


User Interface Software Projects

Assoc. Professor Donald J. Patterson
INF 134 Winter 2013

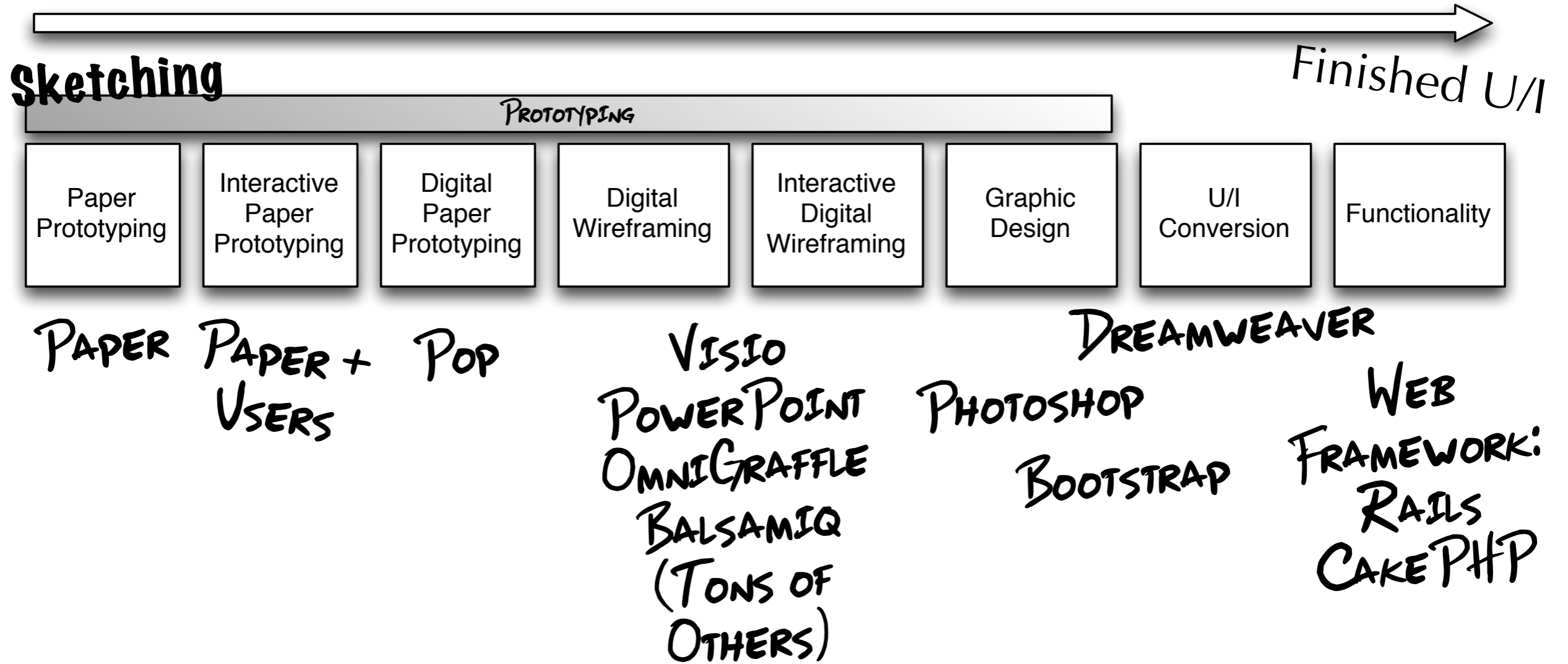


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Assignment 04



Prototyping



In Class



Assignment 04

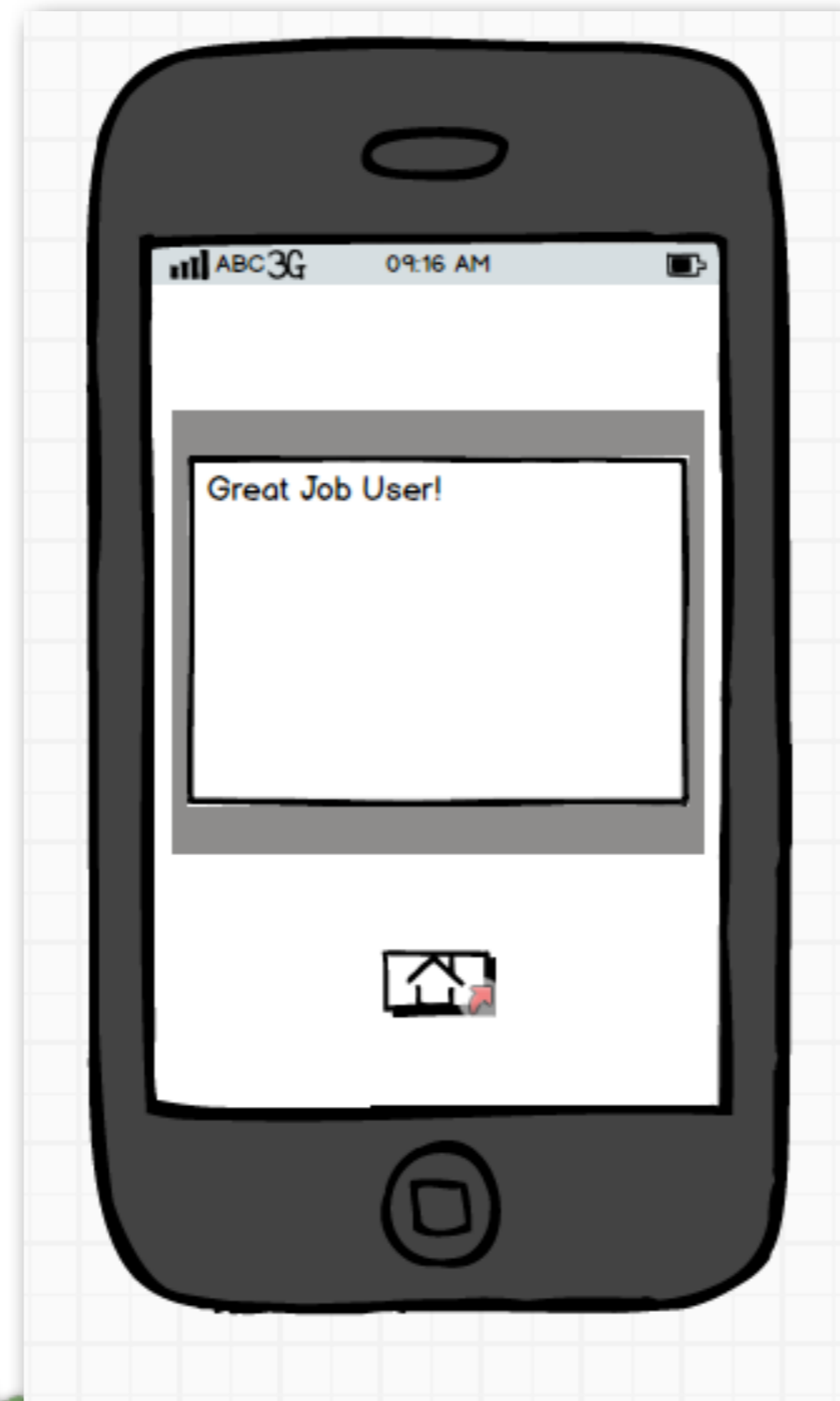


Assignment 03



Balsamiq

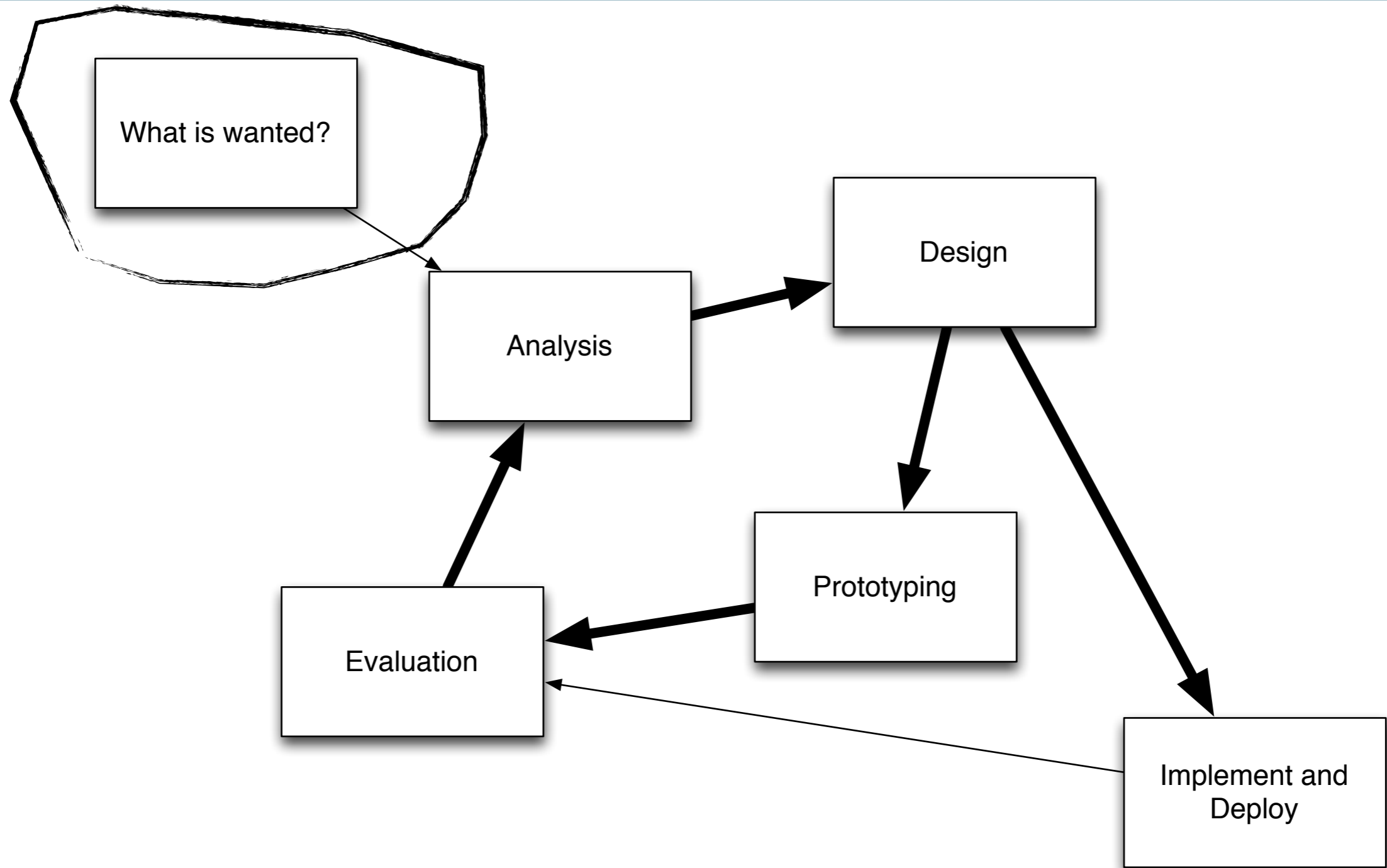




Interaction design tools



Design Process



Interaction Design - Getting what is wanted



Interaction Design - Getting what is wanted

- Brainstorming
- Contextual Inquiry



Goals of Brainstorming



Goals of Brainstorming

- Generating alternatives is a key principle in most design disciplines
- This should be encouraged in interaction design
- “The best way to get a good idea, is to get lots of ideas” - Linus Pauling



Brainstorming

- Brainstorming is used to
 - generate ideas
 - refine ideas
 - develop ideas
- “Brainstorming is used when you're searching for ideas and discovering possibilities that may be found in problems.”
- General goal:
 - Include stake holders in creating:
 - a new future
 - a new innovation
 - a way to solve a problem

<http://dudye.com/5-effective-brainstorming-exercises>

Interaction Design - Getting what is wanted



Interaction Design - Getting what is wanted

- Brainstorming
- Contextual Inquiry



Contextual Inquiry - what is the question and problem?

