Number of Test Users

80-90% of issues found with only a handful of people.



**Credit:** Nielsen Norman Group: <https://www.nngroup.com/articles/why-you-only-need-to-test-with-5-users/>



**WHO should  
facilitate the  
test sessions?**



“I believe strongly that everyone...can...and should — be doing their own testing”

— Steve Krug, author of “Don’t Make Me Think”



## Facilitators

- Professional UX researchers
- Content Strategists
- Designers
- Anyone on the project team

“Anyone can take notes, anyone can listen.”



# Tips for the Facilitator

## Before facilitating your first test:

- Watch an experienced usability expert run a sample session with a pilot user.

## During the test:

- Keep quiet and let users do the talking!!!!!!
- Do not “lead” or guide the users.
- Try to avoid answering questions. You can say: “You can do anything you normally would at home/office.”



**WHEN should  
you perform  
tests?**

**NOW!**

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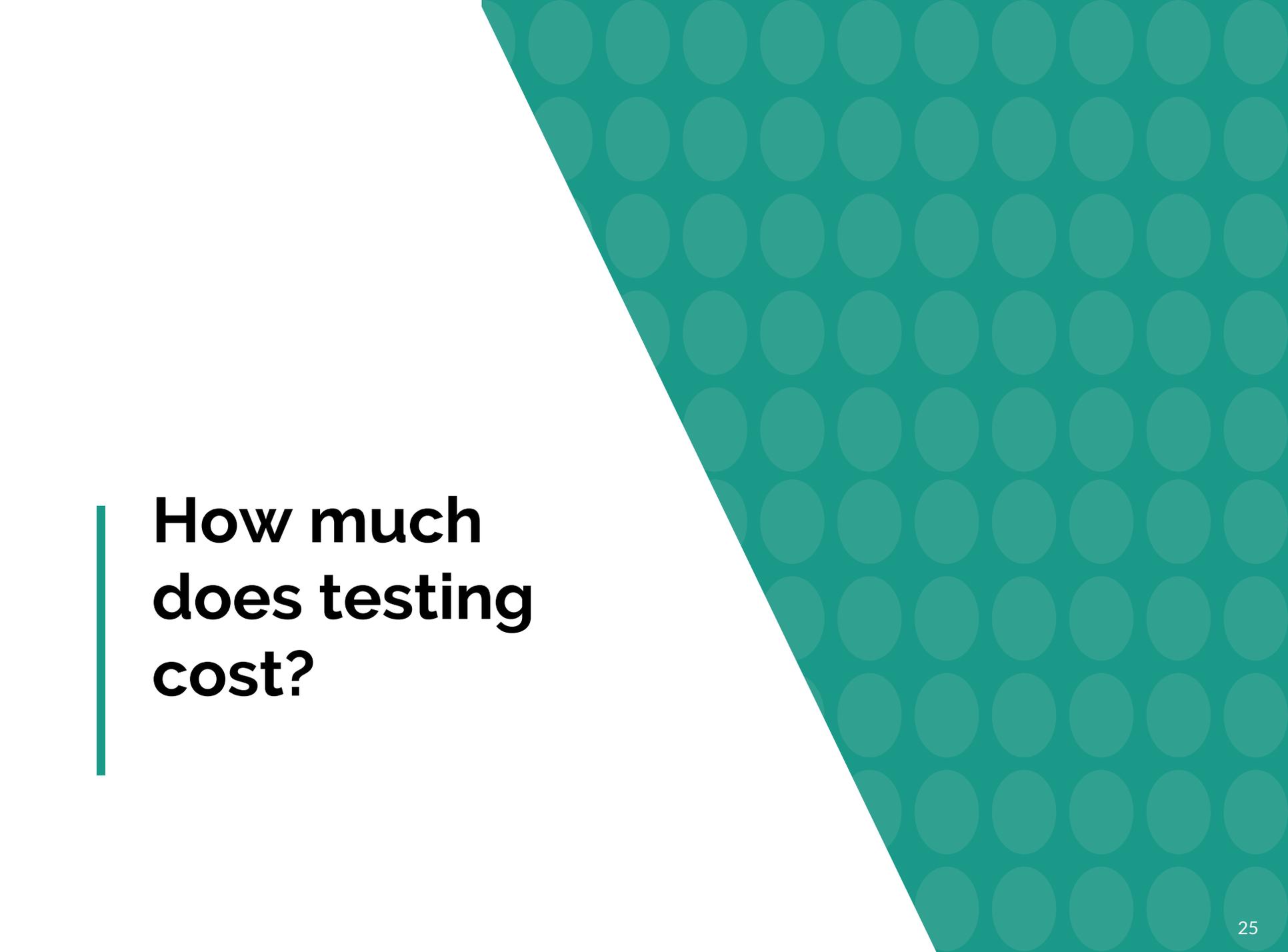


