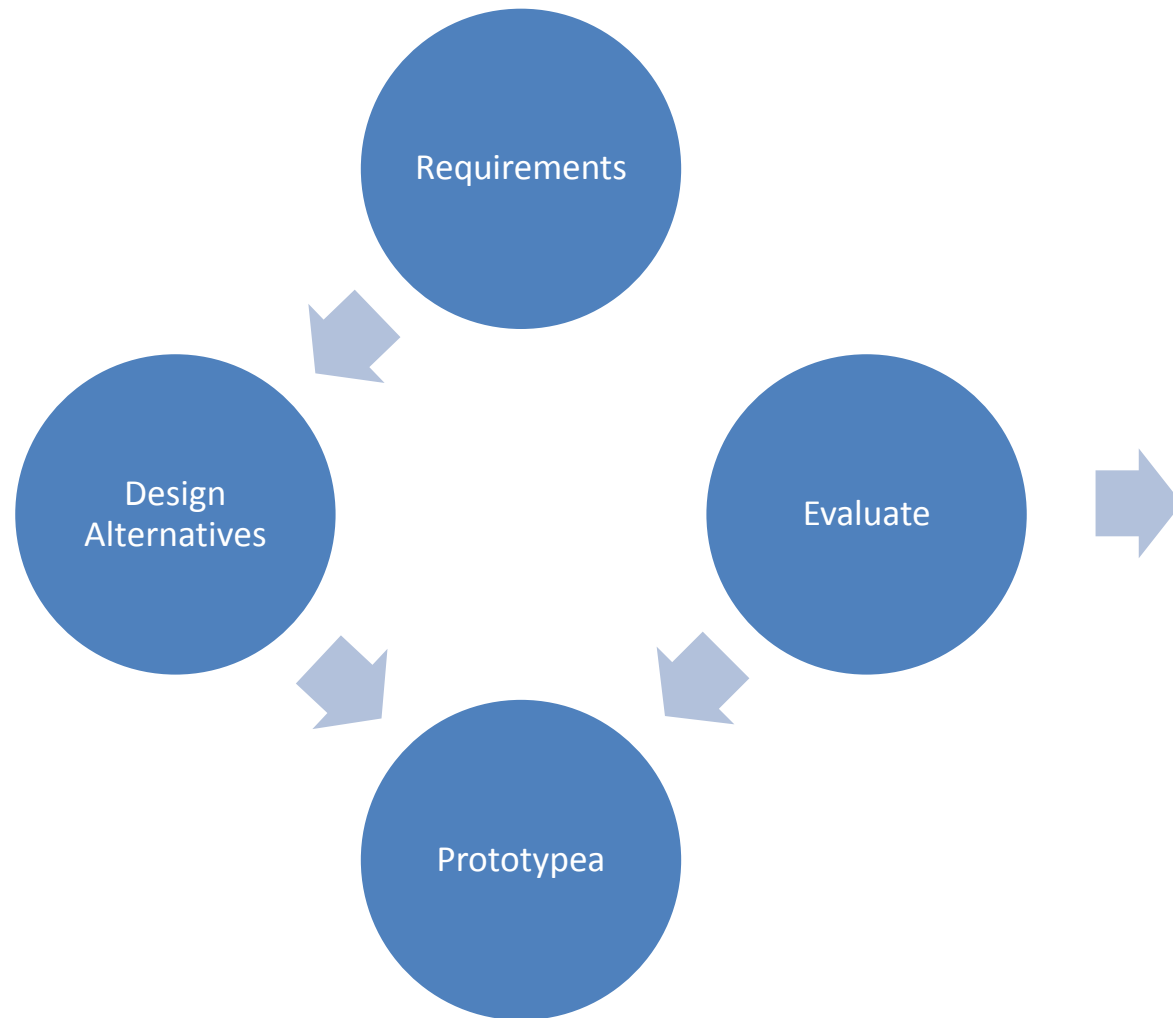


# Google Forms

Evaluation + Usability

- Evaluation + Usability are key components for building a site
  - **Evaluation**: helps you make decisions based upon empirical research
  - **Usability**: helps you figure out how users find your site