- Similar to ethnography
 - Studies the user in place
 - Tries to capture the reality of his work culture and practice
- Different from ethnography
 - It is not open-ended
 - The investigator has a specific focus
 - Its goal is to
 - find the right design
 - design the right system



Contextual Inquiry

- Contextual Inquiry
 - Is like being an apprentice to the user
 - Go to their location
 - See their work place
 - See the objects they use
 - See the artifacts they create
 - Experience their communication patterns
 - verbal
 - non-verbal
 - Gather data



Contextual Inquiry

- The user is the expert and a partner to the investigator
- However, the investigator is not passive
 - Her goal is to understand what is going on.
 - Asking questions...
 - Questioning motivations...
 - Make sense of the actions is expected
 - She must be ready to challenge her assumptions of understandings of the place, user and task



Contextual Inquiry

- Step 1
 - Data collection
 - Interviews
 - Photographs
 - Videos
 - Drawings
 - Sample collection



Contextual Inquiry

- Step 2
 - Data analysis
 - Sequential analysis of actions
 - Physical models of actions
 - Models of communication flow
 - Cultural insights
 - Artifact categorization



Contextual Inquiry

- Step 3
 - Outcome
 - Representation of the required task sequences, artifacts and communication channels that must be supported.
 - Understanding of physical and cultural constraints