# Frequency

- Test Before
- Test During - “Early and Often”
- Test After

# Lean UX





**How much  
does testing  
cost?**

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# Testing Costs: Planned



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# Testing Cost: Reality





# Testing Options

1. Usability Lab

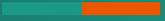


2. UserTesting.com



3. Friends & Family





# A Case Study In User Testing

Princeton University  
Office of the Dean of Faculty Website



# Overview

- Overall Project Goals
- Usability Test Approach
- Use of a Prototype
- Findings and Actions Taken
- Results

# Before

WebMail | A to Z links | PU Home | Search PU | Search DOF

**PRINCETON UNIVERSITY**

**OFFICE OF THE DEAN  
OF THE FACULTY**



ABOUT US | POLICIES & PROCEDURES | FACULTY | POSTDOCS | PROFESSIONALS | CHAIRS & MANAGERS

PU Quick Links  go

**Office Directory**  
**What's New**  
**Calendar of Events**

**Faculty in the News**  
**Faculty Meeting Schedule**  
**Faculty Development & Diversity**

The Office of the Dean of the Faculty has administrative oversight of the departments and programs of instruction and of all such matters as pertain to the effectiveness and well-being of the faculty, professional researchers, professional specialists, and professional librarians. Our focus extends to the areas of recruitment, appointments and advancements, teaching initiatives, honors and prizes, discipline, and other policies and procedures that concern the quality and welfare of the faculty and academic professionals that are appointed through our office. Our office works closely with department chairs, program directors, department managers, and other administrative offices.

Our website is intended to be a helpful tool and provide useful and current information for all the faculty and academic professionals we both work with and serve at the university. Please feel free to [contact our staff members](#) directly any time we can provide assistance to you further beyond the information already contained on our site.

**Campus Resources:**

- › [PU Home](#)
- › [About Princeton](#)
- › [Campus Directory Search](#)
- › [Archives](#)
- › [Job Openings](#)
- › [Human Resources](#)
- › [Davis International Center - Visa Services](#)

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› [For Prospective Students: Admissions](#)

# Problems To Solve

- Users found it difficult to find the information.
- Content was not organized in an intuitive manner.
- Navigation was confusing.
- Information was buried.



# Confusing Navigation

The screenshot shows the website for the Office of the Dean of the Faculty at Princeton University. Several navigation elements are highlighted with red boxes to illustrate confusing design choices:

- Top Navigation:** A horizontal bar at the top right contains links for "WebMail", "A to Z links", "PU Home", "Search PU", and "Search DOF".
- Header:** The Princeton University logo and name are displayed on the left side of the header.
- Image:** A large photograph of a brick building with ivy is featured in the header area.
- Secondary Navigation:** A horizontal bar below the image contains links for "ABOUT US", "POLICIES & PROCEDURES", "FACULTY", "POSTDOCS", "PROFESSIONALS", and "CHAIRS & MANAGERS".
- Search:** A search box labeled "PU Quick Links" with a "go" button is located on the right side of the secondary navigation bar.
- Left Column:** A list of links is provided, including "Office Directory", "What's New", "Calendar of Events", "Faculty in the News", "Faculty Meeting Schedule", and "Faculty Development & Diversity".
- Main Content:** The central text describes the office's administrative oversight and provides contact information for staff members.
- Right Column:** A "Campus Resources:" section lists various links such as "PU Home", "About Princeton", "Campus Directory Search", "Archives", "Job Openings", "Human Resources", "Davis International Center - Visa Services", and "For Prospective Students: Admissions".



# Role Based vs. Action Based IA

- Information architecture was designed based on “User Role” as opposed to “User Action/Task”.
- Users did not know what group they belonged to therefore found it confusing to find information that was relevant to them.