# Lifecycle Design Model

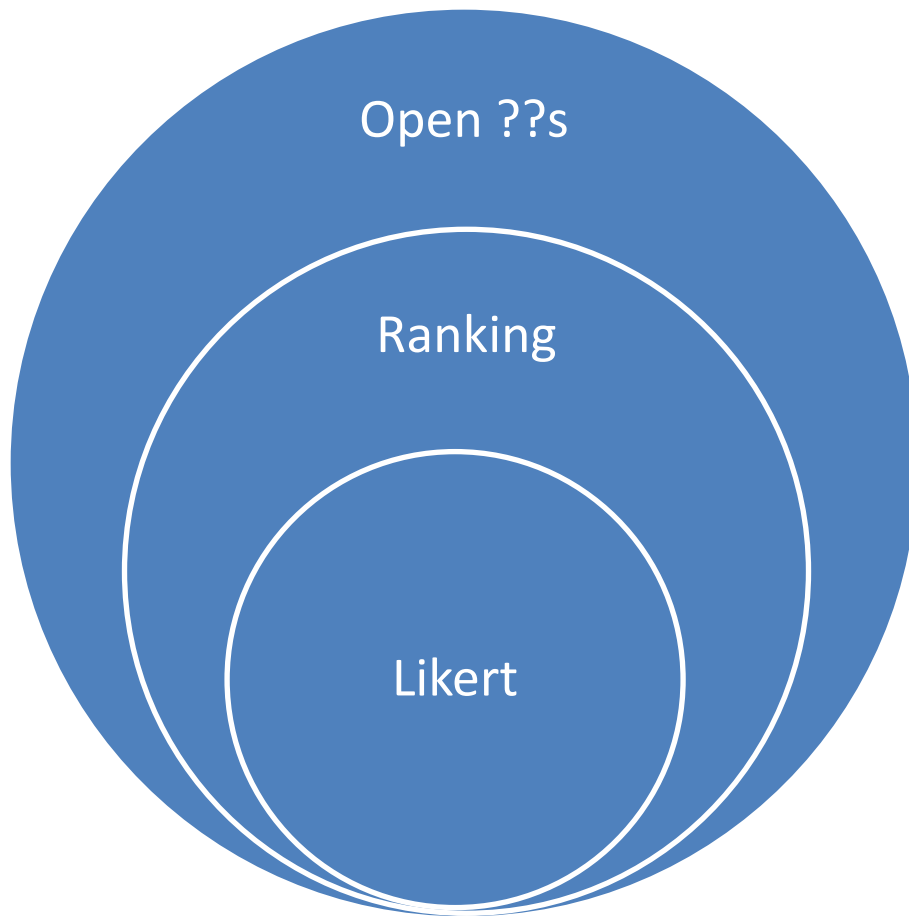


# Evaluations

- Using tools to help build a better social media website
  - Requirements phase: basic testing to find out how people operate, what they think
  - Evaluative state: testing to find out how your prototypes worked

# 3 Types of Methodologies

Likert Scale	Rank Scales	Open-Ended Questions
Determine how people feel about a specific action or task	Determine which features of a site are most likely to be used	Give people the opportunity to discuss how they feel; understand how they use similar functions
5 or 7 point ranking scale (e.g. On a scale of 1-5, how hot was the sauce?)	Used to determine what features to take away or add (e.g In order, which features would you most likely use on a site such as this...)	Used to get people thinking (e.g. Describe a time when you enjoyed sharing a book with your friends.)



When you're evaluating your site, it's important to tie your methodologies together.