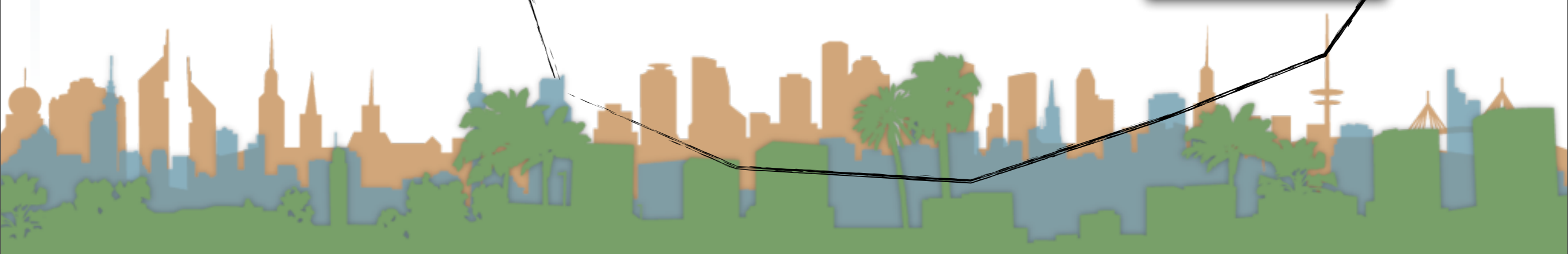
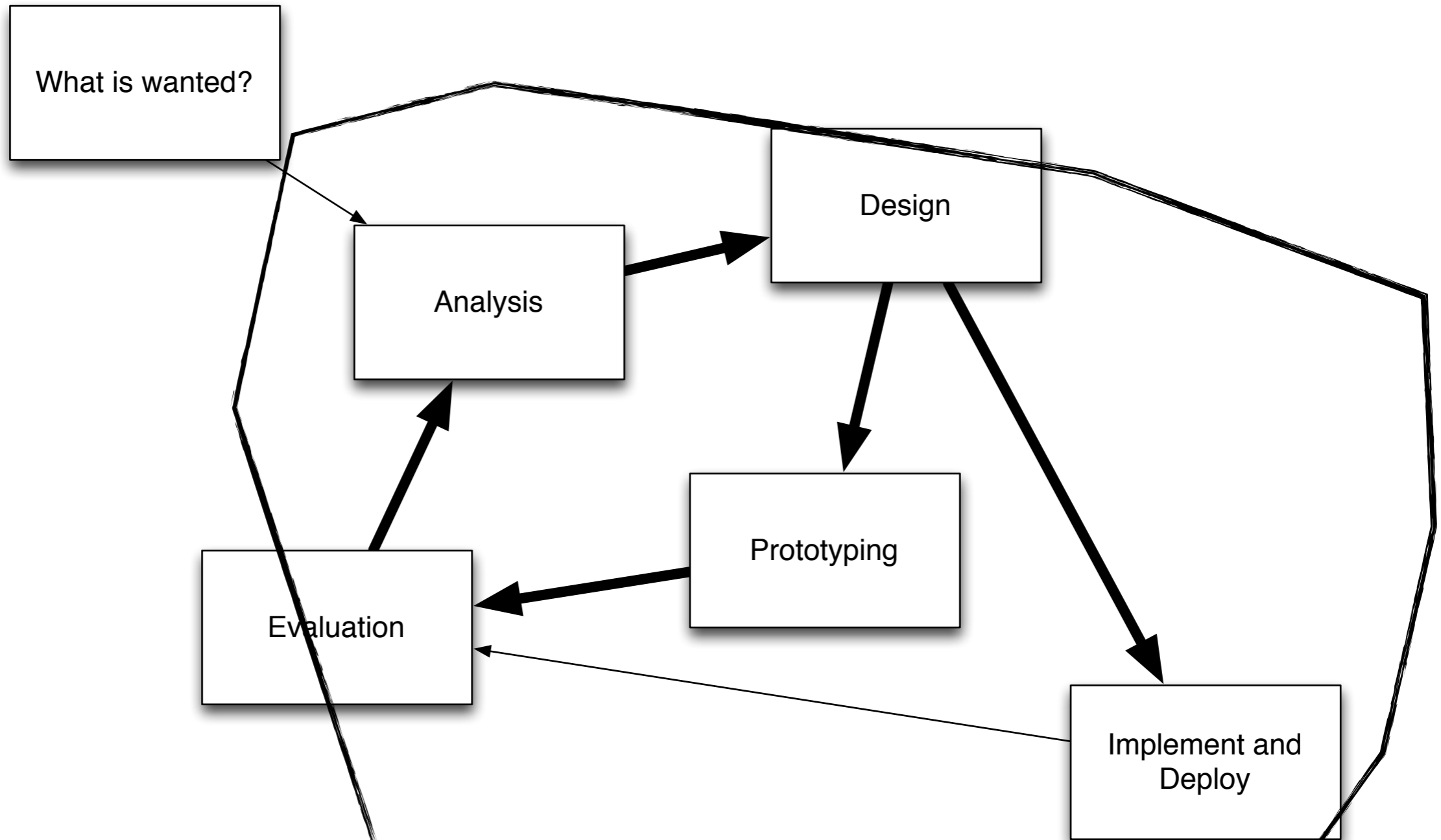


Contextual Inquiry

- Resources
 - IDEO Method Cards
 - Learn
 - Activity Analysis
 - Competitive Product Survey
 - Look
 - Still-Photo Survey
 - Ask
 - Narration/Think Aloud
 - Try
 - Behavior Sampling
 - <http://www.ideo.com/work/>