## Original Main Menu

[ABOUT US](#) [POLICIES & PROCEDURES](#) [FACULTY](#) [POSTDOCS](#) [PROFESSIONALS](#) [CHAIRS & MANAGERS](#)



# Running Test Sessions



# Usability Test Approach

1. Identified target audience groups
2. Found volunteers from sample test group
3. Developed the scope of the first test session
4. Created a working prototype based on the new architecture
5. Identified key user tasks, created test scenarios
6. Observed the user's experience executing the tasks
7. Ask testers to talk through their actions and thought process
8. Gathered and analyzed results



# Target Audience

## Primary:

- Department Manager
- Department Chair
- Faculty Assistant
- Internal DOF Staff Member
- Faculty Member
- Search Officer
- Librarian
- Postdoctoral Research Associate

## Secondary:

- Prospective Job Applicant
- Visiting Faculty Member
- Visiting Lecturer
- Director for Institutional Equity and EEO
- Former Faculty Member
- Former Lecturer
- Peer Institution Dean of the Faculty
- Higher Education Researcher



# Finding Test Volunteers

- Look for a sample set of target audience
- Ask people you know
- Recruit via email blast
- Set up a recruitment table in a high traffic area
- Offer incentive



# Scope of First Test Session

## Original Main Menu

**ABOUT US** **POLICIES & PROCEDURES** **FACULTY** **POSTDOCS** **PROFESSIONALS** **CHAIRS & MANAGERS**

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## Prototype #1: Main Menu

About	Apply for an Academic Job	Benefits, Compensation and Resources	Learning and Professional Development	Department Administration	Forms Policies and Procedures	Announcements and Dates to Remember
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# Test Scenarios



**Name:** Gail  
**Age:** 45  
**Marital Status:** Divorced  
**Sex:** Female  
**Occupation:** Manager  
**Location:** Princeton, NJ  
**Interests:** Running, book club, local theater shows, fish

As a department manager...	User Flow and Comments
Find the rules and procedures document for the faculty, researchers, specialists	
Find appointment forms and checklists	
Where would you find the list of whom to contact in the DOF office	
Where would you find the calendar of deadlines	
Find the chair's guidebook	
Where would you look to find the memorial resolution procedures	
Find the chair/faculty meetings schedule	
Where would you look to find information on reporting illegal activity or potential complaints	
Where would you look to find information on recent faculty awards or those in the news	
Where would you look to find information on Princeton housing options for regular and visiting populations	
Where would you look to find Numbered Memos	
Find moving and reimbursement policies (as well as general business expense policies)	
Find learned society and other travel	

# The Test Lab

- Simple
- Seat for tester and seat for facilitator
- Offer the choice of Windows or Mac computer
- Minimize distractions



Example



# Prep The User

- Welcome the user
- Ask user to sign-in and self Identify based on list of target audience roles.
- Allow user to choose their OS/web browser preference (if applicable)
- Encourage user to **think out loud!**
- Inform user of the purpose of the test:

**Example:** The purpose of these tests are to help us determine how our content should be organized, so we can make our website easier to use. This is not a test of you! You are testing the site. There is no right or wrong answer.



# Prototype Demo



Wireframes and mockups by WDS Designer

**Joanne Tunney**



**You  
Tested.  
Now What.**



# Gather Data / Interpret Results

- Collect Data
- Organize Data
- Review
- Prioritize
- Generate Solutions
- Revise Prototypes
- Retest



# Key Findings

19 testers = way too many

80-90% of issues found with only a handful of people



# Prototype #2: Menu Design Revised

We were able to make corrections to our assumptions quickly before getting deep into website development.

## Prototype #1: Menu Design



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## Prototype #2: Menu Design



After

dof.princeton.edu

PRINCETON UNIVERSITY Academic Jobs Faculty Voting Terms & Definitions Whom to Contact QUICK LINKS

OFFICE OF THE Dean of the Faculty Search

About Working at Princeton Policies & Procedures Forms & Data Submission Memos & Dates to Remember



**Kulkarni Appointed Dean of the Faculty**  
Sanjeev Kulkarni, dean of the Princeton University Graduate School and a professor of electrical engineering, has been appointed dean of the faculty effective July 1.

**Upcoming Faculty Meetings**

FEB	MAR	APR
05	05	02

[View All](#)

**For Chairs and Managers**  
Find information helpful for managing departments, including the Chairs' Guidebook and Annual Salary Review guidelines.

**Forms and Data Submission**  
Read step-by-step instructions on how to submit requests, recommendations, and other information to our office.

**Policy Library**  
Explore current academic and administrative policies specifically targeted to faculty and academic professionals.

**Announcements**

John Scanlon joins the Dean's Office as Associate Dean for Data Analysis and Operations  
08/08/17

**Policy Updates**

02/01/18 Moving/Relocation (Domestic and International)  
01/12/18 Leaves for Scholarship



# Conclusion

- Test before, during and after
- Test early and often
- Use the Lean UX approach: Think, Make, Check
- 80-90% of issues found with only a handful of people.

***YOU*** ARE **NOT** YOUR USER!

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# Questions