Ideally, you'll want to use open-ended questions to find functionalities, rankings to determine what people most want, and Likert scales to determine how well you built something

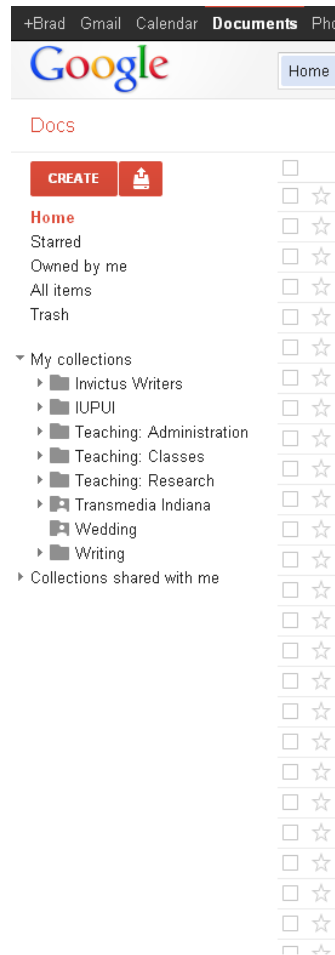
# What Are These Good For?

- Creating Scenarios
- Finding Out What People Can't Articulate
- Deciding What to Add/Cut
- Making Decisions About Core Functionality and Emotional Connection

# Creating the Evaluation Forms

- We'll use Google Forms to capture information; however, some people use Survey Monkey.
- The goal, as Licklider reminded us, is to use technology to gather and crunch information so we can make better decisions more quickly.

# Google Forms



Go to <http://docs.google.com>

In the left navigation bar, you'll see a "CREATE" button. Click on that, and then create a FORM.

This form is simply an Excel sheet with a fancy wrapper on the front so that people can give you data that you can immediately use




**+ Add item** Theme: Books Classic Email this form See responses More actions **Save**

### So Far Appalachia HCI Requirements Testing

Hello:

My name is Prof. Brad King, and I'd like to thank you for your participation in this research. I am in the process of writing and developing a book, So Far Appalachia, a story about my family's history in the United States. As part of the interaction design process for developing the book, I will be conducting a series of research studies to determine how people read in digital environments, frustrations they have with those environments, and ways to develop pleasurable reading products.

Before you complete this survey, please read the Informed Consent Document (<http://tinyurl.com/7mztsh7>) that describes the research, this process, what I will do with the data, and your rights as a participant. Your name will not be used with the research, and upon completion of the project will be deleted permanently from the server.

**Question Title**    

**Help Text**

**Question Type**

**Make this a required question**

**Age**

**Gender**

**Digital Book Reading**

- iPad
- Nook
- Nook Color
- Android Tablet

You can view the published form here: <https://docs.google.com/spreadsheets/viewform?formkey=dG5jbkVSVZ28wLWp6TKZkdVmOE1Za3c6MA>

On the Form, you'll see you can write instructions and add questions (the icons on the right let you EDIT, DUPLICATE, or TRASH a question).

Question Types: Likert (Scale), Rank (Rank), Open-Ended (Paragraph Text)

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\* Required

**If you are willing to participate in a follow-up study, please include your email address so that we may contact you in the future. If not, please skip this section.**

Age \*

Gender

Digital Book Reading \*

 iPad Nook Kindle

Once you have finished the questions, you can view the live form. (It's still possible to change the questions.)

Google Forms offers a variety of themes so that you can personalize your page if you'd like.

Two items of note:

1. The website URL for Google Forms is ridiculously long
2. You'll need to use that anyway because if you embed this within an email, it won't track any information

### So Far Appalachia HCI Requirements Testing ☆

File Edit View Insert Format Data Tools Form (81) Help Last edit was seconds ago

Rich text editor toolbar with icons for undo, redo, bold, italic, text color, background color, bulleted list, numbered list, link, unlink, and other formatting options.

fx   Timestamp	AD	AE	AF	AG
1	<p><b>What are the most frustrating parts you've experienced reading books in a digital environment?</b></p>	Gender	Digital books should have stories that incorporate, as primary material, multiple forms of media (e.g. video, audio, images)	Digital books should include functions outside the story -- such as a dedicated website -- where readers can learn more
2	<p>Fonts, too many extras (links, notes, videos) can be distraction. If I wanted to watch Powerpoint, then I would. I just want to READ.</p>	Female	4	7
3	<p>harder to read, small type or screen size</p>	Male	1	1
4	<p>When the paging format is crappy, it seems like one huge document without a good spot to break. Additionally, a poorly edited is pathetic but seems worse digitally. I still like chapters/sections and ways to easily skip around the book - my bad reading habits need to be satisfied.</p>	Female	7	7
5	<p>can't skip around in a short story book (or poetry) very easily.</p>	Female	7	7
6				

Your data will be recorded directly into an excel sheet, which you can download in the FILE menu.

