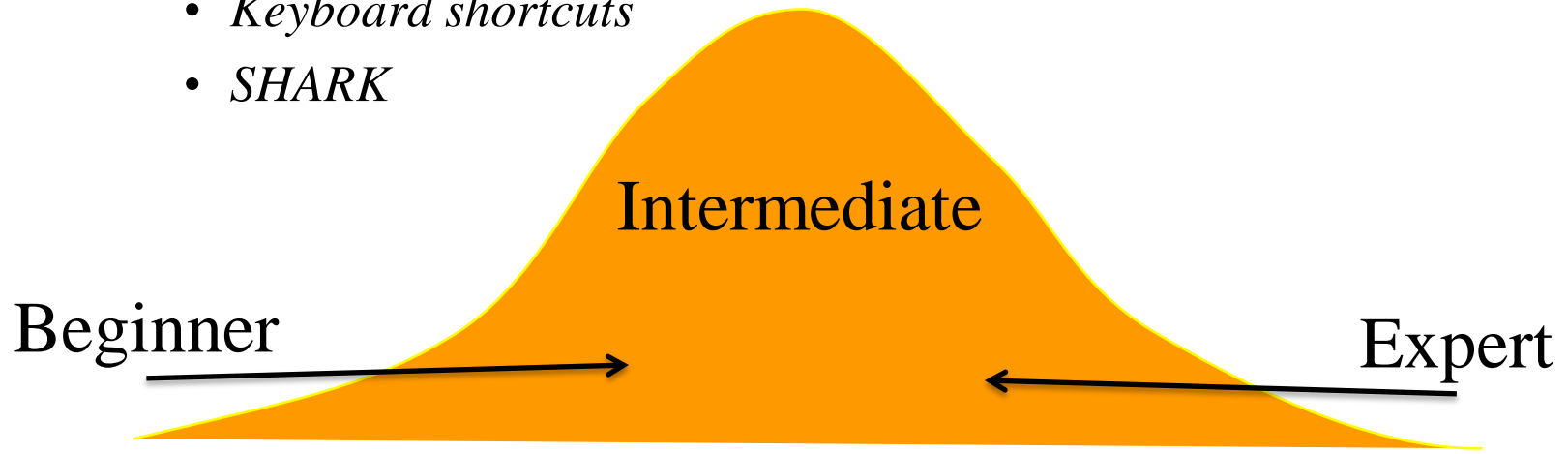


Questions?

- Slides now online

Beginner vs. Intermediate vs. Expert

- Perpetual Intermediates
- Approaches
 - “Help”
 - Layered designs
 - Learn through natural use
 - *Tooltips*
 - *Keyboard shortcuts*
 - *SHARK*