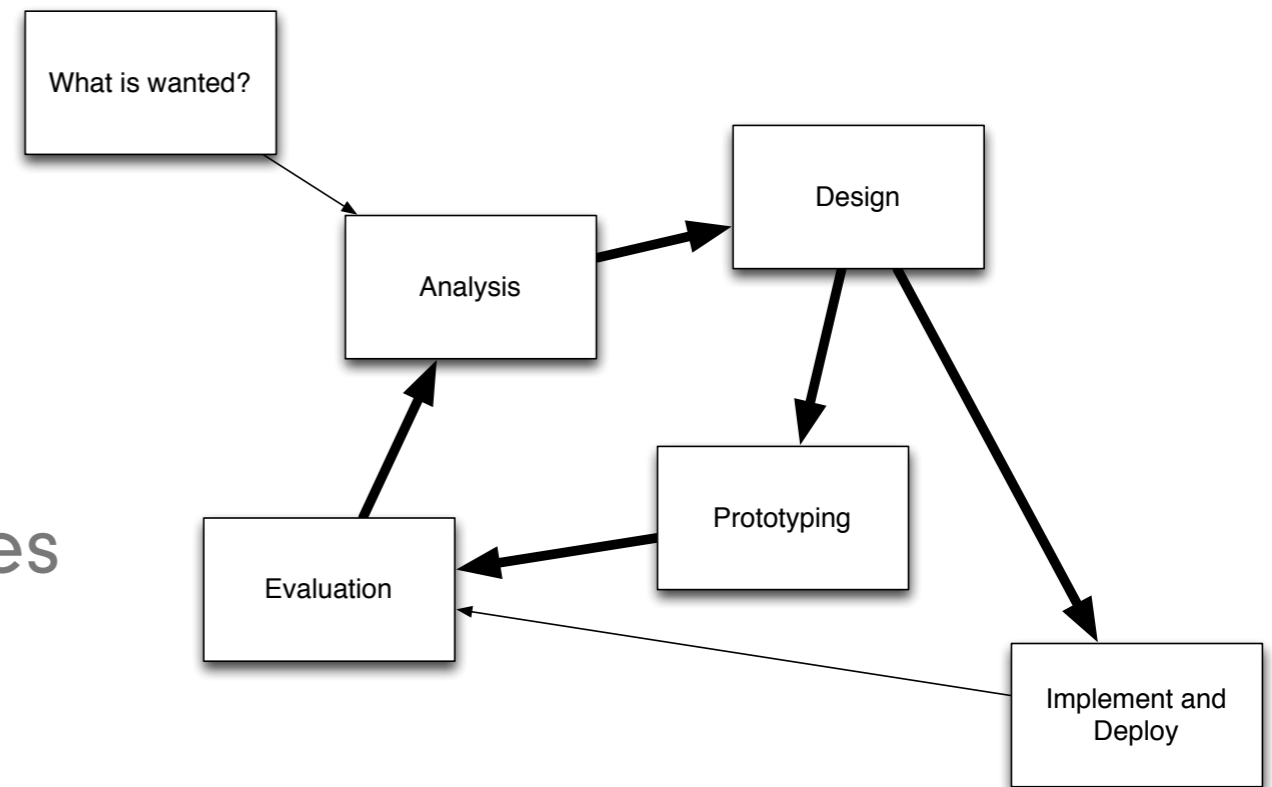


Design Process



Online questionnaires

- Can be used to:
 - Gather requirements
 - “What is wanted”
 - Evaluate prototypes
 - “Evaluate”
 - Understand user experiences
 - “Analysis”








Advantages of online questionnaires

- Responses are usually received quickly
- No copying and postage costs
- Data can be collected in database for analysis
- Time required for data analysis is reduced
- Errors can be corrected easily