You'll need to download the data when you are done in order to create the statistical models (e.g. mean, mode) and the scatter charts.

# Using the Data

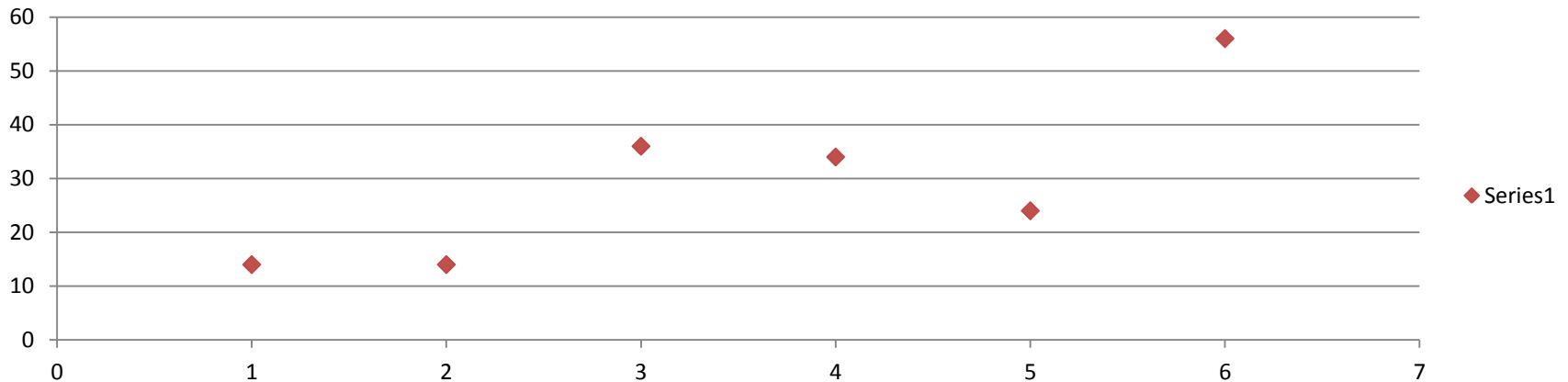
C11				<i>f<sub>x</sub></i>
	A	B	C	
1				
2			14	
3			14	
4			36	
5			34	
6			24	
7			56	
8		mean	29.66667	
9		mode	14	
10		stan dev	15.97081	
11		median	29	
12				

Once you've gathered your Likert and Ranking scale information, you can easily create a series of simple mathematical equations using the *fx* function in Excel.

These simple statistics give us some good information:

- **Mean:** The average of a column of numbers. (Downside: outliers can mess up the average)
- **Mode:** Most common occurring number
- **Standard Deviation:** The number away from the mean (e.g. small STDV means agreement amongst people)
- **Median:** The number in the middle of a set of numbers (e.g equal number of numbers above and below)

# Scatter Charts



Scatter charts are easily made using Excel (it's in the Insert function, you'll see a Scatter Chart).

These charts help you quickly visualize information (remember Licklider). Combine scatter charts with Mean, Mode, and Standard Deviation so that you can make decisions based on empirical data instead of opinion.

# Scenarios



**39-year old male**

**Likes to find ex-patriot bookshops when he travels. Likes to find out-of-the-way places. Takes lots of pictures. Enjoys meeting other travelers before he gets to a location.**

**Dislikes coming home**

Open-ended questions help you put together scenarios.

These are important because they can help you focus your sites function and functionality.

The more scenarios you get, the better you can begin to understand what people *want* to do instead of trying to guess what you *think* they want (based on your limited experience).

You can suss out the emotional appeal of a site as well.

# Now What

- Until you bring your analytical skills to the data, the process is meaningless. You'll need to construct a narrative around the data sets, sussing out what people have said, what they like, what they don't, and how they experience specific events.
- However, your narrative will now contain empirical research and data