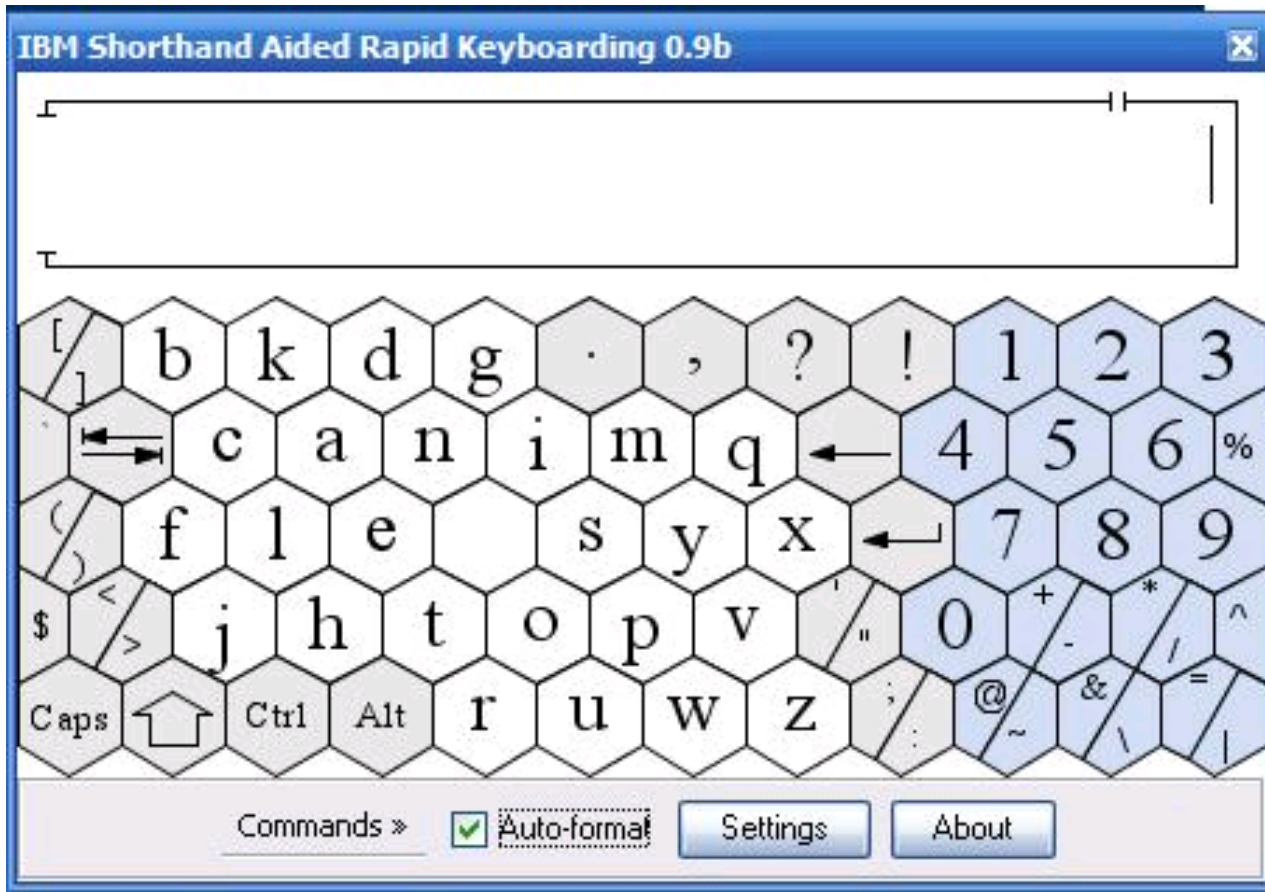


Perpetual Intermediates

- Are most users beginners, intermediates or experts? Why?
- Who in an development organization is most likely to think about beginners? experts?
- Why is online help a poor mechanism to help beginners?
- What is the value of support for expert users to intermediates?

