Mobile Usability

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Overview

• What is Mobile Usability
• Why is Mobile Usability Unique?
• How to design for Mobile devices
• How to user test Mobile interfaces

What is Mobile Usability?

Application of the user-centered design process to small, handheld electronics

Why is this an important subset of human-computer interaction to study?

What Makes it Unique?

What is unique about Mobile Usability?
• Physical limitations
• Social limitations
• Mental limitations

What Makes it Unique? (and hard!)

Physical limitations:
• Small screen
  • scrolling
  • modality
  • pruning
• Small buttons
  • hard to press
  • hard to see
  • accidental keypresses
• Less buttons
  • multi-purpose
  • no clear mapping
  • situational

Several categories of mobile devices:

<table>
<thead>
<tr>
<th>Communication</th>
<th>Entertainment</th>
<th>Organization</th>
<th>Hybrid</th>
</tr>
</thead>
<tbody>
<tr>
<td>cell phones</td>
<td>videogame systems</td>
<td>Personal Digital Assistants (PDA)</td>
<td></td>
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<td>pagers</td>
<td>digital cameras</td>
<td>pocketPC</td>
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<td>portable IM</td>
<td>DVD players</td>
<td>Digital Business Card Organizers</td>
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<td>portable email</td>
<td>iPod players</td>
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What Makes it Unique? (and hard!)

Social limitations:
• No standards!
• Expectations are low
• Patience is low
• Social protocol is different – used in a public place

Mental limitations:
• Lack of a mental model
• No metaphor
• No relationships
• Arbitrary choices
• No spatial awareness of navigation
• What leads where? Why?
• How did I get here?
• Increased anxiety

How to design for Mobile devices

Navigation:
• Where am I?
• Where am I going?
• Where have I been?

• Map it all ahead of time!

Visual Design:
• Simple.
• Simple.
• Simple.
• Monochromatic.
• Consistent from screen to screen

How to user test Mobile interfaces

• Preparation.
• Detail oriented.
• Task based.
• Think aloud!
Let’s try mapping one.

In groups of two or three, map the interface for your cellphone.

1. Determine the navigation system used
2. Identify the main hierarchical branches
3. Illustrate connections between the branches.

Is this interface easy to navigate?
Why or why not?

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