Association for Machine Translation in The Americas

TUTORIAL: INTERACTION DESIGN FOR MT INTERFACES

THE ELEVENTH BIENNIAL CONFERENCE VANCOUVER, CANADA OCTOBER 22-26, 2014

Patricia O'Neill-Brown, Ph.D

Schedule

- 9:00 9:10 Welcome, Introductions, Tutorials Goals
- 9:10 9:30 Introduction to Interaction Design Brief Overview
- 9:30 10:00 Task Description
- 10:00 10:30 Sketch Interface Design Concepts in Teams
- 10:30 11:00 Coffee Break
- 11:00 11:30 Resume Sketch Interface Design Concepts in Teams
- 11:30 12:00 Present Sketches to Group, Obtain Feedback, Discussion
- 12:00 12:30 Recommendations for Next Steps, Q&A, Wrap-up

Dr. Patricia O'Neill-Brown

MT Expert, Interaction

Design Practitioner.

Ph.D Computational Linguistics, Georgetown University, Washington, D.C.

Chief Technologist, U.S. Government. Lead Teams To Develop Innovative Software.

Led The Design of MT Systems That Have Been Instantly Adopted & Immediately Beneficial.

Welcome & Introductions





Tutorial Goals

- I would like to provide you with:
- A very brief overview of some of the essential parts of Interaction Design.
- Have you sketching a first draft interface for a new MT application you will design with your teams.
- Begin to acquire the ability to design MT functionalities to meet users' needs.

Session Ground Rules

- **Be present**: please give your time & attention to your colleagues.
- Feel free to look up terms & concepts on the Internet: that I'll be discussing during the session.
- Be receptive: to the ideas, comments & observations of others...& learn from them too!

Questions?

Introduction To Interaction Design Brief Overview

- It's a method that's trending now.
- It's about shaping digital products for people's use.



Introduction To Interaction Design Brief Overview -cont-

- There are a number of colleges, universities and art schools with Interaction Design programs.
- See the Wikipedia entry on Interaction Design to see a list of these programs.
- Search the Internet to find more information on Interaction Design.

Introduction To Interaction Design Brief Overview -cont-

- I will be teaching you my own brand of ixD
- It's a blend I came up with, drawing on:
 - Successful techniques I utilize when leading software design & development teams.
 - Some of the concepts in Japanese manufacturing & technology development methods.
 - My expertise in Linguistics, Communication Theory & Negotiation
 - Some of the Interaction Design from the Cooper Design firm's practices (<u>http://www.Cooper.Com</u>)

- Interaction Design is a way to help you & your team figure out:
 - What you should design for your user:
 - After you have listened to, recorded and thought about the things they have expressed to you
 - Directly & indirectly
 - Implicitly & explicitly

- Interview users to capture:
 - Their wants, needs, desires & motivations
- Document & record the interview for future reference.
- Share notes & have conversations with your colleagues on your development team.



• After the interview you need to:

- Record your full notes
- Analyze & sort through them
 - This is not easy... there will be lots of things they said...about what they want and who they are...
- Then distill the essence of what
 they would like to achieve
 through the app you will design
 for them.



- Your interviews should give you a sense of how your app should:
 - Look... so when your users sees it, they have an immediate, positive response to it.
 - Operate... how would your users want to interact with the system... what would they want to do, and conversely, what would they not want to have to do?



Questions?

• Persona:

- Interaction design has a construct called a "Persona"
- It's a fictitious or a notional person created by the design team



- The persona is the superset of all your user's wants, needs, interest & motivations.
- You come up with it based on interviewing a number of your prospective users... not just one...



- If you talk to just one person, you will miss things a second, third or fourth person says...
- You also need to hear from a number of people to figure out what that one key thing they have in common that they all want
- Hearing from more than one, helps you to validate that what you'll build will be adopted by multiple people...

How many people should you interview?

- My recommendation is you stop when you are not hearing anything major that is new, and ideas for minor features or additions. When you hit the point of diminishing returns.
- The key is to figure out the primary objective your users have. What do they really want to do that they can not easily do today? That is your challenge to figure out.