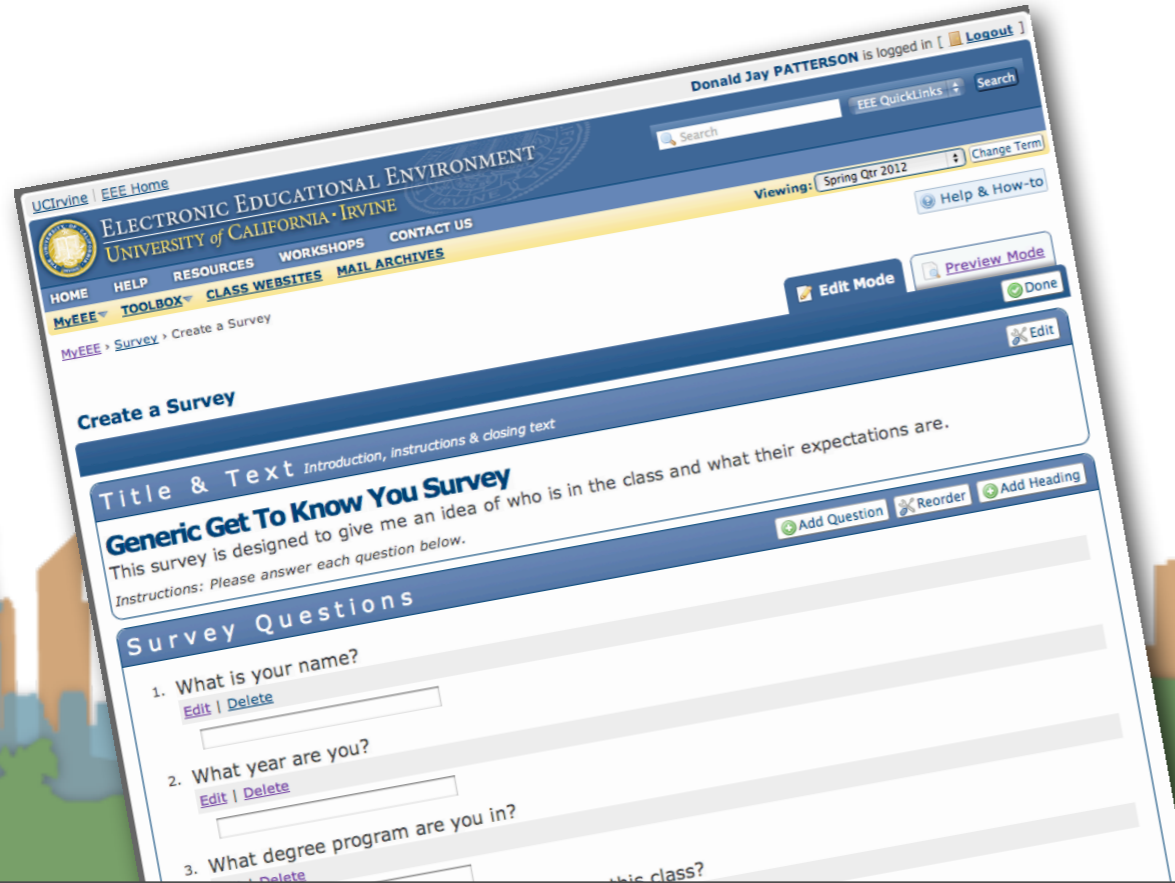
Example Questions & Results:

How likely are you to cancel your Netflix subscription in the next 3-6 months?

		Response Percent	Response Count
Extremely likely		5.7%	15
Very likely		5.7%	15
Moderately likely		13.7%	36
Slightly likely		26.3%	69
Not at all likely		48.5%	127

Why do you think you might cancel your Netflix subscription in the next 3-6 months?

		Response Percent	Response Count
Price is too high		23.7%	32
May move to a competitor		5.2%	7
Don't use enough		20.0%	27
Content I want is not available		27.4%	37
Poor video or audio quality		5.2%	7
Poor customer service		0.0%	0
Poor technical support		0.7%	1
Other (please specify)		17.8%	24



Survey Tools

- EEE Tools Survey
 - <https://eee.uci.edu/toolbox/survey/published.php>
- Survey Monkey
 - <http://www.surveymonkey.com/>
 - Supports Targeted Audiences
- Google Forms
 - <http://youtu.be/xEY10Ub-k-U>
- Mechanical Turk
 - <https://www.mturk.com/mturk/welcome>
- Audiences
 - Social Sciences Pool
 - http://hsl.ss.uci.edu/hsl_experimenter-info
 - mailing lists
 - Survey Monkey
 - Lotteries