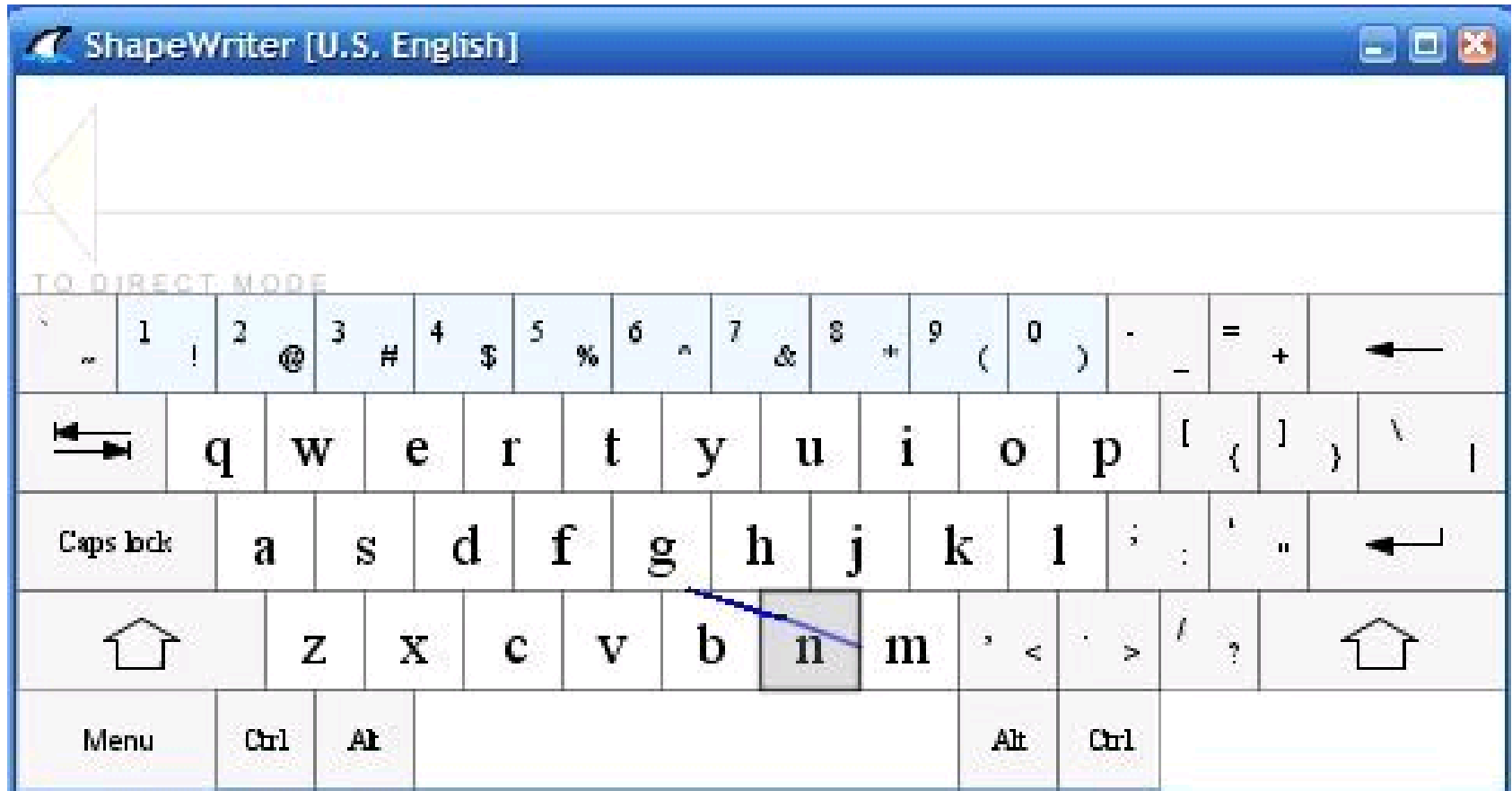
Learn Through Natural Use

- SHARK



Learn Through Natural Use

- SHARK => ShapeWriter



www.shapewriter.com/demo.html

How to Understand and Observe?

- What can you learn from qualitative?
- Interviews
 - Stakeholders
 - Subject Matter Experts
 - Users
- Contextual Inquiry –
user observation / ethnographic studies
- Literature Review
- Competitive Analysis
- Design Partner ...

Interview: What to ask and to whom?

- To the stakeholders
 - Goal: alignment (how to understand and reduce differing visions)
 - Business constraints: budget, schedule, resources...?
 - Tech constraints
 - Value drivers
 - Perception of their users (market)
- Subject matter expert
 - Develop an ongoing relationship with them
- To users and customers
 - Define goals
 - Current problems and frustrations
 - What, When, Where, Why and How do they reach their goals?

Conducting an interview

- Typical topics to explore
 - What is the problem at hand?
 - How is it addressed now?
 - What are the limitation of the current practice?
 - Who, when, where and why will they use the system?
 - What will they do with it?
 - Could you show me?
- How many people should conduct interview?

Conducting an interview

Listen to
users!

- Do not comment on what is possible or not
- Do not force your views
- Be sure to have clear communication channel
- Users are always right

Interview caveats

- Users might not know how to formulate their needs
 - Goals first, tasks second
 - Users are not designers
 - Users are not technology experts
- Designers might influence users
 - Pushing a cool idea
 - Pushing what you have been working on for the last month
- Considerations
 - Remember the Perpetual Intermediates
 - Encourage story telling
 - Ask for show & tell
 - Avoid leading questions

Critique these questions

1. "Do you think this keyboard is better than the traditional ones because it reduces long-term wrist pain?"
2. "Is adding a sliding bar on an MP3 player a good idea for selecting a song to listen to?"
3. "Do you think this functionality is good for students or businessmen?"
4. "When you purchase a digital camera, what is the most important factor in your decision?"
5. "Please choose your favorite design from the pictures below."
6. "Are you willing to pay more (around 10%) for products from well-known companies?"

Understanding: gathering users knowledge

- Contextual Inquiry (ethnographic research)
- Real persons with real constraints
- Conduct in regular work environment
- Encourage
 - Story telling
 - Show & tell
- Tools
 - Notepad
 - Camera
 - Tape recorder
 - Video

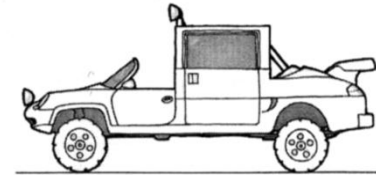
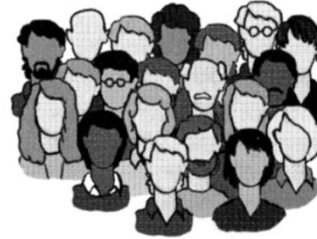


User Models

- Why model?
- Identify and name key “persona”
 - Helps alignment
 - Drives design to desired product
 - Communication tool with stakeholders
 - Helps later in usability studies to get right users
 - Helps market / sales plans

Why personas?