• Benefits Of The Persona:

- The idea of the persona is to keep you focused... and motivated... it's motivating knowing you are working to come up with something to help someone accomplish something.
- You do not share the persona with your users. Its purpose is for you to use it with your team as a conversation and focal point for you to understand what you need to build.
- It helps eliminate scope creep and trying to build too many features in all at once with no timeline.



Task Description Ground Rules

- Everyone puts a marker in their hand, everyone gets to draw.
- Draw a common sketch on the big easel paper.
- Please produce a final, clean sketch, for showing out to the entire group for the feedback session.
- While you are working, listen to everyone's ideas, entertain them all, & be respectful when rejecting ideas.
- Please free to take personal notes to guide your ideas and thinking as you're working with your team members working on the big sketch.





- Your persona for this exercise is Isabel.
- Isabel is a fictitious persona
- Imagine interviewing users
- What we came up with Isabel as a persona to represent the wants, needs & interests of the users we interviewed.
- You will be designing an MT capability for Isabel today.



- Who is Isabel?
- She as a native speaker of English.
- She studied French at university.
- The university she attended was international.
- She made friends with people from all over the world, & she maintains her relationships with them through social media and texting.
- Isabel has a mobile phone and a tablet, & she uses them at the office and at home.



- Isabel works for a Multinational Company.
- Her company wants to get its products into as many global markets as it can.
- She is in the marketing department.
- Her job is to recommend how their products should be designed to be suitable for the different markets.
 - For example, if they are developing a soft drink, what size should it be and what colors should the packaging have for the different markets?



- Isabel gets a sense of what particular regions of the world would like
- What the product design should be its colors, size and shapes – by looking at pop culture websites, blogs and mobile apps for different countries.
- These apps and sites are in a variety of different languages. She likes to see all her content in English.
- She uses online MT so that she can look at these sites, and understand what they are saying, by reading them in English.
- She really likes MT.
- She likes the translations.
- She is fine with the quality.
- She doesn't know what she would do without a MT to read these sites.
- For her, MT is a must-have.



- Isabel communicates with her company's customers and partners from all over the world via voice calls, email and texting.
- What she would really like... which she doesn't have now... is the ability to text with these people in their language.
- She would like it if the person who receives her text gets it in their own language.
- She would like to be able to type in English, and when she hits 'send', the person she's texting sees it in their language.
- Now that she is thinking about it, this would be a great app to use to keep in touch with her friends from her university days too.

Questions?

Sketch Interface Design Concepts In Teams

• In your teams, sketch an interface design concept for the texting application.



Sketch Interface Design Concepts In Teams

• In your teams, sketch an interface design concept for the texting application.





Sketch Interface Design Concepts In Teams_-cont-

- As you are working, please think about:
 - What does Isabel see... when she looks at your application?
 - What does she do?
 - At her every step along the way... at every interaction point.
 - Tie doing & seeing together in your mind's eye, e.g.
 - she sees this and then clicks this, & this happens & she sees that;
 - she looks at this & types that, hits send & sees this, etc.

Sketch Interface Design Concepts In Teams_-cont-

- Example of what you need to produce in your teams:
 - Please make sketches of at least 3 screens.
 - Screen 1: how Isabel's screen looks today where she texts.
 - Screen 2: what Isabel's new screen would be that you designed, before she would type & send a text.
 - Screen 3: what the screen looks like after the text she types is translated.
 - Screen 4: what the screen looks like after she sends the translated text to someone.
 - If you need more than 4 screens, then draw as many as you need.

Questions?

Present Designs

EACH GROUP PRESENT THEIR DESIGNS TO ALL

Feedback

- Obtain feedback from instructor and the group on the following:
 - What seems that it might work for Isabel? Why?
 - What might not work for Isabel? Why not?

What Are The Next Steps?

- Factor in feedback
- Reiterate design
- Show users
- Obtain their feedback
- Re-sketch (if necessary)
- Use sketches to guide and focus the development of the first prototype you'll show your user to obtain their feedback



Interaction Design Resources Learn More About It

- Wikipedia "Interaction Design" and search on the Internet
- On <u>Zite.com</u>, pick "Interaction Design" as one of your interests to see articles on this topic
- Search the internet on "Interaction Design" for information on what it is, how & where to learn about it, conferences on it, articles about it.

Discussion

- Learn anything new?
- How might you apply what you learned in your work?
- Your thoughts, comments, feedback, observations.

Thank you!