Your Users

Representation of user groups

Balanced around key differences

Participants

Diverse but generalisable

How many?
Why You Only Need to Test with 5 Users

by Jakob Nielsen

\[ N \left( 1 - \left(1 - L \right)^n \right) \]

Where \( n \) is a number of users, \( N \) is the total number of usability problems, \( L \) is the proportion of usability problems discovered while testing a single user. The typical value of \( L \) is 31%
Why You Only Need to Test with 5 Users by Jakob Nielsen
Your Users

- Representation of user groups
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- Diverse but generalisable

Participants

- How many?

For this course 3-5 participants
Your Users

Ethics
Why would the university have ethics requirements for a course?

Always respect participants! Including their:

- Time
- Attitude and environment
- Desire for privacy

University has a formal process for Ethics. They consider:

- Recruitment
- Voluntary participation
- Confidentiality and anonymity
- Risks/benefits
- Fully informed consent

Process and protections ensure study is done correctly with proper forethought.
Principles:

- Respect for human dignity
- Respect for free and informed consent
- Respect for vulnerable persons
- Respect for privacy and confidentiality
- Respect for justice and inclusiveness
- Balancing harms and benefits
- Minimizing harm
- Maximizing benefits

Research Ethics Board (REB) at Waterloo can:

- Approve, reject, propose changes, or terminate any work with human subjects by members of the university. **This includes you.**
- REB consists of five members (both men and women)
  - One member knowledgeable in ethics
  - Two members have expertise in fields covered by REB
  - One member knowledgeable in biomedical law
  - One member from outside university
  
  Goal is breadth – want a balanced perspective on projects being examined
### Your Users

#### Ethics

<table>
<thead>
<tr>
<th>Informed Consent:</th>
<th>Voluntariness:</th>
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</thead>
<tbody>
<tr>
<td>● Full Disclosure</td>
<td>● Subjects can refuse to answer and can stop participating at any time</td>
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<tr>
<td>● Comprehension</td>
<td>● If they say they don’t want to participate, their involvement is done</td>
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<tr>
<td>● Voluntariness</td>
<td>● Never, ever push subjects for information they cannot or do not want to disclose</td>
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<tr>
<td>● Competence</td>
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<tr>
<td>● Agreement</td>
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**Partial consent:**

- They can consent to all or part of process
- Consider consent forms
- Make them aware of selective exclusion
Problem

Understand your users

Translate needs into functionalities

Create design ideas

Prototype design

Test & Evaluate

Build final version
Exploratory Study

Understanding:
Motivations
Typical Behaviour
Struggles
Environment
Social context
Language
...

Build final version

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