- Moving from
 - Too many conflicting goals



- To
 - A clear set of personas, each with a well articulated set of goals



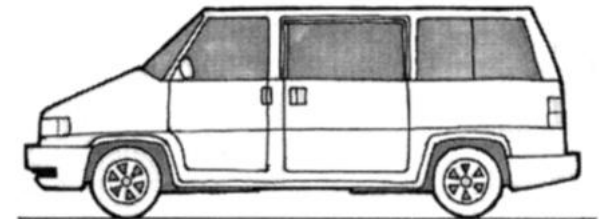
Alessandro's goals

- Go fast
- Have fun



Marge's goals

- Be safe
- Be comfortable

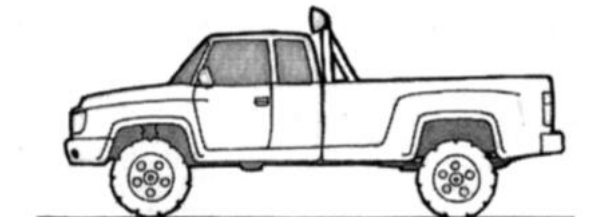


- Not a specific person
- Not so broad as to include everyone



Dale's goals

- Haul big loads
- Be reliable



Defining personas

- A fictitious user representing a class of users
 - Represent a key set of behavior and goals
- Provide shared point for all stake holders
 - No elastic users
 - Avoid designing for self
 - Avoid designing for edge cases
- Identify and name key goals
 - What do users wish to accomplish?
 - How different goals articulate with each others?
 - Goals are not Tasks!
 - *Tasks are technology dependent*
 - *Goals are not*

Why Personas?

- Addresses:
 - Elastic user
 - Self-referential design
 - Design edge cases
- Compare “persona” and “stereotype”
- Compare “persona” and “user profile”

Key persona attributes

- How to find them?
 - Identify major clusters from stakeholders & user interviews
 - Synthesize their goals
 - Check for completeness
 - Try them out by developing narrative
- Design each interface for a single primary persona
 - Other types might use the interface
- Examples
 - <http://www.usability.gov/analyze/personas.html>

Goals

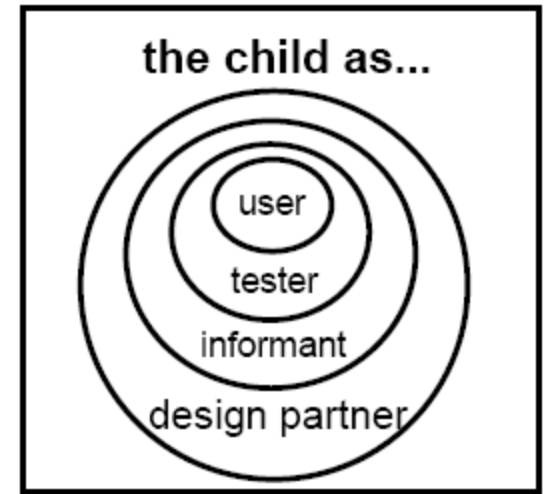
- Goals, not tasks (“I want to ...”)
 - “I want to not be stressed”,
not “I want my equipment to work on the plane”.
 - “I want to never feel stupid”, not
“I want to be able to fill out this expense report without mistakes”
- Tasks, not Solutions
 - “I want to use this on my plane trip to California”,
not “long battery life”
 - “I want to easily find class files”,
not “create hierarchy with homeworks, readings, and projects”
 - “I want to discover and use speaker phone on demand with 3 people in
my office watching me”,
not “one hardware button to activate speakerphone”

Children as Design Partners

- What are the four roles that children can play in the design of new technology?
- How are children's roles in supporting design different than adults roles?
- Describe one method to engage children in each of the four roles.
- What are some special challenges of working with children?
- What is wrong with “K-12” solutions?

User Roles

- **User:** Observe use with product
- **Tester:** Observe use with prototype
- **Informant:** Provide input with existing technologies or prototypes
- **Design Partner:** Work with designers throughout process, elaborating on each other's ideas



[Druin (2002)]

Form groups for HW #2