

Appendix E

Usability:

Using the notes from first year module 'Developing quality software' I noted down guidelines I need to take into account when designing the interface to my system. (Shneiderman, 2009)

- Interface is seen as the software to a user
- Must be easy/clear to use all with different levels of computer literacy
- Interfaces designed for nurses
 - To max user efficiency
- Ease of use
 - Test with real end users
 - Fellow students and client (mother) → perform benchmarks tasks
 - Software should be tested not the user
- Usability – combination of factors
 - Ease of learning
 - How fast user can pick up software?
 - Ability to remember aspects of the system
 - Do users need to be reminded?
 - Efficiency of use
 - Once users know the system, how fast can they perform tasks?
 - Error frequency and severity
 - How often are errors made?
 - Subjective satisfaction?
 - How much does user like the system?

Ben Shneiderman's Principle:-

- 1) Recognise the Diversity
 - Consider range/different users
 - Age, education etc
 - Experience of users
 - Legal requirements
 - Colour vision deficiency
 - Task profiles
 - Decompose complex tasks
 - Call Lists → direct link to patient details
 - Interaction styles
 - Forms/Menus etc
- 2) Golden Rules
 - Strive for consistency
 - Fonts and colours
 - Enable frequent users to use shortcuts
 - Offer informative feedback

- Design dialogs to yield closure
 - E.g. confirmation of print action
 - E.g. "This is your call lists for *date*"
- Offer error prevention and simple error handling
 - Input validation
 - Error messages – clear messages
- Permit easy reversal of actions
 - Undo options to reverse actions
- Support internal locus of control
 - Make user feel in control
- Reduce short-term memory load
 - 7+/-2 chunks of information
 - Simplify displays
 - Do not expect users to remember information between screens
- 3) Prevent errors
 - Minimise error messages by preventing errors in the first place
 - Listboxes, radiobuttons etc
- 4) Data display
 - Organising display
 - Consistency between screens such as size and same banner
 - Format familiar to user and suit related task
 - Good layout screens
 - Getting user attention
 - Marking: underline, boxes, arrows, bullets, dashes etc
 - Colours – up to 4 standard
- 5) Data entry
 - Reduce time for entry and reduce