What is a web application?

- Can it be defined?
  - Any application that runs in a browser
  - An application that connects over the web

- Does the definition matter?

- Or is the real question:
  How do we make design decisions?
What drives design decisions?

- A series of questions that can be used to discuss different aspects of the application
  - Relationship between user and application
  - Style and tone of the conversation
  - Presentation style
  - Interaction style
  - Expectations for interface standards
  - Frequency of use
  - Perceived distance
  - Expectations for response time

Relationship Between User and Application

- Is this app required for users?
- Do users have to identify themselves?
- Does the app remember prior work?
- Is there an need for reliability?
**Interaction Style**

- How do users interact with the application?
- What is the basic paradigm of the interaction?

**Style of Conversation**

- What is the relationship between the application owner and users?
- What kind of language and terminology is used?
What We've Learned About Web Application Design UPA 2002 Panel

Presentation Style

- What is the graphic style of the user interface?
- How closely related is the presentation style to the application content?

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Expectation for Interface Standards

- Does this application replace or supplement a desktop application?
- Is it used with other apps that set expectations?
- Is it used exclusively in a business setting?
**Frequency of Use**

- **Occasional, Erratic**
  - Foreign exchange tool

- **Episodic, Periodic**
  - Self-registration for medical appts

- **Constant, Daily**
  - Customer service desktop

- How often is this app used?
- For how long is it used at one time?
- What triggers its use?

**Perceived Distance**

- **Far Away Server**
  - Panama Canal-cam

- **Can’t Tell or Don’t Care**
  - Quicken updates

- **Nearby, On-site or Local Machine**
  - Internal application

- Where do users think this application ‘lives’?
- Who do they think controls the data?
Expectations for Response Time

- Is response time critical?
- Why or how?

Example: Mortgage Broker App

Used to process applications for mortgages
Example: Online Personal Banking
Used to monitor checking account, pay bills, transfer funds

Example: Custom Beauty Program
Used to create a custom mix of beauty products
### Relationship:

<table>
<thead>
<tr>
<th>User Selects App</th>
<th>App Selects User</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Looking</strong></td>
<td><strong>Doing</strong></td>
</tr>
</tbody>
</table>

### Intensity of Interaction

<table>
<thead>
<tr>
<th>Reports-Oriented Work</th>
<th>Work ‘Desktops’</th>
</tr>
</thead>
<tbody>
<tr>
<td>• information presentation</td>
<td>• embodies an entire task</td>
</tr>
<tr>
<td>• data manipulation</td>
<td>• often mission critical</td>
</tr>
<tr>
<td>• actions often separate</td>
<td>• long sessions</td>
</tr>
</tbody>
</table>

#### E-Commerce

- • browsing-focused
- • casual until purchase
- • stored information convenient, not critical

#### Home Applications

- • targeted task
- • simple interaction style
- • persistent data
- • short sessions

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### Examples

<table>
<thead>
<tr>
<th>Reports-Oriented Work</th>
<th>Work ‘Desktops’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician access to test reports</td>
<td>Mortgage application processor</td>
</tr>
<tr>
<td>Network surveillance tool</td>
<td>Hospital management program</td>
</tr>
<tr>
<td>Market report</td>
<td>Calendar/diary</td>
</tr>
<tr>
<td>Web article with comments</td>
<td>Finance rate calculator</td>
</tr>
</tbody>
</table>

#### E-Commerce

- Personal beauty planner
- E-Commerce site
- Online auction
- Online banking
- Grocery shopping list
Exceptions

- Games
  - May be “obsessions”
  - Often turn usability guidelines on their heads
- Some visualizations
  - Too soon to tell whether they are “tools” or “toys”
- Sites with overlapping purposes
  - Marketing sites with small applications